RISK ASSESSMENT FOR THE IMPORTATION OF NATIVE REPTILES INTO THE ACT

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Technical Report 31

May 2015
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May 2015
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1 Summary

This report presents risk assessments for 191 native reptile species that potentially might be introduced into the ACT, and includes turtles, lizards and snakes. These species are permitted to be kept by the public in NSW but not in the ACT. The risk assessments focus on the likelihood of a species establishing a wild population in the ACT and the potential environmental, social and economic consequences if that were to occur. The aim is to identify any species that are potentially of relatively high risk for introduction.

Most (161) of the species were assessed as being of low or low-moderate risk for introduction. Twenty-four species were assessed as having a moderate risk for introduction. Six species were assessed as having a moderate-high or high risk and include three turtles (Collie’s Snake-necked Turtle *Chelodina colliei*, Steindachner’s Snake-necked Turtle *Chelodina steindachneri*, Saw-shelled Turtle *Wollumbinia latisternum*), a gecko (Tree Dtella *Gehyra variegata*), a dragon lizard (Lined Earless Dragon *Tympanocryptis lineata*) and an elapid snake (Little Whip Snake *Parasuta flagellum*). These species were considered to have a relatively high likelihood of establishing wild populations in the ACT (or for the turtles, establishing wild populations in the Murray–Darling Basin System) and either competing with, or preying on, local species including endangered species. In addition, importation of a subspecies of the Eastern Water Dragon (*Intellagama lesueurii lesueurii*) should also be viewed with caution, because escapees could interbreed with the local subspecies and contaminate the local gene pool of the species. We recommend these six higher-risk species and one subspecies are not added to the list of species that can be kept by the public in the ACT without further detailed risk assessment.

2 Introduction

Keeping reptiles as pets or as a hobby is a popular pursuit in Australia, and includes turtles, lizards and snakes (venomous and non-venomous). Which species (and in some cases sub-species) can legally be kept by the public varies from state to state. Generally, only native reptiles are able to be kept by the public in Australia, though individuals of these species may have natural ranges far from where they are being housed (for example, tropical Australian Children’s Pythons kept in Melbourne). In the Australian Capital Territory around 50 species of native reptiles can legally be kept by the public, whereas in surrounding New South Wales the number is more than 200 species.

A closer alignment of the ACT reptile keeping policy to that of NSW (i.e. a greater similarity in the species that can be kept in each jurisdiction) is likely to lead to improved cross-border administrative efficiencies and less complications for reptile keepers relocating between NSW and the ACT. However, there are also environmental risks (such as survival of escaped/released individuals and the potential for establishment of feral populations) that need to be considered if
‘new’ reptile species are permitted to be kept in the ACT. Canberra is the largest inland city and is located on the headwaters of the largest Australian river system (Murray-Darling) and so the risk of establishing feral populations of aquatic or semi-aquatic species is of particular concern. This report aims to provide a preliminary assessment of the risk of expanding the list of native reptiles that can be kept in the ACT to include those that can be kept in NSW.
3 Objectives of this report

The purpose of this report is to provide an assessment of the risk of allowing 191 ‘new’ species of native reptiles that are already on the ‘NSW List’ (i.e. that can be kept in NSW) to be imported and kept by the public in the ACT. The aim is to identify any of these ‘new’ species that have a high risk of causing significant environmental, economic or social impacts, and hence their introduction requires further consideration.

Formal risk assessments for native species are rare; they are usually undertaken for the importation of a foreign species into Australia and are highly detailed due to the magnitude of the risks involved. For this report, risk assessments were less detailed than that required for importation of foreign species because the species in this report:

- Naturally occur in Australia and thus the magnitude of the risk for introduction to the ACT is likely to be less than for importation of a foreign species into Australia.
- Are already permitted to be kept in surrounding NSW including towns that are on the headwaters of the Murray-Darling river system (Queanbeyan and Yass), and hence changes to the ACT reptile policy may help to mitigate, but will not remove, any potential risks to the ACT region and Murray-Darling river system from the public keeping these reptiles.

Specific Objectives of this report were to:

- Develop a set of Risk Assessment Criteria to be used for assessing Australian native reptiles that will be potentially introduced to the ACT.
- Apply the criteria to the reptile species that can currently be legally kept in NSW but not the ACT.
- Make recommendations on which, if any, species are likely to pose a high risk and thus their introduction should be viewed with caution.

The assessments in this report take into account:

- The risk of a captive animal establishing a wild population (breeding or non-breeding).
- The risk of significant environmental impacts, if individuals survive and/or reproduce in the wild.
- The risk of social impacts, such as the risk of injury to humans, from escaped individuals or wild populations.
- The risk of any economic impacts (such as damage to crops or infrastructure).
- Identify where lack of data has led to an inconclusive result or an inability to assess the risk.
4 Importing native reptiles – what are the risks?

There are many reasons for concern if, through human action, plants and animals establish populations outside of their natural geographic range. With improved transport and greater mobility of human populations, these introductions are becoming more frequent. If such introductions result in the establishment of viable populations that continue to spread they are considered to be invasive (Bomford 2008; Secretariat of NOBANIS 2002). Once an introduced species has been established it can be very difficult to remove from the wild. To date, most concern has centred on the potential impact of species that have had their origins in other countries (e.g. Bomford 2008). However, also of considerable concern are native species that have established populations in areas outside of their natural range as the result of translocations (deliberate or accidental).

Introduced animals (including both exotic species and those native species established outside of their natural geographic range) can provide threats to other species and to humans. They frequently compete with comparable local species for habitat, home sites and food and may consume or prey on those local species. Moreover, the introduced populations may also experience a form of ‘ecological release’ that may lead to an expansion of their ecological niche, thus enabling them to compete more effectively with the local species (Losos and de Queiroz 1997).

In Australia there have been many cases of the rapid expansion of populations of introduced vertebrates (particularly birds and mammals) that are most likely driven by some form of ecological release (Flannery 2002). Such expansions typically lead to a decline or localised extinction of competing species, or species that are preyed on by the introduced species (e.g. Dorcus et al. 2012). The Cane Toad provides a striking example of a rapidly spreading species that is extremely poisonous to most vertebrate animals that eat it. This has led to the decline and local extinction of populations of vertebrates that prey on frogs (Burnett 1997; Doody et al. 2007; Ujvari and Madsen. 2009). An estimated 150 species of vertebrates in Kakadu National Park may be under some form of threat from the presence of cane toads (van Dam et al. 2002). Similarly, the accidental introduction of the Australian Brown Tree Snake Boiga irregularis to the archipelago of Guam has resulted in severe impacts to local reptile and bird species (Colvin et al. 2005).

Another concern with the establishment of introduced populations outside of their natural range is that they might inter-breed with naturally occurring members of the same species. This can potentially lead to the disruption of locally adapted gene complexes, thus affecting the evolutionary processes involved in local adaptation. Changes in behaviour, timing of breeding, morphology and colouration are all potentially disruptive and might lead to an increased risk of being taken by predators, or breeding at inappropriate times or having reduced resistance to disease. In eastern Australia there are now mixed breeding populations of different subspecies of the turtle Emydura macquarii in the rivers near Sydney (G. Shea pers. comm.), and these populations may therefore be a threat to the original local populations of this species. These
subspecies have their origins in very different parts of Australia and therefore may be genetically predisposed to breeding at different times of the year - times that may be unsuitable for the Sydney region.

In Australia there are a few examples of breeding populations of exotic (non-Australian) reptiles becoming established in the wild (Burgin 2006; Michael 2005). The most concerning of these is the North American Red-eared Slider turtle *Trachemys scripta elegans* that has become established in many waterways in Sydney, Melbourne and at several other locations in Australia. Over the past decade there have been several instances of this species appearing in waterways in Canberra, presumably escapees or deliberate releases of illegally kept individuals. The threat of establishment of Red-eared Sliders in the Murray-Darling river system prompted the ACT Government (Conservation Research Section) to undertake a public awareness campaign of the risks posed by illegally keeping and releasing this species in the ACT.

Not all introduced species are thought to be of concern. The Asian House Gecko *Hemidactylus frenatus* has established populations in many cities and towns in the northern parts of Australia, but these appear to be confined to houses and buildings in urban areas. Nevertheless, this species is reported to have invaded natural habitats on Christmas Island (Anon. 2008). There is a single record of this species from the ACT (Wellbourne 2012).

In recent years there has been increased reporting of occurrences of non-local breeding populations of native reptiles that have apparently established outside of their known range. Most observations have not been published. For example, P. Robertson (pers. comm.) reports that Marbled Geckos *Christinus marmoratus*, Eastern Water Dragons *Physignathus lesueurii* (both subspecies) and Macquarie Turtles *Emydura macquarii* have established breeding populations in the Melbourne region. Robertson also believes that regular sightings of Shingle-backed Lizards *Tiliqua rugosus* in the Brisbane Ranges immediately to the west of Melbourne are presumably derived from the pet trade (there are no previous records of shingle backs in this area). In the Sydney region there are records from the wild of several species of reptiles that are commonly kept in captivity including Inland Bearded Dragons *Pogona vitticeps* and Carpet Snakes *Morelia spilota* (G. Daly pers. comm.), pythons from the genera *Antaresia* (Children’s Python group), *Aspidites* (Black-headed and Woma Python group) and *Liasis* (Water Python group) (G. Shea pers. comm.). Shea notes that none of these species appear to have established wild breeding populations (however this would be hard to discern given the complexity of habitats surrounding Sydney). By contrast, Shea reports that the turtle *Emydura macquarii* is now breeding in large numbers in many of the ponds and waterways in Sydney. Moreover, large numbers of Saw-shelled Turtles *Wollumbinia latisternum* (including gravid females) are also reported from waterways in the Sydney region (G. Shea pers. comm.). There are also occasional records of Broad-shelled River Turtles *Chelodina expansa* and the so-called pet shop turtle (Mary River Turtle *Elusor macrurus*) in the Sydney region (G. Shea pers. comm.). In the ACT only one terrestrial species of reptile, the Weasel Skink *Saproscincus mustelinus*, has established breeding populations...
– there are records of multiple occurrences of different individuals from the suburb of Aranda (P. Ormay pers. comm.) and at one location at Fyshwick (R. Speirs pers. comm.).

There are some records of the occurrence in the wild of non-local species of reptiles in the ACT. These are unlikely to represent breeding populations. There is a single record of a Tree Dtella gecko Gehyra variegata from a backyard in the ACT (B. Gruber pers. comm.) and a Tree Skink Egernia striolata from Hawker (brought in with fire wood; W. Osborne pers. obs.). R. Bennett (previous ACT Parks ranger) found a dead Diamond Python Morelia spilota tangled in rabbit fencing at the edge of Black Mountain Nature Reserve (this is likely to have been an escaped pet). M. Lintermans (pers. comm.) reported that the few records of the Macquarie Turtle Emydura macquarii from urban lakes in Canberra are most likely to have been deliberately released individuals.

5 Factors that potentially can influence likely establishment of wild populations

The influence of cold climates

The ACT is located within parts of two IBRA biogeographic regions (Interim Biogeographic Regionalisation for Australia Version 7): the Australian Alps and the Southern Highlands. The cooler conditions experienced in this region, particularly during winter, impose restrictions on the kinds of reptiles that can successfully survive in the outdoors in this area. Not surprisingly, the number of reptile species in the ACT region decreases markedly with increasing altitude (Jenkins and Bartell 1980).

Approximately two thirds of the species of reptiles that occur in the ACT lay eggs – the rest are viviparous (young born not in an egg). However, at the highest altitudes in the ACT (subalpine zone - above 1500 m) almost all species are viviparous and are heliotherms (sun basking as the main means of thermoregulation). By contrast, at lower elevations there are more thigmotherms (reptiles that gain heat energy from the substrate). Examples of thigmothermic species that occur in the ACT are: Stone Gecko (Diplodacylus vittatus), Marbled Gecko (Christinus marmoratus), and Blackish Blind Snake (Rhamphotyphlops nigrescens). All are nocturnal species that are active away from their shelter sites only on warmer evenings. Cold conditions certainly appear to have limited the reptiles that are likely to occur in the ACT. Species that lay eggs in the ground can be at a disadvantage due to cold wet soil conditions. There are no records of pythons in the ACT and the reason for this may simply be that nights are, on average, too cold for these snakes to survive and breed. Cold river temperatures clearly limit the number of species of turtles that can survive in the ACT. Only one species, the eastern long-necked turtle (Chelodina longicollis) is present in ACT wetlands as a local breeding population (Bennett 2011).

Life history characteristics that potentially increase potential for invasion
As was mentioned in the previous section, in the ACT the number of egg laying reptiles decreases with increasing altitude (compared to the numbers of viviparous species) (Jenkins and Bartell 1980; Green and Osborne 2012). Therefore, in terms of adaptation, it is likely that viviparous reptiles would have a greater likelihood of becoming invasive in the ACT. Body size is also thought to be a factor that is related to potential for invasion. Species with larger body sizes (for example monitor lizards) take longer to mature (Greer 1989), occur at lower densities in the landscape (Heatwole and Taylor 1987), may be easier for predators to see and capture, and may have more difficulty finding shelter from adverse weather. Age at first breeding is another factor that is likely to influence the potential for invasion, though this data is not available for most Australian reptiles (Greer 1989).

**Habitat related characteristics that influence potential for invasion**

Some species of reptiles are confined to wetlands and streams, such as turtles and water dragons (*Physignathus*). For these species the typically linear arrangements of wetlands associated streams and river valleys leads to increased opportunities for downstream and upstream dispersal. Many species of reptile show a preference for particular kinds of habitats (e.g. rainforest, grassland, sphagnum bog, sand dune) and an association with particular habitat structural components (e.g. fissures in rock, burrows, termite mounds). Such species are unlikely to spread through the landscape unless these habitat components are also extensive and widely distributed.

**6 Threatened and uncommon reptiles in the ACT**

Potential impacts to local reptiles (and other fauna) is an important consideration when assessing the risk of introducing new species to the ACT. Impacts can include predation on local species, competition for resources (e.g. food, shelter/nesting sites) and disruption of locally adapted gene complexes as a result of interbreeding with introduced reptiles.

Of particular concern are potential impacts to local reptiles that already face the threat of extinction. These threatened species are likely to be highly vulnerable to additional impacts from non-local predators/competitors/inter-breeders. The following reptile species are listed as threatened in the ACT:

- Grassland Earless Dragon *Tympanocryptis pinguicolla*
- Striped Legless Lizard *Delma impar*
- Pink-tailed Worm Lizard *Aprasia parapulchella*

Although they are not under immediate threat, there are several uncommon or declining ACT reptile species that should also be considered. These are:

- Rosenberg’s Monitor *Varanus rosenbergi* (Vulnerable NSW)
• Tree Skink *Egernia striolata*
• Nobbi Dragon *Amphibolurus nobbi*
• Black-headed Snake *Suta spectabilis*
• Alpine Water Skink *Eulamprus kosciuskoii*
• Tan-backed rock skink *Liopholis montana*

The introduction of species that occupy a similar, narrow ecological niche or that are closely related (different subspecies or races) to local species should be viewed with extra caution. An example would be a semi-fossorial, small legless lizard that feeds on ant larvae, which might directly compete with the Pink-tailed Worm Lizard for food and shelter.

7 Approach to risk assessment

Approaches to demonstrating impact by invasive species are described by Bomford et al. (2005). These approaches to risk assessment require a considerable ecological knowledge of the species being assessed. Unfortunately very little ecological information is available for Australian reptiles, particularly information that is relevant to their potential impacts in other areas of Australia. Greer (1997, 1998) provides a comprehensive summary of available information at that publication time. Other information in the primary literature published since that time is available, although it can be difficult to access. Hutchinson (2001) cautions that ecological modelling based on key life-history parameters such as breeding biology, population demography, habitat selection, diet, and predation, are unlikely to be meaningful because of a lack of the necessary ecological data. There have been few detailed studies conducted that would provide this data for Australian reptiles (Greer 1997, 1998). In recognising this lack of information, Bomford *et al.* (2005) recommended that for exotic reptiles a qualitative approach be taken which includes addressing the following checklist (Table 1).

The criteria by Bomford *et al.* (2005) also have application to the consideration of risk involving the importation of native reptiles into the ACT. However for most native reptile species there is very little information available even on these criteria. We know of no cases where adverse impacts have been demonstrated (there are a few cases of native reptiles establishing breeding populations outside of their range but their impact has not yet been ascertained). We know of no data that describes the rate of spread of exotic or native reptiles into new environments in Australia. The natural densities of native Australian reptiles are generally poorly known except in specific cases where surveys have been undertaken at particular sites, and hence it is difficult to generalise about this point, particularly considering density can vary considerably across the landscape. The occurrence of disease in wild populations of reptiles in Australia is generally poorly known. Moreover the potential impact of diseases carried by captive reptiles on wild populations is also poorly known. For the purposes of this assessment we have assumed the risk of escaped/released individuals having a significant impact on wild populations through disease transfer to be relatively low. Based on the information that is generally available for native
reptiles, we have used a modified set of the Bomford et al. (2005) criteria for our assessment of the risk of introducing native reptiles to the ACT.

Table 1  Qualitative criteria suggested by Bomford et al. (2005) as being likely to be associated with an increased risk of a species becoming a pest species. The absence of these factors does not necessarily mean that a species has a low risk of harm.

1. Have adverse impacts elsewhere
2. Have close relatives with similar behavioural and ecological strategies that have had adverse impacts elsewhere
3. Are dietary generalists
4. Stir up sediments to increase turbidity in aquatic habitats
5. Occur in high densities in their native or introduced range
6. Have the potential to cause poisoning and/or physical injury
7. Harbour or transmit diseases or parasites that are present in Australia
8. Have close relatives among Australia’s endemic reptiles and amphibians
9. Are known to have spread rapidly following their release into new environments.

For each ‘species page’ in this report, the assessment is prefaced by the background information below. This information is used to gauge possible threats to species being introduced (such as illegal collecting within its natural range) and for the assessment of the likelihood of establishment of wild populations.

- Conservation Status  Is the species threatened in its natural range?
- Distribution  Where does the species naturally occur?
- Climate and Ecoregion  How similar are the climates between the natural distribution and the ACT?
- Habitat  How similar are the habitats between the natural distribution and the ACT? Is the species a habitat specialist or generalist? A habitat generalist may have a higher probability of establishment.

In addition to the above background information, in assessing the likelihood of establishment of wild populations we considered the following points on a qualitative scale from low to high, with a separate category for unknown or not reported:

- Reproductive potential  Higher number of offspring may result in a higher probability of establishment.
- Dietary Generalisation  A generalist diet may result in a higher probability of establishment.
- Climate Suitability  Similar climates between the natural distribution and the ACT may result in a higher probability of establishment.
• Populations outside of range  Species that are known to have been established populations outside of the natural range may result in a higher probability of establishment in the ACT.

• Aquatic/Riparian Species  Canberra is on the headwaters of the Murray-Darling, so aquatic/riparian species may have a higher probability of establishment in the catchment (which includes the range of climates from the ACT to SA).

• Potential range in the ACT  Similar habitat in the natural range and in the ACT may result in a higher probability of establishment.

In assessing the likely consequences of establishment we addressed the following points on a qualitative scale from low to high:

  • Potential for impact on threatened species in the ACT (predation, competition, interbreeding).
  • Potential for environmental/economic impacts in the ACT (damage to habitats, crops, infrastructure).
  • Potential for harm to humans (injury or death from bites etc).

Risk is usually assessed as $Risk = Likelihood \times Consequence$, where $Likelihood$ is the chance of the event occurring and $Consequence$ is the severity of the outcome if the event occurs. High $Likelihood$ combined with High $Consequence$ equates to High $Risk$, whereas High $Likelihood$ but Low $Consequence$ (or vice versa) usually equates to Moderate $Risk$. The introduction of ‘new’ reptile species to the ACT will almost certainly result in individuals escaping or being released. In this report we have considered $Likelihood$ (in terms of the Risk equation above) to be the likelihood of a wild population establishing from escaped/released individuals of a species. We consider $Consequence$ to be the level of potential impacts (Environmental, Social, Economic) if a wild population of that species became established. We determined the overall risk level for a species by considering $Likelihood \times Consequence$, together with the nature of the potential impacts.

The distribution maps used in this report are our interpretation of those used in Cogger (2014) and the Australian Reptile Online Database (AROD). Climate matches between the natural distribution of a species and the ACT were done using ‘Climatch’ climate matching software. Access the Department of Agriculture, Commonwealth Government\(^1\) page.

**Caveat to this risk assessment**

In general the data available on native reptiles did not enable highly detailed assessments to be made of the risk of introducing these ‘new’ species of native reptiles to the ACT. Lack of available ecological and/or life history information has, in some cases, required us to make generalisations

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\(^1\) http://data.daff.gov.au:8080/Climatch/
or logical assumptions about the ecology and potential impacts of some species. This report therefore should be viewed as a preliminary assessment. As mentioned in the Objectives section, the aim of this report is to identify species that stand out as potentially having a relatively high risk and hence their importation should be viewed with caution.

As for ‘species risk assessments’ in general, it should be noted that a species identified in this report as having a high risk does not necessarily mean that the species will establish feral populations or become a pest should it be introduced, rather that it has ecological traits to suggest that the chance of doing so in the ACT is higher than for the other species assessed. Similarly, a species identified as having a low risk does not guarantee it will not establish wild populations or become a pest if introduced, rather that the chance of this occurring is considered in this report to be low.
8 Freshwater Turtles
Family: Carettochelydidae

**SPECIES**

*Carettochelys insculpta*

**Common name:** Pig-nosed Turtle

**Other common name:**
A large, very distinctive aquatic turtle (pitted shell, flippers) from coastal far north-west of the Northern Territory (carapace length to 70 cm)

**Conservation status:** Not threatened, though rare to uncommon in Australia – highly restricted distribution.

**Distribution:** Coastal far north-west of the Northern Territory.

**Climate/ecoregion:** Tropical far north-west.

**Habitat:** Freshwater and estuarine reaches of tropical rivers.

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size average 15. Eggs laid in a hole in river sandbanks during the dry season.
- **Dietary generalisation:** HIGH Generalist omnivore – snails, fruits and small fish.
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** HIGH Aquatic.
- **Potential range (ACT):** LOW No tropical monsoonal environments. Rivers in ACT do not provide suitable habitat for foraging and nesting and are likely to be too cold.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

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**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** MOD Generalist diet includes small fish.
- **Potential for environmental/economic impacts:** HIGH Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams. Individuals could directly compete with *C. longicollis* and *E. macquarie*.

**Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** HIGH

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Chelidae

**SPECIES**  *Chelodina (Chelodina) canni*

**Common name:** Cann’s Long-necked Turtle

**Other common name:** Cann’s Snake-necked Turtle

A large freshwater turtle very similar to *C. longicollis* (carapace length to 30 cm)

- **Conservation status:** Not threatened.
- **Distribution:** Far northern tropical Queensland and eastern gulf region of Northern Territory.
- **Climate/ecoregion:** Tropical north-eastern Australia.
- **Habitat:** Lakes, swamps and billabongs.

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**LIKELIHOOD OF ESTABLISHMENT**

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<td>Potential range (ACT):</td>
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**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

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**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** MOD
- **Potential for environmental/economic impacts:** HIGH

Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** HIGH

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Chelidae

**SPECIES**  *Chelodina longicollis*

**Common name:** Eastern Long-necked Turtle

**Other common name:** Eastern Snake-necked Turtle

A large and familiar freshwater turtle, often seen crossing roads in wet weather (carapace length to 25 cm)

- Conservation status: Not threatened.
- Distribution: South-eastern and central-eastern Australia. Occurs in ACT where it is very common (Bennett 1997).
- Climate/ecoregion: Temperate and subtropical eastern Australia.
- Habitat: Freshwater wetlands including streams, rivers, ponds and lakes. Moves over land between wetlands.

![Map of Australia showing distribution of *Chelodina longicollis*]

**LIKELIHOOD OF ESTABLISHMENT**

<table>
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**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT.

**CONSEQUENCES OF ESTABLISHMENT**

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**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW

ACT genotype is widespread in the Murray Darling Basin (A. Georges pers. comm.) so hybridization may not be an issue. The only turtle found in most wetlands and rivers in the ACT so competition not an issue. If captive individuals survive in the wild, there is potential for them to transfer disease.
Family: Chelidae

**SPECIES**  
*Chelodina (Chelodina) steindachneri*

**Common name:** Steindachner’s Snake-necked Turtle  
**Other common name:** Flat-shelled Turtle

A large freshwater turtle from far Western Australia. (Carapace length to 20 cm).

**Conservation status:** Not threatened.  
**Distribution:** Far mid-west of WA.  
**Climate/ecoregion:** Semi arid and arid; Pilbara region to coast.  
**Habitat:** Temporary and permanent freshwater wetlands and dams in semi-arid areas.

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>MOD</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>HIGH</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Consequence</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>MOD</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** HIGH

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE-HIGH
Family: Chelidae

**SPECIES**  
*Chelodina (Macrodiremys) colliei*  
(prev. *C. oblonga* – renamed in 2013)

**Common name:** Collie’s Snake-necked Turtle  
**Other common name:** Narrow-breasted Snake-necked Turtle

A large freshwater turtle with a distinctive oblong-shaped shell. (Carapace length to 40 cm).

**Conservation status:** Not threatened.  
**Distribution:** Far south-western corner of WA. Common in some suburban lakes in Perth.  
**Climate/ecoregion:** Warm temperate south west.  
**Habitat:** Permanent freshwater wetlands including streams, rivers, ponds and lakes.

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 15, sometimes two clutches per year (second clutch smaller)
- **Dietary generalisation:** HIGH Generalist, predator of aquatic animals including tadpoles and fish.
- **Climate suitability:** MOD Climate match with ACT = 40%
- **Populations established outside of range:** HIGH Not known, but likely given presence in suburban wetlands, and very large numbers kept by private keepers.
- **Aquatic/riparian species:** HIGH Aquatic. A very similar species to *C. longicollis*.
- **Potential range (ACT):** HIGH Lowland wetlands (rivers, streams, dams etc).

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH

---

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** MOD Generalist diet includes small fish.
- **Potential for environmental/economic impacts:** HIGH Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams. Individuals could directly compete with *C. longicollis* and *E. macquarie*.

**Potential for harm to humans:** LOW Releases a very pungent but harmless odour.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** HIGH

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** HIGH
Family: Chelidae

**SPECIES**  
*Chelodina (Macrochelodina) expansa*

**Common name:** Broad-shelled River Turtle  
**Other common name:** Broad-shelled Snake-necked Turtle

Largest of the long-necked turtles (carapace length to 48 cm)

**Conservation status:** Endangered (Vic), Vulnerable (SA). Not threatened elsewhere, though occurrence at very low densities is of concern (Bowler and Hodges 2014).

**Distribution:** South-eastern Australia including the Murray - Darling river system. There have been several reports of specimens being caught in the Murrumbidgee River in the ACT, and the species is known from Burrinjuck Reservoir (M. Lintermans pers. comm.).

**Climate/ecoregion:** Subtropical and warm temperate. Coastal hinterland (Qld) and Murray - Darling Basin.

**Habitat:** Billabongs and large water holes attached to rivers, lower densities in rivers.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Eggs laid in hole in soil. Clutch size up to 17.
- **Dietary generalisation:** HIGH Generalist, aquatic animals and plants.
- **Climate suitability:** HIGH Climate match with ACT = 80%
- **Populations established outside of range:** HIGH Occasional records in rivers in the Sydney region (G. Shea pers. comm.).
- **Aquatic/riparian species:** HIGH Aquatic.
- **Potential range (ACT):** MOD Lowland rivers, unlikely to reach high densities in the ACT due to lack of large biologically productive semi-attached billabongs etc. Despite occurring near the ACT and MDB rivers, it has not established in the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW Already occurs in Murray-Darling river system.
- **Potential for harm to humans:** LOW Musk gland secretion not offensive.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Chelidae

**SPECIES**  
**Elseya dentata**  
Common name: Northern Snapping Turtle  
A large freshwater turtle with large head and short neck (carapace length to 35cm)

- **Conservation status:** Not threatened.  
- **Distribution:** Far north-west of Australia (Kimberley east to the Gulf).  
- **Climate/ecoregion:** Tropical.  
- **Habitat:** Freshwater rivers, prefers flowing waters, but also associated lagoons and oxbow lakes. Eggs laid in a hole in sandy areas near wetlands.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Ave clutch size 10 (Cann 1998), several clutches/season (Ehmann 1992). 8-13 years to reach maturity (Cann 1998).
- **Dietary generalisation:** MOD Moderately specialised, adults feed mainly on vegetation including fruit (Cann 1992; Ehmann 1992).
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** HIGH Aquatic.
- **Potential range (ACT):** LOW No tropical, monsoonal environments in ACT. Rivers not suited.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** MOD Vegetarian diet, low potential to compete with C. longicollis. Aquatic species—if established potential for downstream spread to Murray – Darling Basin streams.

- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Chelidae

**SPECIES**  
Elseya irwini

**Common name:** Irwin’s Snapping Turtle  
**Other common name:** Yellow-headed Snapping Turtle.

A large snapping turtle (carapace length to 35 cm)

Conservation status: Not threatened.

Distribution: Known only from the Burdekin River drainage and the Johnstone River in north-eastern Queensland.

Climate/ecoregion: Tropical; coastal flowing rivers, high rainfall.

Habitat: Rivers.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: LOW  

Dietary generalisation: NR  
Omnivorous – snails and vegetation (Cann 1998).

Climate suitability: LOW  
Climate match with ACT ≤ 30%

Populations established outside of range: NR  
Not reported.

Aquatic/riparian species: HIGH  
Aquatic.

Potential range (ACT): LOW  
No tropical environments in ACT.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): MOD  
Generalist diet likely to include small fish.

Potential for environmental/economic impacts: HIGH  
Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams. Individuals could directly compete with *C. longicollis* and *E. macquarie*.

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: HIGH

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Chelidae

**SPECIES** *Elseya lavarackorum*

**Common name:** Gulf Snapping Turtle

A large freshwater turtle similar to *E. dentata* (carapace length to 30 cm)

Conservation status: Endangered (Commonwealth), Vulnerable (Qld).

Distribution: Nicholson River drainage, Gulf of Carpentaria (near Queensland and Northern Territory border).

Climate/ecoregion: Tropical; coastal drainages.

Habitat: Rivers.

---

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>NR Oviparous.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD Likely to be similar to <em>E. dentata</em>.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>HIGH Aquatic.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW No tropical environments in ACT. Rivers likely to be unsuited.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts:   | MOD Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams. |
| Potential for harm to humans:                    | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Chelidae

**SPECIES** *Elusor macrurus*

**Common name:** Mary River Turtle

**Other common name:** A large and distinctive short-necked turtle (carapace length to 40 cm)

Conservation status: Endangered (Commonwealth, Qld).
Distribution: Mary River drainage in south-east Qld.
Climate/ecoregion: Subtropical; coastal hinterland and ranges.
Habitat: Rivers. Nests on sand flats.

---

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: HIGH

Dietary generalisation: MOD
- Moderately specialised omnivore – filamentous algae, bivalves, insects (Cann 1998)

Climate suitability: LOW
- Climate match with ACT ≤ 30%

Populations established outside of range: HIGH
- Breeding populations established in rivers in the Sydney region – a result of previous pet trade in that species (as the pet shop turtle) (G. Shea).

Aquatic/riparian species: HIGH
- Aquatic.

Potential range (ACT): MOD
- Lowland rivers.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

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**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: MOD
- Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams.

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: MOD

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Chelidae

**SPECIES**  
*Emydura macquarii*

**Common name:** Macquarie Turtle  
**Other common name:** Murray Short-necked Turtle

A familiar freshwater short-necked turtle (found in eastern Australia - both coastal and inland flowing rivers (carapace length to 30 cm)

**Conservation status:** Vulnerable (SA, Vic). Not threatened elsewhere.  
**Distribution:** Eastern Australia. Widespread in the MD Basin and coastal northern NSW and Qld. Occurs in ACT where it is very uncommon (Lintermans and Osborne 2002; Bennett 1997). Individuals have been reported from the Murrumbidgee River near and downstream of Canberra; however escaped or deliberately released individuals have been found in some urban lakes in Canberra (Lintermans and Osborne 2002).

**Climate/ecoregion:** Temperate to Tropical, coastal mesic to semi-arid inland.  
**Habitat:** Rivers and attached permanent lakes and billabongs.

### LIKELIHOOD OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Likelihood</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>HIGH</td>
<td>Oviparous. Clutch size up to 25, up to three clutches per season.</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
<td>Omnivorous, aquatic vegetation and aquatic animals including yabbies and fish.</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>HIGH</td>
<td>Climate match with ACT = 100%</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>HIGH</td>
<td>Yes. Melbourne and Sydney (G. Shea and P. Robertson pers. comm.).</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>HIGH</td>
<td>Aquatic.</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
<td>Lowland wetlands (rivers, streams, dams etc).</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT</td>
<td>HIGH</td>
<td>Already present in ACT.</td>
</tr>
</tbody>
</table>

### CONSEQUENCES OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Likelihood</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT):</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>MOD</td>
<td>(If subspecies or races other than <em>E. m. macquarii</em>.)</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>OVERALL CONSEQUENCES OF ESTABLISHMENT:</td>
<td>MOD</td>
<td></td>
</tr>
</tbody>
</table>

### OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: MODERATE

There are five subspecies of *E. macquarii*; the subspecies in the Murrumbidgee River is *E. m. macquarii*. There is a significant risk of subspecies becoming genetically mixed if released into different catchments - this has already occurred in rivers flowing through Sydney (G. Shea and H. Cogger pers. comm.). Note that the designated subspecies may not correlate well geographically with genetically distinct groups (Georges and Thomson 2010).
Family: Chelidae

**SPECIES**  
*Emydura subglobosa*

**Common name:** Red-flushed River Turtle  
**Other common name:** Painted Turtle; Worrell’s Turtle

A short-necked freshwater turtle similar to *E. macquarii* but with distinctive markings (carapace length to 25 cm)

**Conservation status:** Near-threatened (Qld).  
**Distribution:** Far northern Australia near the Gulf.  
**Climate/ecoregion:** Subtropical, monsoonal.  
**Habitat:** Freshwater waterholes, watercourses, rivers and lakes.

**Likelihood of establishment**

- **Reproductive potential:** MOD  
- **Dietary generalisation:** HIGH  
  Omnivorous, aquatic vegetation and aquatic animals.
- **Climate suitability:** LOW  
  Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** HIGH  
  Aquatic.
- **Potential range (ACT):** LOW  
  Lowland wetlands and rivers. Cold waters likely to be limiting.

**Overall likelihood of establishment in ACT:** LOW

**Consequences of establishment**

- **Potential for impact on threatened species (ACT):** MOD  
  Generalist diet likely to include small fish.
- **Potential for environmental/economic impacts:** HIGH  
  Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams. Individuals could directly compete with *C. longicollis* and *E. macquarie*.

**Potential for harm to humans:** LOW

**Overall consequences of establishment:** HIGH

**Overall risk level for introduction to ACT:** MODERATE
Family: Chelidae

SPECIES  *Emydura tanybaraga*

Common name: Northern Yellow-faced Turtle

A short-necked freshwater turtle most similar to *E. subglobosa* (carapace length to 25 cm)

Conservation status: Not threatened.

Distribution: Daly and South Alligator River in the NT; catchments and parts of lower Cape York Qld.

Climate/ecoregion: Tropical, monsoonal, coastal and hinterland.

Habitat: Deeper, slow-moving sections of rivers and creeks.

Likelihood of Establishment

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW Oviparous.</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>NR Not reported</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>HIGH Aquatic.</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW Lowland rivers. Cold temperatures likely to be limiting.</td>
</tr>
</tbody>
</table>

Overall Likelihood of Establishment in ACT: LOW

Consequences of Establishment

<table>
<thead>
<tr>
<th>Consequence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>MOD Generalist diet likely to include small fish (if diet similar to other <em>Emydura</em>).</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>HIGH Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams. Individuals could directly compete with <em>C. longicollis</em> and <em>E. macquarie</em>.</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

Overall Consequences of Establishment: HIGH

Overall Risk Level for Introduction to ACT: MODERATE
Family: Chelidae

**SPECIES**  
*Emydura victoriae*

Common name: North-west Red-faced Turtle  
Other common name: Northern Red-faced Turtle

A large short-necked freshwater turtle (carapace length to 30 cm)

Conservation status: Not threatened.  
Distribution: Far north-west Australia. Kimberley region (WA and NT).  
Climate/ecoregion: Tropical, monsoonal. Coastal drainage.  
Habitat: Deeper, slow moving sections of rivers and creeks.

---

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: HIGH  
Clutch size at least 16 reported (Ehmann 1992).

Dietary generalisation: MOD  
Omnivore – pandanus fruits, aquatic animals including mussels, crustaceans, insect larvae.

Climate suitability: LOW  
Climate match with ACT ≤ 30%

Populations established outside of range: NR  
Not reported.

Aquatic/riparian species: HIGH  
Aquatic.

Potential range (ACT): LOW  
Rivers- deeper, slow moving.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

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**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: MOD  
Aquatic species –if established potential for downstream spread to Murray – Darling Basin streams.

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: MOD

---

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW-MODERATE
Family: Chelidae

**SPECIES**  
*Rheodytes leukops*

**Common name:** Fitzroy Turtle  
**Other common name:** Fitzroy River Turtle  

Single species in the genus - a short-necked freshwater turtle with a placid demeanour (Ehmann 1992) (carapace length to 25 cm)

- **Conservation status:** Vulnerable (Commonwealth, Qld).  
- **Distribution:** Known only from Fitzroy River and its tributaries in Qld.  
- **Climate/ecoregion:** Tropical, monsoonal eastern coastal hinterland.  
- **Habitat:** Fast-flowing, clear subtropical rivers. Prefers riffle areas.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** HIGH  
  Oviparous eggs laid in a hole in sandy areas. Clutch size 34-70 eggs laid in three to five clutches (Ehmann 1992).
- **Dietary generalisation:** HIGH  
  Omnivorous – aquatic insects and their larvae; Cann (1998) reports also feeds on ribbon weed.
- **Climate suitability:** LOW  
  Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** HIGH  
  Aquatic.
- **Potential range (ACT):** MOD  
  Lowland rivers.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** MOD  
  Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams.
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE

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Native Reptile Import Risk Assessment
Family: Chelidae

**SPECIES**  
*Wollumbinia bellii*

**Common name:** Bell’s Turtle  
**Other common name:** Northern Tablelands Turtle

A medium-sized freshwater turtle similar to *W. latisternum* (carapace length to 30 cm)

**Conservation status:** Vulnerable (Commonwealth, NSW)  
**Distribution:** Found only in a few rivers in the Northern Tablelands of NSW.  
**Climate/ecoregion:** Warm temperate.  
**Habitat:** Rivers and streams. Within its natural range in the Northern Tablelands occupies the upper reaches of rivers (Cogger2014). Cann (1998) describes habitat at several sites – narrow runs of rivers, riverbed sandy and rocky with patches of ribbon weed.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. 8-23 eggs (Cann 1989)  
- **Dietary generalisation:** MOD Mainly herbivorous will eat crayfish.  
- **Climate suitability:** MOD Climate match with ACT = 50%  
- **Populations established outside of range:** NR Not reported. The related *W. latisternum* has established populations in rivers in Sydney (G. Shea pers. comm.).  
- **Aquatic/riparian species:** HIGH Aquatic.  
- **Potential range (ACT):** MOD Lowland rivers and streams.  

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** MOD Diet includes crayfish (one species threatened in ACT).  
- **Potential for environmental/economic impacts:** MOD Aquatic species –if established potential for downstream spread to Murray – Darling Basin streams. Cann (1998) reports does not occur at the same in-stream locations as *C. longicollis* indicating a low potential for competition.

**Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Chelidae

**SPECIES**  
*Wollumbinia latisternum*

**Common name:** Saw-shelled Turtle

**Other common name:** A freshwater turtle with some saw-shaped edging to carapace evident particularly in younger animals (carapace length to 20 cm)

**Conservation status:** Not threatened.

**Distribution:** Coastal North Eastern and Eastern Australia (north of Richmond River)

**Climate/ecoregion:** Tropical, subtropical, monsoonal, coastal drainages.

**Habitat:** Creeks, lagoons and the upper reaches of large rivers (Swan et al 2004).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size up to 17 reported Ehmann1992. Up to 50 eggs in a season (Cann 1998).
- **Dietary generalisation:** HIGH Generalist omnivore, aquatic animals, plant material and tadpoles, fish, frogs, invertebrates
- **Climate suitability:** MOD Climate match with ACT = 50%
- **Populations established outside of range:** HIGH Yes, Sydney - where gravid females have been found (G. Shea pers. comm.).
- **Aquatic/riparian species:** HIGH Aquatic.
- **Potential range (ACT):** MOD Lowland rivers.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** MOD Generalist diet likely to include small fish.
- **Potential for environmental/economic impacts:** HIGH Aquatic species – if established potential for downstream spread to Murray – Darling Basin streams. Individuals could directly compete with *C. longicollis* and *E. macquarie*.
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** HIGH

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE-HIGH
Geckos
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Neophurus amyae*

Common name: Centralian Knob-tailed Gecko

Other common name: A very large, distinctive gecko with a large head and short tail that ends in a small knob (snout-vent length to 13 cm)

Conservation status: Not threatened. However has a highly restricted distribution.

Distribution: Central Australia.

Climate/ecoregion: Extreme arid.

Habitat: Stony hills and ranges of central Australia. Shelters in crevices amongst rocks and scree, and under rock slabs (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>NR</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**

**Nephrurus asper**

**Common name:** Rough Knob-tail

**Other common name:** Prickly Knob-tailed Gecko-

A very large, distinctive, gecko with a large head and short tail that ends in a small knob, spiny tubercular shaped scales obvious on back (snout-vent length to 10 cm)

**Conservation status:** Not threatened.

**Distribution:** Much of northern and inland Queensland.

**Climate/ecoregion:** Tropical and semi-arid.

**Habitat:** Rocky areas. Shelters in crevices amongst rocks and under rock slabs (Cogger 2014).

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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Reproductive potential:</td>
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</tr>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
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</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT):</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Nephurus laevissimus*

**Common name:** Smooth Knob-tailed Gecko  
**Other common name:** Pale Knob-tailed Gecko

A very large, distinctive knob-tailed gecko with mostly smooth skin (snout-vent length to 8 cm)

**Conservation status:** Not threatened.  
**Distribution:** Inland regions of south-western Australia.  
**Climate/ecoregion:** Arid and semi-arid. Warm temperate and subtropical west.  
**Habitat:** Sandhills, sandy ridges dominated by Spinifex (Triodia) hummocks (Ehmann 1992).

![Map of Australia showing distribution of *Nephurus laevissimus*](image)

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.
- Dietary generalisation: HIGH Generalist carnivore – invertebrates.
- Climate suitability: LOW Climate match with ACT ≤ 30%.
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): LOW No extensive arid sandy habitats in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**

**Nephrurus sheai**

**Common name:** Northern Knob-tailed Gecko

**Other common name:**
A very large, reddish-brown knob-tailed gecko with transverse bands across body (snout-vent length to 12 cm)

**Conservation status:** Not threatened.

**Distribution:** Far north west Australia; Kimberley region to the Arnhem escarpment northern NT.

**Climate/ecoregion:** Tropical; hinterland.

**Habitat:** Stony ranges and rock bluffs in woodland areas; shelters in crevices amongst rocks and scree, and under rock slabs (Cogger 2014).

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**LIKELYHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 2.
- **Dietary generalisation:** NR Not reported
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** LOW No tropical environments in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Neophurus stellatus*

**Common name:** Stellate Knob-tail Gecko  
**Other common name:** Starred Knob-tailed Gecko

A very large, distinctive gecko with a prominent and even scattering of yellow spots (star like) on its back, short tail ends in a small knob (snout-vent length to about 8.5 cm)

**Conservation status:** Not threatened.  
**Distribution:** Extreme south of South Australia and an outlying population west of Kalgoorlie in Western Australia.  
**Climate/ecoregion:** Temperate, semi arid.  
**Habitat:** Shrubland and heath (Cogger). Spinefix hummock grassland on sandy soil, usually with mallee eucalypts present (Ehmann 1992). Shelters in burrows.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 2.  
- **Dietary generalisation:** NR Not reported for wild.  
- **Climate suitability:** MOD Climate match with ACT = 40%.  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** LOW No sandy arid environments in ACT.  

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Phyllurus platurus*

**Common name:** Southern Leaf-tailed Gecko  
**Other common name:** Broad-tailed Gecko

A leaf-tailed gecko (snout-vent length to 8 cm)

- **Conservation status:** Not threatened.  
- **Distribution:** Central coast and ranges of NSW south to Kiama.  
- **Climate/ecoregion:** Warm temperate, coastal hinterland, high rainfall.  
- **Habitat:** Sandstone outcrops and overhangs in wet and dry eucalypt forest and heathland. Will enter houses. (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
  Oviparous. Clutch size up to 2.
- **Dietary generalisation:** NR  
  Not reported
- **Climate suitability:** HIGH  
  Climate match with ACT = 80%.
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** LOW  
  Terrestrial.
- **Potential range (ACT):** MOD  
  Very few sandstone cliffs and outcroppings with large overhangs and large crevices in the ACT. Drier and colder conditions in the ACT likely to be limiting. Has not established in ACT despite occurring nearby.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Saltuarius salebrosus*

**Common name:** Rough-throated Leaf-tail Gecko  
**Other common name:** A very large leaf-tailed gecko (snout-vent length to 16 cm)

- **Conservation status:** Not threatened.  
- **Distribution:** Mid-eastern Qld – coastal ranges near Rockhampton.  
- **Climate/ecoregion:** Tropical.  
- **Habitat:** Granite and sandstone rock outcrops in rainforest and scrub. Also shelters in cavities in tree trunks in rainforest (Cogger 2014; Wilson and Knowles 1988).

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
  Oviparous. Clutch size up to 2.
- **Dietary generalisation:** NR  
  Not reported
- **Climate suitability:** LOW  
  Climate match with ACT ≤ 30%.
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** LOW  
  Terrestrial.
- **Potential range (ACT):** LOW  
  No tropical environments with extensive rock cliffs and escarpments in the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Saltuarius swaini*

Common name: Southern Leaf-tailed Gecko  
Other common name: A large leaf-tailed gecko, similar to *S. wyerba* and *S. moritzi* (snout-vent length to 13 cm)

Conservation status: Not threatened.  
Distribution: Border ranges in far eastern Australia south of Brisbane.  
Climate/ecoregion: Wet subtropical east.  
Habitat: Rainforest and adjacent tall open forest; especially stream side vegetation in mountain gorges (Cogger 2014). Commonly seen on tree trunks.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.  
- Dietary generalisation: NR Not reported  
- Climate suitability: MOD Climate match with ACT = 60%.  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): LOW No suitable habitat in ACT.  

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Saltuarius wyberba*

Common name: Granite-belt Leaf-tailed Gecko  
Other common name: Wyberba Leaf-tailed Gecko  
A leaf-tailed gecko, similar to *S. swaini* and *S. moritzi* (snout-vent length to 11 cm)

Conservation status: Not threatened.  
Distribution: Northern parts of New England Tablelands of NSW and adjacent areas in QLD west of the Border Ranges.  
Climate/ecoregion: Warm temperate and subtropical east.  
Habitat: Forested granite and basalt areas. Shelters amongst rocks and in caves. Active at night on rocks and in rock crevices (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.  
- Dietary generalisation: NR Not reported.  
- Climate suitability: LOW Climate match with ACT = 60%.  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): LOW No suitable habitat in ACT.  
- OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  
- OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Carphodactyliidae (Southern padless geckos)

**SPECIES**

*Underwoodisaurus milii*

**Common name:** Thick-tailed Gecko  
**Other common name:** Barking Gecko

A distinctive terrestrial gecko with a fat tail and large yellow dots located on enlarged tubercles (snout-vent length to 8 cm)

**Conservation status:** Not threatened.  
**Distribution:** Across entire southern Australia.  
**Climate/ecoregion:** Cool temperate, warm temperate, semi-arid.  
**Habitat:** Occurs in a broad range of habitats including heathland, woodlands and sclerophyll forests. Common in granite and sandstone areas (Ehmann 1992). Shelters under rock slabs, logs, litter and in burrows.

![Map of Australia showing the distribution of *Underwoodisaurus milii*](image)

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW: Oviparous. Clutch size up to 2.</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH: Generalist carnivore – invertebrates.</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>HIGH: Climate match with ACT = 90%.</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR: Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW: Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>HIGH: Occurs close to the ACT in the Western Slopes region near Gundagai (Swan et al. 2004). Has not established in the ACT despite occurring nearby (may be too cold).</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
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<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Carphodactylidae (Southern padless geckos)

**SPECIES**  
*Uvidicolus sphyrurus*

Common name:  Border Thick-tailed Gecko  
Other common name:  New England Tableland Thick-tailed Gecko

An uncommon and sparsely distributed gecko quite similar in appearance to the more common Thick-tailed Gecko (*U. milii*), background colour pale to dark-brownish grey (snout-vent length to 7 cm)

Conservation status:  Vulnerable (Australia, NSW), Near Threatened (Queensland). Rare and sparsely distributed within its small range.

Distribution:  Northern Tablelands of NSW.

Climate/ecoregion:  Warm temperate – tableland elevations.

Habitat:  Confined to granite belt – associated with rock outcrops and stony hills in eucalyptus woodland. Shelters beneath exfoliated rock slabs and boulders.

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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>LOW  Oviparous. Clutch size up to 2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH  Generalist carnivore – invertebrates.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>MOD  Climate match with ACT = 70%.</td>
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<tr>
<td>Populations established outside of range:</td>
<td>NR  Not reported.</td>
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<tr>
<td>Aquatic/riparian species:</td>
<td>LOW  Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>MOD  Tableland climate and presence of extensive areas of granite rock out-cropping.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:**  MOD

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts: | LOW |
| Potential for harm to humans: | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:**  LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:**  LOW-MODERATE
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Amalosia lesueurii*  
**Common name:** Lesueur’s Velvet Gecko  
**Other common name:** A small velvet gecko (snout-vent length to 8cm cm)

Conservation status: Not threatened.
Distribution: Coast and ranges of NSW and far south-eastern Queensland.
Climate/ecoregion: Subtropical and warm temperate music east.
Habitat: Rocky ridges and extensive rock outcrops with dry forest and heathland (Cogger 201); Swan et al. 2004). Shelters under exfoliated rock slabs, rock crevices and leaf litter at the base of rock faces (Swan et al 2004).

**LIKELIHOOD OF ESTABLISHMENT**  
Reproductive potential: LOW Oviparous. Clutch size up to 2.
Dietary generalisation: HIGH Generalist carnivore – invertebrates.
Climate suitability: HIGH Climate match with ACT = 80%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW Terrestrial.
Potential range (ACT): LOW A lack of extensive rock outcropping in moist vegetation types at low elevations in the ACT. Has not established in the ACT despite occurring nearby.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

**CONSEQUENCES OF ESTABLISHMENT**  
Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW-MODERATE
Family: Diplodactylidae (Austral Geckos)

**SPECIES**

*Diplodactylus galeatus*

Common name: Helmeted Gecko

Other common name: A small distinctive member of the *D. vittatus* group of ground geckos (snout-vent length to 5 cm)

Conservation status: Not threatened.
Distribution: Mountain ranges and hills of central Australia (NT and SA).
Climate/ecoregion: Arid interior.
Habitat: Rocky spinifex covered hills. Shelters beneath rocks and in deeper burrow beneath rocks (Cogger 2014; Wilson and Knowles 1988).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.
- Dietary generalisation: NR Not recorded
- Climate suitability: LOW Climate match with ACT ≤ 30%.
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): LOW A lack of extreme arid environments in the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**

*Diplodactylus vittatus*

**Common name:** Eastern Stone Gecko  
**Other common name:** Wood Gecko

A small ground gecko with a zig zag stripe along back (snout-vent length to 5 cm)

**Conservation status:** Not threatened.  
**Distribution:** Southern SA, northern Vic, inland NSW including Sydney region, south eastern QLD. Occurs in the ACT where it is sparsely distributed in woodlands and rocky areas in the northern parts of the ACT and lower ranges.

**Climate/ecoregion:** Eastern tropical, subtropical, warm temperate and semi-arid.

**Habitat:** Wide variety of habitat types from arid scrubs to woodland and forest. A terrestrial species usually found under fallen timber, stones or litter (Cogger 2014; Swan et al. 2004; Ehmann 1992; Wilson and Knowles 1988).

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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>HIGH</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT.

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW

If captive individuals become established in the wild, there is potential for them to breed with members of local populations and/or transfer disease.
Family: Diplodactylidae (Austral Geckos)

**SPECIES** *Lucasium damaeum*

Common name: Beaded Gecko

Other common name: A common small terrestrial gecko (snout-vent length to 5 cm)

Conservation status: Not threatened.

Distribution: Arid interior of all mainland states – generally southern and central Australian distribution.

Climate/ecoregion: Arid and semi-arid; temperate.

Habitat: Wide variety of drier habitat types with sandy soils - woodland, mallee, and spinifex covered sandhills and ranges. Shelters in burrows constructed by itself or by other lizards and invertebrates (Cogger 2014; Swan et al. 2004; Ehmann 1992; Wilson and Knowles 1988).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.
- Dietary generalisation: HIGH Generalist carnivore – invertebrates.
- Climate suitability: LOW Climate match with ACT ≤ 30%.
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): LOW Lack of suitable sandy semi-arid and arid environments in the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**

*Lucasium steindachneri*

**Common name:** Steindachner’s Ground Gecko

**Other common name:** Box-patterned Gecko

A very distinctive ground gecko with a striking dorsal pattern of interconnected box-shaped pale markings (snout-vent length to 6 cm)

**Conservation status:** Not threatened. Rare (SA) (limited distribution).

**Distribution:** Interior of NSW and Southern QLD extending to the NE coastal regions of

**Climate/ecoregion:** Subtropical, warm temperate and semi-arid.

**Habitat:** A broad range of habitats from arid shrub land to mallee and woodland. Shelters in holes and crevices in the ground, particularly abandoned arthropod burrows (Cogger 2014; Ehmann 1992; Wilson and Knowles 1988; Swan et al. 2004).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 2.
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates (James et al. 1984)
- **Climate suitability:** MOD Climate match with ACT = 60%.
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** MOD Some low-lying areas in warmer parts of ACT may be suitable (e.g. *Callitrus* woodland, native grassland). Has not established in the ACT despite occurring nearby.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** MOD If it occupied burrows in NTG grassland could potentially compete with *T. pinguicolla* for home sites.
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Diplodactylidae (Austral Geckos)

**SPECIES**

*Nebulifera robusta*

**Common name:** Robust Velvet Gecko

**Other common name:** A large strikingly patterned arboreal gecko (snout-vent length to 8 cm)

Conservation status: Not threatened.
Distribution: North-eastern NS to Atherton Tablelands of Qld.
Climate/ecoregion: Subtropical and warm temperate east.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.
- Dietary generalisation: HIGH Generalist carnivore – invertebrates.
- Climate suitability: HIGH Climate match with ACT = 80%.
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): MOD Woodlands in warmer parts of ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Oedura castelnaui*

**Common name:** Northern Velvet Gecko  
**Other common name:** A very large, banded velvet gecko (snout-vent length to 9 cm)

**Conservation status:** Not threatened.  
**Distribution:** Cape York Peninsula.  
**Climate/ecoregion:** Tropical NE.  
**Habitat:** Tropical woodland – usually in rocky areas (Cogger 2014; Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>LOW</th>
<th>Oviparous. Clutch size up to 2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>NR</td>
<td>Not recorded. Known to survive for very long periods by using fat stored in tail.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW</td>
<td>Climate match with ACT ≤ 30%.</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR</td>
<td>Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW</td>
<td>Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW</td>
<td>Lack of tropical woodlands in the ACT. Cold temperatures at night likely to be limiting for this nocturnal arboreal species.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts:   | LOW |
| Potential for harm to humans:                    | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**

*Oedura coggeri*

Common name: Northern Spotted Velvet Gecko

Other common name: A velvet gecko with distinctive eye-like spots and bars on the dorsum (snout-vent length to 7 cm)

Conservation status: Not threatened.

Distribution: Far north-eastern Queensland, including lower eastern part of Cape York.

Climate/ecoregion: Tropical east.

Habitat: Rocky areas within tropical woodland (Cogger 2014; Ehmann 1992). Sometimes shelters under bark on fallen trees.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.
- Climate suitability: LOW Climate match with ACT ≤ 30%.
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): LOW Lack of tropical environments.

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Oedura filicipoda*

**Common name:** Fringe-toed Velvet Gecko

**Other common name:**  
A large velvet gecko with distinct fringing on toes and fingers (snout-vent length to 10 cm)

**Conservation status:** Not threatened. Limited distribution.

**Distribution:** Known only from the Mitchell Plateau in the Kimberley region.

**Climate/ecoregion:** Tropical north west.

**Habitat:** Inhabits caves and deep fissures in sandstone outcroppings and deeply dissected rock faces and ridges (Cogger 2014; Ehmann 1992).

![Map of Australia](image)

**LIKELIHOOD OF ESTABLISHMENT**

| Reproductive potential: | LOW  
|-------------------------|-----|
| Dietary generalisation: | NR  
| Climate suitability: | LOW  
| Populations established outside of range: | NR  
| Aquatic/riparian species: | LOW  
| Potential range (ACT): | LOW  

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW  
| Potential for environmental/economic impacts: | LOW  
| Potential for harm to humans: | LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Oedura marmorata*

**Common name:** Marbled Velvet Gecko  
**Other common name:** A variably patterned and widespread velvet gecko (snout-vent length to 10 cm)

**Conservation status:** Not threatened.  
**Distribution:** Inland Eastern Australia, much of NT and an apparently isolated but extensive population in the Pilbara region of WA.  
**Climate/ecoregion:** Continental – tropical, subtropical, warm temperate, semi-arid.  
**Habitat:** Forest, woodland and scrub as well as rock outcrops. An arboreal species, shelters in tree holes, under bark and in rock fissures (Cogger 2014; Swan et al. 2004; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 2.  
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates and smaller lizards (Ehmann 1992).  
- **Climate suitability:** LOW Climate match with ACT ≤ 30%.  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** MOD Drier parts of ACT. Cold nights likely to limit activity of this arboreal species.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** MOD Potentially could compete with *C. marmoratus*.  
- **Potential for harm to humans:** LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Diplodactyliidae (Austral Geckos)

SPECIES  
**Oedura monilis**

Common name: Ocellated Velvet Gecko

Other common name: A velvet gecko with pairs of large ocelli (eye-like spots) along the back (snout-vent length to 9 cm)

Conservation status: Not threatened.
Distribution: Western slopes and ranges of northern NSW and eastern QLD.
Climate/ecoregion: Tropical, subtropical, warm temperate - eastern.
Habitat: Dry eucalypt forests and callitris woodlands. An arboreal species usually found under bark (Cogger 2014; Swan et al. 2004).

LIKELIHOOD OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Feature</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
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<td>Dietary generalisation</td>
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</tr>
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<td>Climate suitability</td>
<td>MOD</td>
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<td>Aquatic/riparian species</td>
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</tr>
<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
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OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

CONSEQUENCES OF ESTABLISHMENT

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<tr>
<th>Feature</th>
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<tr>
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</tr>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>MOD</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
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</tr>
</tbody>
</table>

OVERALL CONSEQUENCES OF ESTABLISHMENT: MOD

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: MODERATE
Family: Diplodactylidae (Austral Geckos)

SPECIES: *Oedura tryoni*

**Common name:** Southern Spotted Velvet Gecko

**Other common name:** A velvet gecko with many ocelli (eye-like spots) (snout-vent length to 10 cm)

**Conservation status:** Not threatened.

**Distribution:** North-eastern NSW and south-eastern Qld; hinterland ranges and tableland areas.

**Climate/ecoregion:** Warm temperate - eastern.

**Habitat:** Granite outcrops and ranges in dry eucalypt forests (Cogger 201); Swan et al. 2004). Shelters under exfoliated granite and sometimes under bark of standing trees (Swan et al. 2004).

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**LIKELIHOOD OF ESTABLISHMENT**

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<tr>
<th>Characteristic</th>
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<td>Climate suitability</td>
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<tr>
<td>Populations established outside of range</td>
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<td>Aquatic/riparian species</td>
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<tr>
<td>Potential range (ACT)</td>
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**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

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**CONSEQUENCES OF ESTABLISHMENT**

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<thead>
<tr>
<th>Consequence</th>
<th>Likelihood</th>
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<td>Potential for impact on threatened species (ACT)</td>
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<td>Potential for environmental/economic impacts</td>
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<tr>
<td>Potential for harm to humans</td>
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</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Pseudothecadactylus linderi*

**Common name:** Northern Giant Cave Gecko  
**Other common name:** Lindner’s Giant Cave Gecko

A large, powerful cave gecko (snout-vent length to 10 cm)

Conservation status: Not threatened.  
Distribution: Western Arnhemland, NT.  
Climate/ecoregion: Tropical and monsoonal far north.  
Habitat: Inhabits caves, crevices and overhangs in deeply dissected sandstone country (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

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<tr>
<th>Aspect</th>
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<tr>
<td>Climate suitability</td>
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<td>Aquatic/riparian species</td>
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</tr>
<tr>
<td>Potential range (ACT)</td>
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</table>

**OVERALL LIKELIKHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Aspect</th>
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</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT):</td>
<td>LOW</td>
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<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
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<tr>
<td>Potential for harm to humans:</td>
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</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Strophurus ciliaris*

**Common name:** Northern Spiny-tailed Gecko  
**Other common name:** Spiny-tailed Gecko

A small arboreal gecko snout (vent length to 8 cm cm)

**Conservation status:** Not threatened.  
**Distribution:** Extensive distribution, arid interior and NW monsoonal areas of Australia.  
**Climate/ecoregion:** Tropical monsoonal, arid and semi arid.  
**Habitat:** Very wide variety of habitats from monsoonal forests to arid woodlands and Acacia scrub (Cogger 2014; Swan et al. 2004). Arboreal and sometimes active on the ground.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 2.  
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates (Ehmann 1992).  
- **Climate suitability:** LOW Climate match with ACT ≤ 30%.  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** LOW Lack of tropical and arid environments in ACT.

**OVERALL LIKELIKHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**

**Strophurus elderi**

Common name: Jewelled Gecko

Other common name: A small distinctive dark-coloured gecko with numerous white star-like spots (snout-vent length to 4.5 cm)

Conservation status: Vulnerable (NSW, limited distribution), not threatened in other States.

Distribution: Arid regions of SA, WA and southern NT. Far western Qld, NSW and Vic.

Climate/ecoregion: Subtropical NW; arid and semi-arid.

Habitat: Confines to semi-arid and arid environments that support spinifex (Cogger 2014). Appears to be confined to dense live spinifex clumps on sandy red soils (Swan et al. 2004).

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: LOW Oviparous. Clutch size up to 2.


Climate suitability: MOD Climate match with ACT = 40%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): LOW A lack of arid and semi-arid environments and spinifex hummock grasses on sandy soils.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Strophurus intermedius*

**Common name:** Southern Spiny-tailed Gecko  
**Other common name:** A small spiny tailed gecko (snout-vent length to 6.5 cm)

**Conservation status:** Not threatened.
**Distribution:** South-eastern WA, through southern SA and parts of NT, to north-western Vic and western NSW.
**Climate/ecoregion:** Southern - arid, semi-arid and warm temperate.
**Habitat:** Dry eucalypt forests and woodlands, Callitris woodland, mallee extending into hummock grasslands (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>MOD</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Aspect</th>
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<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Diplodactylidae (Austral Geckos)

**SPECIES**  
*Strophurus taenicauda*  
Common name: Golden-tailed Gecko  
Other common name: A small distinctive gecko with an orange stripe on the tail (snout-vent length to 7 cm)

Conservation status: Near Threatened (Qld).  
Distribution: Darling Downs to coastal regions of central and north-eastern QLD.  
Climate/ecoregion: Eastern subtropical, warm temperate.  
Habitat: Dry eucalypt forests and acacia and Callitris woodlands (Cogger 2014). An arboreal species found amongst branches or on the trunk.

![Map of Australia showing the distribution of Strophurus taenicauda](image)

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
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</tr>
<tr>
<td>Dietary generalisation</td>
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</tr>
<tr>
<td>Climate suitability</td>
<td>MOD</td>
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<tr>
<td>Populations established outside of range</td>
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</tr>
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<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Diplodactyliidae (Austral Geckos)

**SPECIES**  
*Strophurus williamsi*

Common name: Eastern Spiny-tailed Gecko  
Other common name: A small spiny tailed gecko, can eject a mildly pungent fluid from tail for up to 20 cm (Ehmann 1992) (Snout-vent length to 6 cm)

Conservation status: Not threatened.  
Distribution: North-eastern interior of NSW, through inland QLD to the north eastern coast.  
Climate/ecoregion: Eastern tropical, subtropical, warm temperate, semi-arid.  
Habitat: Found in a wide range of habitats, from dry woodland and eucalypt forest to Callitris forests (Cogger 2014). An arboreal species.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: LOW Oviparous. Clutch size up to 2.  
Dietary generalisation: NR Not reported  
Climate suitability: MOD Climate match with ACT = 70%  
Populations established outside of range: NR Not reported.  
Aquatic/riparian species: LOW Terrestrial.  
Potential range (ACT): MOD Very little suitable habitat in the ACT (mainly woodland areas on the drier west facing slopes associated with the lower river valleys).

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW  
Potential for environmental/economic impacts: LOW  
Potential for harm to humans: LOW  
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Gekkonidae (typical geckos)

**SPECIES**  
*Christinus marmoratus*  
Common name: Marbled Gecko  
Other common name:  
A small well camouflaged arboreal gecko found in the ACT (Snout-vent length to 7 cm)

Conservation status: Not threatened.  
Distribution: Southern Australia, from the coast of WA to central NSW.  
Climate/ecoregion: Southern, warm temperate and cool temperate.  
Habitat: An arboreal species found in dry eucalypt forests and woodlands. Thought to replace *G. variegata* in similar, but colder and wetter, habitats (Cogger 2014). Shelters by day under loose bark on trees, in rock crevices, or under rock slabs (Swan et al 2004; Bennett 2011).

![Map of Australia with areas in green indicating distribution of *Christinus marmoratus*](image)

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.  
- Dietary generalisation: HIGH Generalist carnivore – invertebrates.  
- Climate suitability: HIGH Climate match with ACT = 100 %  
- Populations established outside of range: NR Melbourne (P. Robertson pers. comm.)  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): HIGH Woodlands and rocky areas in the northern ACT provide extensive areas of suitable habitat.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW  
Potential for any imported individuals from other parts of Australia to breed with members of local populations.
Family: Gekkonidae (typical geckos)

**SPECIES**  
*Gehyra australis*

**Common name:** Northern Dtella  
**Other common name:** Top-end Dtella

A medium-sized arboreal gecko found on trunks of trees, rock outcrops and walls of buildings, (snout-vent length to 7 cm)

**Conservation status:** Not threatened.  
**Distribution:** Far northern Australia from East Kimberley to the Gulf.  
**Climate/ecoregion:** Northern tropical, monsoonal.  
**Habitat:** Woodlands and coastal riverine forests and rock outcrops. Also buildings (Cogger 2014; Ehmann 1992).

### LIKELIHOOD OF ESTABLISHMENT

- **Reproductive potential:** LOW  
  Oviparous. Clutch size up to 2.  
- **Dietary generalisation:** HIGH  
  Generalist carnivore – invertebrates.  
- **Climate suitability:** LOW  
  Climate match with ACT ≤ 30%  
- **Populations established outside of range:** NR  
  Not reported.  
- **Aquatic/riparian species:** LOW  
  Terrestrial.  
- **Potential range (ACT):** LOW  
  No monsoonal, tropical environments.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

### CONSEQUENCES OF ESTABLISHMENT

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Gekkonidae (typical geckos)

**SPECIES**  
*Gehyra dubia*

**Common name:** Dubious Dtellaa  
**Other common name:** A medium-sized strongly built arboreal dtella gecko (snout-vent length to 8 cm)

**Conservation status:** Not threatened.
**Distribution:** North-eastern Australia from central western NSW to Cape York  
**Climate/ecoregion:** Eastern, tropical, monsoonal, subtropical, warm temperate, semiarid.  
**Habitat:** Woodlands, open forest and shrubland (Cogger 2014; Ehmann 1992). Also seen amongst rocks and on outer walls of buildings (Swan et al. 2004).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 2.
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates.
- **Climate suitability:** MOD Climate match with ACT = 50%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** MOD ACT likely to be too cold, although southern-most populations in NSW may have cold tolerance.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** MOD potentially would compete with *C. marmoratus*.
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Gekkonidae (typical geckos)

**SPECIES**  
*Gehyra montium*

Common name: Centralian Dtella  
Other common name: A small strikingly-patterned semi-arboreal gecko found in rocky areas (snout-vent length to 5 cm)

Conservation status: Not threatened.  
Distribution: Central Australia.  
Climate/ecoregion: Arid.  
Habitat: Found in rocky habitats and shelters under rock slabs and in crevices (Cogger 2014; Ehmann 1992).

![Map of Australia showing distribution of Gehyra montium](image)

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Trait</th>
<th>Likelihood</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
<td>Oviparous. Clutch size up to 2.</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>NR</td>
<td>Not reported</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW</td>
<td>Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
<td>Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
<td>Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW</td>
<td>No arid environments in ACT.</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT</td>
<td>LOW</td>
<td></td>
</tr>
</tbody>
</table>

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Trait</th>
<th>Likelihood</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>OVERALL CONSEQUENCES OF ESTABLISHMENT</td>
<td>LOW</td>
<td></td>
</tr>
</tbody>
</table>

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Gekkonidae (typical geckos)

**SPECIES**  
*Gehyra variegata*

**Common name:** Tree Dtella  
**Other common name:** Variegated Dtella  
A small arboreal gecko found on trunks of trees, rock outcrops and walls of buildings (snout-vent length to 5.5 cm)

Conservation status: Not threatened.  
Distribution: Widely distributed throughout the inland of Australia.  
Climate/ecoregion: Subtropical, warm temperate, arid and semiarid  

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: LOW Oviparous. Clutch size up to 2.  
Dietary generalisation: HIGH Generalist carnivore – invertebrates.  
Climate suitability: MOD Climate match with ACT = 50%  
Populations established outside of range: HIGH Recorded in a number of cities outside known range. Several records in ACT likely to have been accidentally imported on firewood (although no evidence of these forming breeding populations).

Aquatic/riparian species: LOW Terrestrial.  
Potential range (ACT): MOD Woodlands and rocky areas at low elevations.  
OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW  
Potential for environmental/economic impacts: MOD Potential to compete with *C. marmoratus*.  
Potential for harm to humans: LOW  
OVERALL CONSEQUENCES OF ESTABLISHMENT: MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE-HIGH
Family: Gekkonidae (typical geckos)

**SPECIES**  
*Hemidactylus frenatus*

Common name: Asian House Gecko  
Other common name: House Gecko

A small exotic (introduced to Australia) arboreal gecko found on the walls and ceilings of buildings (snout-vent length to 6 cm)

Conservation status: Not threatened. Introduced species  
Distribution: Northern Australia; associated with human settlements. There has been a record from Canberra.  
Climate/ecoregion: Northern tropical, monsoonal, eastern subtropical, warm temperate.  
Habitat: Confined to human settlements (buildings), however on Christmas Island has extended into primary forest (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.  
- Dietary generalisation: HIGH Generalist carnivore – invertebrates.  
- Climate suitability: LOW Climate match with ACT ≤ 30%  
- Populations established outside of range: HIGH Now established in many cities in both coastal and inland parts of northern Australia.  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): LOW Likely to be too cold for breeding populations to establish outside of buildings.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Gekkonidae (typical geckos)

**SPECIES**

*Heteronotia binoei*

**Common name:** Bynoe’s Prickly Gecko

**Other common name:** Bynoe’s Gecko

A small, highly variable, terrestrial gecko with a prickly appearance, some populations in Western Australia are parthenogenic (snout-vent length to 5 cm)

**Conservation status:** Not threatened.

**Distribution:** Most of Australia, except for far SW and SE.

**Climate/ecoregion:** Northern tropical, monsoonal, subtropical, warm temperate, arid and semi-arid.

**Habitat:**

A wide variety of habitats including wet coastal forests, woodlands, and a range of semi-arid and desert vegetation types (Cogger 2014; Ehmann 1992). Shelters beneath rocks, logs, piles of bark at the base trees, soil cracks and beneath surface debris (Wilson and Knowles 1988).

### LIKELIHOOD OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Feature</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW Oviparous. Clutch size up to 2. Note some populations are parthenogenic.</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>MOD Climate match with ACT = 50%</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW ACT likely to be too cold.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

### CONSEQUENCES OF ESTABLISHMENT

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** MOD Could potentially compete with *D. vittatus*.
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Gekkonidae (typical geckos)

**SPECIES**

*Heteronotia spelea*

**Common name:** Desert Cave Gecko  
**Other common name:** Cave Prickly Gecko  
A small prickly, banded, ground gecko associated with caves and rock crevices (snout-vent length to 5 cm)

**Conservation status:**  Not threatened.  
**Distribution:** Pilbara region of WA; also recorded from Tanami Desert (Cogger 2014).  
**Climate/ecoregion:** Semi-arid and arid.  
**Habitat:** Caves, crevices and deep low overhangs in rocky areas. Found at night foraging about the entrances of such caves and crevices. (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 2.  
- Dietary generalisation: NR Not reported.  
- Climate suitability: LOW Climate match with ACT ≤ 30%  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): LOW No arid or semi-arid environments. Caves and other subterranean cavities uncommon in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Gekkonidae (typical geckos)

**SPECIES**  
*Cryodactylus tuberculatus*  
(NB Listed as *Cryodactylus loisiadensis* in NSW keepers list)

**Common name:** Tuberculated Ring-tailed Gecko  
**Other common name:** Ring-tailed Gecko  
*A very large ring-tailed gecko (snout-vent length to 12 cm)*

**Conservation status:** Not threatened.  
**Distribution:** Central-eastern Cape York Peninsular.  
**Climate/ecoregion:** Northern tropical, monsoonal.  
**Habitat:** Tropical rainforest, monsoon forest, vine-thickets and rocky areas within, or adjacent, to these areas (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW  
  Oviparous. Clutch size up to 2.
- Dietary generalisation: HIGH  
  Generalist carnivore – invertebrates and frogs.
- Climate suitability: LOW  
  Climate match with ACT ≤ 30%
- Populations established outside of range: NR  
  Not reported.
- Aquatic/riparian species: LOW  
  Terrestrial.
- Potential range (ACT): LOW  
  Monsoonal, tropical forests do not occur in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Legless Lizards
Family: Pygopodidae (Legless lizards)

**SPECIES**  
*Delma inornata*

**Common name:** Patternless Delma  
**Other common name:** Olive Legless Lizard

A legless lizard (snout-vent length to 12.5 cm)

Conservation status: Not threatened.  
Distribution: Eastern and south-eastern Australia. Occurs in the ACT where it is common.  
Climate/ecoregion: Warm temperate, cool temperate.  
Habitat: A range of open forest and woodland environments including mallee and chenopod shrublands (Cogger 2014; Ehmann 1992). In the ACT also occurs in land cleared for livestock grazing if it is dominated by native grasses and perennial grasses and has rocks and logs present to provide homesites.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW  
  Oviparous. Clutch size 2.
- Dietary generalisation: HIGH  
  Generalist carnivore – invertebrates.
- Climate suitability: HIGH  
  Climate match with ACT = 100%
- Populations established outside of range: NR  
  Not reported.
- Aquatic/riparian species: LOW  
  Terrestrial.
- Potential range (ACT): HIGH  
  Already widespread at lower elevation in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH  
Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Pygopodidae (Legless lizards)

**SPECIES**

*Lialis burtonis*

Common name: Burton’s Legless Lizard

Other common name: Burton’s Legless Lizard

A large legless lizard with very distinct wedge-shaped snout (snout-vent length to 25 cm)

- **Conservation status:** Not threatened.
- **Distribution:** Occurs throughout most of Australia. Occurs in the ACT where it is uncommon.
- **Climate/ecoregion:** Tropical, subtropical, monsoonal, warm temperate, cool temperate.
- **Habitat:** A very wide range of habitats including open forest, woodland, shrubland, and heath (Cogger 2014; Ehmann 1992; Wilson and Knowles 1988).

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size 2.
- **Dietary generalisation:** LOW Specialised carnivore – preys on small lizards.
- **Climate suitability:** HIGH Climate match with ACT = 100%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** HIGH Already occurs at lower elevation in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

---

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Pygopodidae (Legless lizards)

**SPECIES**

*Pygopus lepidopodus*

**Common name:** Common Scaly-foot

**Other common name:** Southern Scaly-foot

A large robust legless lizard (snout-vent length to 23 cm)

**Conservation status:** Not threatened.

**Distribution:** All of southern Australia (excluding arid interior). Occurs in the ACT where there have been two records (Black Mountain Nature Reserve and Tidbinbilla Nature Reserve).

**Climate/ecoregion:** Warm temperate, cool temperate.

**Habitat:** A range of open forest and woodland environments including mallee and chenopod shrublands (Cogger 2014; Ehmann 1992). In the ACT also occurs in land cleared for livestock grazing and that is dominated still by native grasses and perennial grasses that provide substantial ground cover

**LIKELIHOOD OF ESTABLISHMENT**

**Reproductive potential:** LOW Oviparous. Clutch size 2.

**Dietary generalisation:** MOD Carnivore – invertebrate; feeds mostly on spiders (Cogger 2014). Will also eat small berries.

**Climate suitability:** HIGH Climate match with ACT = 100%

**Populations established outside of range:** NR Not reported.

**Aquatic/riparian species:** LOW Terrestrial.

**Potential range (ACT):** HIGH Already widespread at lower elevation in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

**Potential for impact on threatened species (ACT):** LOW

**Potential for environmental/economic impacts:** LOW

**Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Pygopodidae (Legless lizards)

**SPECIES**  
*Pygopus nigriceps*

Common name: Western Hooded Scaly-foot  
Other common name: A large, robust legless lizard (snout-vent length to 23 cm)

Conservation status: Not threatened.  
Distribution: Central and western Australia (excluding far north and south).  
Climate/ecoregion: Arid, semi-arid, warm temperate, subtropical.  
Habitat: A range of open forest and woodland environments including open forest, woodland, shrubland and grassland wherever hummock grasses occur (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>LOW Oviparous. Clutch size 2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH Generalist carnivore – invertebrates.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW Climate match with ACT ≤ 30%</td>
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<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW No arid and semi-arid environments.</td>
</tr>
</tbody>
</table>

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: **LOW**

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts: | LOW |
| Potential for harm to humans: | LOW |

OVERALL CONSEQUENCES OF ESTABLISHMENT: **LOW**

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: **LOW**
Skinks
Family: Scincidae (Skink lizards)

**SPECIES**

*Acritoscincus platynotus*

Common name: Red-throated Skink

Other common name: A legless lizard (snout-vent length to 6 cm)

Conservation status: Not threatened.

Distribution: Eastern Victoria and south-eastern NSW. Occurs at lower elevations in the ACT.

Climate/ecoregion: Warm temperate, cool temperate.

Habitat: A range of open forest, woodland, grassy woodland and rocky environments (Cogger 2014; Ehmann 1992). Often found beneath logs and rocks.

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size 3-9 (Greer 1989).
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates.
- **Climate suitability:** HIGH Climate match with ACT = 100%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** HIGH Already widespread at lower elevation in ACT.
- **OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

SPECIES  
**Bellatorias frerei**

**Common name:** Major Skink  
**Other common name:** A large, robust skink (snout-vent length to 25 cm)

Conservation status: Not threatened.  
Distribution: North eastern NSW to Cape York Peninsula.  
Climate/ecoregion: Tropical, subtropical, monsoonal, warm temperate.  
Habitat: moist, dense thickets in rainforest, open forest, vine thickets and woodland (including coastal sites) (Cogger 2014; Ehmann 1992).

LIKELIHOOD OF ESTABLISHMENT

Reproductive potential: LOW Viviparous. Clutch size low (up to three according to Ehmann 1992).


Climate suitability: MOD Climate match with ACT = 50%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): MOD Potential to occur in woodlands, though temperatures likely to be too low to establish populations.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

CONSEQUENCES OF ESTABLISHMENT

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW-MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Bellatorias major*

**Common name:** Land Mullet  
**Other common name:**

One of the largest Australian skinks, a bulky, robust species with a dark glossy appearance (snout-vent length to 30 cm)

**Conservation status:** Not threatened.  
**Distribution:** Far south-eastern Queensland and North eastern New South Wales  
**Climate/ecoregion:** Eastern subtropical, warm temperate.  
**Habitat:** Edges of closed forest and adjacent woodland in areas with thick ground cover or amongst rocks (Swan et al. 2004). Shelters in burrows, rotting hollow logs and rotated out tree roots or under large rocks (Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Viviparous. Clutch size 4-9 (Ehmann 1992).
- **Dietary generalisation:** HIGH Generalist omnivore – invertebrates, snails, fruit and fungi (Ehmann 1992).
- **Climate suitability:** MOD Climate match with ACT = 50%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** LOW Lack of suitable habitat, temperatures likely to be too cold.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Concinnia tenuis*

**Common name:** Bar-sided Skink  
**Other common name:** Bar-sided Forest-skink

A medium-sized arboreal forest skink (snout-vent length to 7 cm)

Conservation status: Not threatened.  
Distribution: Eastern Australia from south eastern coastal New South Wales to about Townsville in Queensland.  
Climate/ecoregion: Eastern, tropical, subtropical and warm temperate.

**Habitat:** Rainforest and tall open forest, moist pockets in woodland (Cogger 2014). Shelters in hollows low on trees and in rottling logs (Ehmann 1992).

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### LIKELIHOOD OF ESTABLISHMENT

<table>
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<tr>
<th>Category</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>HIGH</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>MOD</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

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### CONSEQUENCES OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Concinnia tryoni*

**Common name:** Tryon’s Skink  
**Other common name:** A medium-sized semi-arboreal arboreal forest skink very similar to C. murrayi (snout-vent length to 10 cm)

**Conservation status:** Not threatened.  
**Distribution:** Known only from high altitudes on the Mcpherson range on the QLD - NSW border.  
**Climate/ecoregion:** Eastern subtropical, warm temperate.  
**Habitat:** Rainforest.  

---

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW  
  - Viviparous.  
- Dietary generalisation: NR  
  - Not reported.  
- Climate suitability: MOD  
  - Climate match with ACT = 40%  
- Populations established outside of range: NR  
  - Not reported.  
- Aquatic/riparian species: LOW  
  - Terrestrial.  
- Potential range (ACT): LOW  
  - Lack of moist subtropical montane environments.  

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

---

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES** *Cryptoblepharus virgatus*

**Common name:** Striped Snake-eyed Skink

**Other common name:** Wall Skink

A small, active, arboreal skink (snout-vent length to 3.5 cm)

Conservation status: Not threatened.

Distribution: Coastal areas of far north-eastern Queensland.

Climate/ecoregion: Eastern monsoonal, tropical.


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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW</td>
</tr>
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<td>Populations established outside of range</td>
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<tr>
<td>Aquatic/riparian species</td>
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</tr>
<tr>
<td>Potential range (ACT)</td>
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</tr>
</tbody>
</table>

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: **LOW**

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**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
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</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

OVERALL CONSEQUENCES OF ESTABLISHMENT: **LOW**

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** **LOW**
Family: Scincidae (Skink lizards)

**SPECIES**  
*Ctenotus pantherinus*

**Common name:** Leopard Ctenotus  
**Other common name:** A moderate-sized member of the striped *Ctenotus* group of skinks – with prominent black edged white spots (snout-vent length to 9 cm)

**Conservation status:** Not threatened (subspecies *C. p. ocellifer* listed as endangered in NSW).

**Distribution:** Widely distributed throughout the inland of Australia including most of WA and NT, as well as far north-western NSW. Does not occur in the most southern parts of Australia.

**Climate/ecoregion:** Tropical, monsoonal, semiarid and arid.

**Habitat:** Closely associated with Spinifex in a wide range of sandy, arid and semi arid habitats, including hummock grassland, shrubland and woodland (Cogger 2014; Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size up to 9.
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates (Ehmann 1992).
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** LOW No communities with Spinifex; no semi-arid or arid environments in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**

*Ctenotus robustus*

**Common name:** Eastern Striped Skink  
**Other common name:** Striped Skink  
A large, fast-moving, striped skink (snout-vent length to 11 cm)

Conservation status: Not threatened.  
Distribution: South-eastern, eastern and northern Australia. Occurs in the ACT where it is very common.  
Climate/ecoregion: Tropical, subtropical monsoonal, eastern warm temperate, eastern cool temperate.  
Habitat: A broad range of open forest and woodland, heath, grassland and coastal dune (Cogger 2014; Ehmann 1992). Shelters in short burrows under rocks and logs etc (Ehmann 1992). In the ACT also occurs in rocky grasslands (native and exotic) that are used for livestock grazing. Often found beneath rocks (Bennett 2011).

**LIKELYHOOD OF ESTABLISHMENT**

Reproductive potential: LOW Oviparous. Clutch size up to 6.  
Dietary generalisation: HIGH Generalist carnivore – invertebrates.  
Climate suitability: HIGH Climate match with ACT = 100%  
Populations established outside of range: NR Not reported.  
Aquatic/riparian species: LOW Terrestrial.  
Potential range (ACT): HIGH Already widespread at low to mid elevation in ACT.  
OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW  
Potential for environmental/economic impacts: LOW  
Potential for harm to humans: LOW  
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**

*Ctenotus taeniolatus*

**Common name:** Copper-tailed Skink  
**Other common name:** Copper-tailed Ctenotus

A moderately large, distinctively striped, skink with a brown or copper-coloured tail (snout-vent length to 8 cm)

**Conservation status:** Not threatened.  
**Distribution:** Eastern and south-eastern Australia. Occurs in the ACT where it is common.  
**Climate/ecoregion:** Warm temperate, cool temperate.  
**Habitat:** Rocky areas in a range of open forest, woodland, shrubland and grassland environments (Cogger 2014; Ehmann 1992). In the ACT also occurs in land cleared for livestock grazing if some native tussock grass cover and rocks are present. Often found in short burrows beneath rocks.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch size up to 7.  
- Dietary generalisation: HIGH Generalist carnivore – invertebrates.  
- Climate suitability: HIGH Climate match with ACT = 100%  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): HIGH Already widespread at lower to mid elevations in ACT.  
- OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  
- OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES** *Cyclodomorphus casuarinae*

Common name: Tasmanian She-oak Skink

Other common name: A large she-oak skink from Tasmania (snout-vent length to 16 cm)

NB The name *C. casuarinae* once referred to the eastern Australian mainland species (now *C. michaeli*).

Conservation status: Not threatened.
Distribution: Tasmania.
Climate/ecoregion: Cool temperate.
Habitat: A range of open forest, woodland and heathland environments (Cogger 2014). Shelters in dense ground cover, litter or under logs.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Viviparous. Clutch size to 8.
Dietary generalisation: NR Not reported. Close relatives eat invertebrates, snails and small fruit.
Climate suitability: MOD Climate match with ACT = 70%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW Terrestrial.
Potential range (ACT): MOD Upland heathland and moist tussock grassland likely to provide potential habitat - similar to that favoured by *C. praelaltus* in the adjacent Kosciusko National Park (Green and Osborne 2012)

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT**: MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW Note if *C. praelaltus* actually occurs in the ACT then this species would provide a threat.
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT**: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT**: LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Cyclodromorus gerrardii*

**Common name:** Pink-tongued Skink  
**Other common name:**  
A striking slender skink that is the largest member of the genus *Cyclodromorus* (snout-vent length to 20 cm)

**Conservation status:** Not threatened.  
**Distribution:** Coast and ranges of eastern Australia from the Blue Mountains to lower Cape York Peninsular.  
**Climate/ecoregion:** Moist - tropical, subtropical, warm temperate.  
**Habitat:** Rainforest and wet sclerophyll forest as well as moist gullies and moist rocky slopes. Partially arboreal and can climb into low shrubs to bask (Cogger 2014; Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: **HIGH** Viviparous. Up to 65 young.  
- Dietary generalisation: **HIGH** Generalist carnivore - Invertebrates slugs and snails.  
- Climate suitability: **HIGH** Climate match with ACT = 80%  
- Populations established outside of range: **NR** Not reported.  
- Aquatic/riparian species: **LOW** Terrestrial.  
- Potential range (ACT): **LOW** Lack of moist environments.  
- OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: **MOD**

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**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): **LOW**  
- Potential for environmental/economic impacts: **LOW**  
- Potential for harm to humans: **LOW**  
- OVERALL CONSEQUENCES OF ESTABLISHMENT: **LOW**

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** **LOW-MODERATE**
Family: Scincidae (Skink lizards)

**SPECIES**  
*Cyclodomorphus michaeli*

**Common name:** Mainland She-oak Skink  
**Other common name:** Eastern She-oak Skink

A she-oak skink (snout-vent length to 16 cm)

**Conservation status:** Not threatened.  
**Distribution:** New England region of New South Wales to coastal eastern Victoria.  
**Climate/ecoregion:** Eastern warm temperate, cool temperate (coastal).  
**Habitat:** Coastal heath, grassy edges of swamps, open forest, woodland and pasture.

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  

- **Dietary generalisation:** HIGH  

- **Climate suitability:** HIGH  
  Climate match with ACT = 80%

- **Populations established outside of range:** NR  
  Not reported.

- **Aquatic/riparian species:** LOW  
  Terrestrial.

- **Potential range (ACT):** MOD  
  Moist heathland and moist tussock grassland likely to provide potential habitat in more sheltered and wetter parts of the ACT. Cold winters and cold overnight temperatures may limit survival of this nocturnal and crepuscular species.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
  If *C. praelaltus* actually occurs in the ACT then possibly provide a threat.

- **Potential for environmental/economic impacts:** LOW

- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Egernia cunninghami*

**Common name:** Cunningham’s Skink  
**Other common name:** Cunningham’s Rock skink  
A large spiky-scaled rock dwelling skink (snout-vent length to 15 cm)

**Conservation status:** Not threatened.  
**Distribution:** South-eastern Australia. Occurs in the ACT where it is common at low to mid elevations in areas with large rock outcroppings and boulders.  
**Climate/ecoregion:** Warm temperate, cool temperate.  
**Habitat:** Rock outcrops and boulder piles in a broad range of open forest and woodland and grassland environments, including cleared pasture (Cogger 2014; Ehmann 1992). In the ACT occurs in rocky clearings in forest ad woodland but also very commonly in land cleared for livestock grazing if outcropping rock is abundant. Seeks refuge in fissures and beneath rock slabs or in hollow logs.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Viviparous. Up to 6 young.  
- **Dietary generalisation:** HIGH Omnivore – eats flowers, fruits, soft leaves and invertebrates. Also reported to capture small lizards (Ehmann 1992).  
- **Climate suitability:** HIGH Climate match with ACT = 100%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** HIGH Already widespread at lower to mid elevation in ACT.  
- **OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**

**Egernia depressa**

**Common name:** Pygmy Spiny-tailed Skink

**Other common name:** Southern Pygmy Spiny-tailed Skink

A small spiny-tailed *Egernia* skink with a short tail (snout-vent length to 10 cm)

**Conservation status:** Not threatened.

**Distribution:** The far west of WA but not including southerly areas.

**Climate/ecoregion:** Semi-arid and arid, western warm temperate.

**Habitat:** Rock outcrops, rocky slopes logs, tree hollows within areas of mulga, woodland, shrub land and hummock grassland (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

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<th>Likelihood</th>
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**CONSEQUENCES OF ESTABLISHMENT**

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<td>OVERALL CONSEQUENCES OF ESTABLISHMENT</td>
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</table>

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
_Egernia hosmeri_

**Common name:** Hosmer’s skink  
**Other common name:** A large spiny-tailed _Egernia_ skink (snout-vent length to 18 cm)

**Conservation status:** Not threatened.  
**Distribution:** Inland northern Queensland and the adjacent border region of the NT.  
**Climate/ecoregion:** Monsoonal, tropical, semi-arid.  
**Habitat:** In drier hilly areas with extensive rock outcrops. Lives in rock crevices, under exfoliating boulders, amongst tumbled rocks and scree slopes. Also sometimes in hollow trees and splits in logs (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: NR Not reported.  
- Dietary generalisation: NR Not reported.  
- Climate suitability: LOW Climate match with ACT ≤ 30%  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): LOW Lack of tropical monsoonal and semi-arid environments.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Egernia kingii*

**Common name:** Kings Skink  
**Other common name:** A very large dark coloured *Egernia* skink confined to south-western WA (snout-vent length to 20 cm)

**Conservation status:** Not threatened.  
**Distribution:** Off shore islands and coast and hinterland of south-western WA.  
**Climate/ecoregion:** Western - warm temperate.  
**Habitat:** rocky coastal islands, low coastal heaths and shrublands, rock outcrops further inland (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
- **Dietary generalisation:** HIGH Generalist scavenger and predator – eggs, soft vegetation, fruit, invertebrates and other lizards.  
- **Climate suitability:** MOD Climate match with ACT = 50%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** MOD Some potential to survive in rocky areas at lower elevations in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Egernia mcpheeii*

**Common name:** Eastern Crevice Skink

**Other common name:** A medium-sized rock skink very similar to the black rock skink (*E. saxatilis*) (snout-vent length to 13 cm)

**Conservation status:** Not threatened.

**Distribution:** Coastal NSW, north of the Hunter River, to south-eastern QLD near Brisbane.

**Climate/ecoregion:** Eastern subtropical, warm temperate.

**Habitat:** Reported to be from tall open forest however no description of the habitat is available (Cogger 2014). Presumably similar to *E. saxatilis*

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** NR Not reported.
- **Dietary generalisation:** NR Not reported.
- **Climate suitability:** MOD Climate match with ACT = 40%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** MOD There is some potential for the species to occupy habitat similar to the black rock skink (*E. saxatilis*).

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Egernia rugosa*

**Common name:** Yakka Skink  
**Other common name:** A very large *Egernia* skink with thick base to tail (snout-vent length to 20 cm)

**Conservation status:** Vulnerable (nationally, Qld).  
**Distribution:** Coastal environments and hinterland of eastern QLD.  
**Climate/ecoregion:** Tropical, subtropical, monsoonal east.  
**Habitat:** A burrow sheltering species found in dry open habitats dissociated with low ranges foothills and undulating terrain with good drainage (Ehmann 1992). Usually found in open dry sclerophyll forest or woodland throughout its range (Cogger 2012).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
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<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
</table>
| Reproductive potential: | NR  
Viviparous. Not reported. |
| Dietary generalisation: | HIGH  
Omnivore - invertebrates and soft plant material. |
| Climate suitability: | MOD  
Climate match with ACT = 40% |
| Populations established outside of range: | NR  
Not reported. |
| Aquatic/riparian species: | LOW  
Terrestrial. |
| Potential range (ACT): | LOW  
Lower elevation rock outcrops and Callitris woodland. |

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

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<th>Feature</th>
<th>Value</th>
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**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Egernia saxatilis*

**Common name:** Black Rock Skink  
**Other common name:** Black Crevice-skink  

A dark-coloured arboreal *Egernia* skink with yellow or orange coloured ventral surface (snout-vent length to 11.5 cm)

**Conservation status:** Not threatened.  
**Distribution:** South-eastern Australia – highlands to coastal areas. Occurs in the montane zone in the ACT where it is patchily distributed.  
**Climate/ecoregion:** Warm temperate, cool temperate.  
**Habitat:**occurs in a range of forest and woodland environments but is found only in dissociation with rock outcrops, scree and piles of boulders. Individual shelter within deep cracks within these rock outcrops (Cogger 2014). In the ACT is mainly associated with granite outcrops in Namadgi National Park.

**LIKELIHOOD OF ESTABLISHMENT**

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<td>Viviparous. Up to two young.</td>
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<td>Dietary generalisation:</td>
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<td>Omnivore - invertebrates and soft plant material.</td>
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<td>Climate match with ACT = 100%</td>
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<tr>
<td>Potential range (ACT):</td>
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<tr>
<td><strong>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:</strong></td>
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<td>Already present in ACT</td>
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**CONSEQUENCES OF ESTABLISHMENT**

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<tr>
<td><strong>OVERALL CONSEQUENCES OF ESTABLISHMENT:</strong></td>
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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES** *Egernia stokesii*

**Common name:** Gidgee Skink  
**Other common name:** Gidgee Spiny-tailed Skink  
A large spiny-tailed *Egernia* skink (snout-vent length to 18 cm)

**Conservation status:** Not threatened (subspecies *E.s. aethiops* and *E. s. badia* listed as threatened nationally and in WA).

**Distribution:** Inland parts of NT, Qld, NSW and SA. Also occurs in WA from the central coast to the hinterland several hundreds of km inland.

**Climate/ecoregion:** Western - warm temperate, arid, semi-arid.

**Habitat:** Found among rocky outcrops, stony hills and mountain ranges, where it shelters in deep crevices or under large boulders (Cogger 2014). Occasionally observed to shelter in crevices in dead and hollow trees adjacent to rocky areas (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
  Oviparous. Up to 3 young (Ehmann 1992).

- **Dietary generalisation:** HIGH  
  Omnivore - invertebrates and soft plant material.

- **Climate suitability:** MOD  
  Climate match with ACT = 40%

- **Populations established outside of range:** NR  
  Not reported.

- **Aquatic/riparian species:** LOW  
  Terrestrial.

- **Potential range (ACT):** LOW  
  No arid and semi-arid environments in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW

- **Potential for environmental/economic impacts:** LOW

- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Egernia striolata*

**Common name:** Tree Skink  
**Other common name:** Tree Crevice-skink

A dark-coloured arboreal *Egernia* skink (snout-vent length to 10cm)

**Conservation status:** Not threatened.  
**Distribution:** Eastern Australia. Central eastern QLD through much of NSW to the south coast of SA. Occurs at Ginninderra Falls near the ACT border (W. Osborne pers. obs.).  
**Climate/ecoregion:** Eastern subtropical, warm temperate, semi-arid.  
**Habitat:** A range of open forest and woodland environments. An arboreal species found in hollow limbs and cracks or under bark of standing trees. Also found in fallen timber and, in some parts of its range, on rock outcrops (Cogger 2014). Ehmann (1992) suggest that it is not found where there are populations of *E. saxatilis*. At Ginninderra Falls occurs in Callitrus woodland on large cliff-like rock outcrops with deep cracks in the rock (W. Osborne pers. obs.).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Viviparous. Up to 6 young.  
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates small lizards.  
- **Climate suitability:** HIGH Climate match with ACT = 100%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** HIGH Already widespread at lower elevation in ACT.  
- **OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH (naturally occurs within 3 km of ACT)

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Eremiascincus fasciolatus*

**Common name:** Eastern Narrow-banded Sand-swimmer  
**Other common name:** Eastern Narrow-banded Skink

A medium-size skink with short but strong limbs and narrow-banded colouration - can burrow rapidly into sand (snout-vent length to 8 cm)

**Conservation status:** Not threatened.  
**Distribution:** Central coast of Queensland through inland parts of south-western Qld, western NSW, SA and WA.  
**Climate/ecoregion:** Subtropical, subhumid, arid, semi-arid.  
**Habitat:** Found in a wide variety of arid or drier habitats, usually on sandy or loamy soils (Cogger 2014). Ehmann (1992) suggests that a layer of sand is always present at sites with this species.

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size NR.  
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates.  
- **Climate suitability:** LOW Climate match with ACT ≤ 30%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** LOW Lack of suitable arid sandy habitats.  

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Eremiascincus richardsonii*

**Common name:** Broad-banded Sand-swimmer  
**Other common name:** A medium-size skink with short but strong limbs and broad-banded colour pattern - can burrow rapidly into sand (snout-vent length to 10 cm)

**Conservation status:** Not threatened.  
**Distribution:** Most of W.A., SA and NT to south-eastern Qld and western NSW.  
**Climate/ecoregion:** Tropical, subtropical, warm temperate, arid and semi-arid.  
**Habitat:** Found in a wide variety of arid or drier habitats, usually on sandy or loamy soils (Cogger 2014). Ehmann (1992) suggests that loose sand is always present at sites with this species.

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size to 7 (Greer 1989).
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates and small lizards (Ehmann 1992).
- **Climate suitability:** MOD Climate match with ACT = 50%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** LOW Lack of suitable arid sandy habitats.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**

_Eulamprus heatwolei_

Common name: Yellow-bellied Water-skink
Other common name: Heatwole’s Water-skink; Warm-temperate Water-skink

A water skink (snout-vent length to 8 cm)

Conservation status: Vulnerable (SA), not threatened elsewhere.
Distribution: South-eastern Australia – coast, tablelands, mountains. Occurs in the ACT where it is common.
Climate/ecoregion: Warm temperate, cool temperate.
Habitat: A range of moist forest, open forest, woodland and heathland environments usually near or within moist environments such as swamps, wet heaths, streams and moist gullies (Cogger 2014; Ehmann 1992 Jenkins and Bartell 1980). In the ACT occurs along Murrumbidgee and Molonglo Rivers but most common in Namadgi National Park.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: LOW Viviparous. Up to 5 young.
Dietary generalisation: HIGH Generalist carnivore – invertebrates, very small fish.
Climate suitability: HIGH Climate match with ACT = 100%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW Both terrestrial and riparian.
Potential range (ACT): HIGH Already widespread at lower elevation in ACT.
OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**

*Eulamprus quoyii*

Common name: Eastern Water Skink

Other common name: A large water skink (snout-vent length to 10 cm)

Conservation status: Not threatened.

Distribution: Coastal eastern Australia from mid-north Qld to near the Victorian border in NSW. Also occurs patchily along the Darling river system to SA. Does not occur in the ACT.

Climate/ecoregion: Tropical, subtropical, warm temperate.

Habitat: Riparian areas associated with various kinds of wetlands and water bodies including rocky shorelines. Surrounding vegetation includes rainforest, open forest, woodland, coastal heath, shrubland and grassland environments (Cogger 2014; Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: HIGH Viviparous. Up to nine young.

Dietary generalisation: HIGH Generalist carnivore and omnivore – invertebrates, tadpoles, snails, small fish, berries.

Climate suitability: MOD Climate match with ACT = 60%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: HIGH Riparian.

Potential range (ACT): HIGH Wetlands and streams at lower elevations.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: MOD Potentially could compete with other species of water-skink (particularly *E. heatwolei*).

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Eulamprus tympanum*

Common name: Southern Water-skink  
Other common name: Mountain Water-skink

A water skink (snout-vent length to 8 cm)

Conservation status: Rare (SA), subspecies *E.t.marnieae* listed as threatened nationally and in Vic.  
Distribution: South-eastern NSW and eastern Vic. Occurs in the ACT where it is common at higher elevations (above about 1000 m).  
Climate/ecoregion: Cool temperate, montane subalpine, alpine.  
Habitat: A range of moist forest, open forest, woodland and heathland environments usually near or within moist environments such as swamps, wet heaths, streams and moist gullies (Cogger 2014; Ehmann 1992 Jenkins and Bartell 1980). More widely distributed in subalpine vegetation (Green and Osborne 2012).

![Map of Australia highlighting the distribution of Southern Water-skink](image)

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: MOD Viviparous. Up to eight young.  
- Dietary generalisation: HIGH Generalist carnivore – invertebrates, very small fish.  
- Climate suitability: HIGH Climate match with ACT = 100%  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: MOD Both terrestrial and riparian.  
- Potential range (ACT): HIGH Already widespread at higher elevations in ACT.  

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Gnypetoscincus queenslandiae*

**Common name:** Prickly Forest Skink  
**Other common name:** A very distinctive skink with small keeled (pointy) scales (snout-vent length to 8 cm)

**Conservation status:** Not threatened.  
**Distribution:** Confined to the rainforests of the Cooktown-Cardwell region, Qld.  
**Climate/ecoregion:** Tropical, monsoonal east.  
**Habitat:** Rainforest. Shelters under rotting logs.

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Likelihood</th>
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<tbody>
<tr>
<td>Reproductive potential</td>
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<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
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<tr>
<td>Climate suitability</td>
<td>LOW</td>
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<td>Aquatic/riparian species</td>
<td>LOW</td>
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<tr>
<td>Potential range (ACT)</td>
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**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

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<th>Aspect</th>
<th>Likelihood</th>
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<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
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<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
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<td>Potential for harm to humans</td>
<td>LOW</td>
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**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES** *Lampropholis delicata*

Common name: Dark-flecked Garden Sunskink

Other common name: Delicate Skink

A small brown skink (snout-vent length to 4.5 cm)

Conservation status: Not threatened.

Distribution: South-eastern SA through Victoria, eastern NSW to eastern Qld. Occurs in the ACT where it is common and widespread.

Climate/ecoregion: Eastern tropical, subtropical, warm temperate, cool temperate.

Habitat: A wide variety of habitats including rainforest, open forest, woodland coastal heath and scrub (Cogger 2014; Ehmann 1992). Common in many backyards.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: MOD Oviparous. Clutch size up to six; up to three clutches/season (Ehmann 1992).

- Dietary generalisation: HIGH Generalist carnivore – invertebrates.

- Climate suitability: HIGH Climate match with ACT = 100%

- Populations established outside of range: NR Not reported.

- Aquatic/riparian species: LOW Terrestrial.

- Potential range (ACT): HIGH Already widespread in ACT.

- OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW

- Potential for environmental/economic impacts: LOW

- Potential for harm to humans: LOW

- OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  *Lamproholis guichenoti*

**Common name:** Pale-flecked Garden Sunskink

**Other common name:** Grass Skink

A small brown skink (snout-vent length to 4 cm)

**Conservation status:** Not threatened.

**Distribution:** South-eastern SA through Victoria, eastern NSW to far south-eastern Qld. Occurs in the ACT where it is common and widespread.

**Climate/ecoregion:** Eastern subtropical, warm temperate, cool temperate.

**Habitat:** A wide variety of habitats including rainforest, open forest, woodland coastal heath and scrub (Cogger 2014; Ehmann 1992). Common in many backyards.

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size up to 6; up to two clutches/season (Ehmann 1992).
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates.
- **Climate suitability:** HIGH Climate match with ACT = 100%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** HIGH Already widespread in ACT.
- **OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Lerista bougainvillii*

**Common name:** South-eastern Slider  
**Other common name:** Bougainville’s Skink

A small *Lerista* skink (snout-vent length to 7 cm)

**Conservation status:** Not threatened.

**Distribution:** South-eastern SA, through Victoria and central-eastern NSW (Western Slopes). Not known from the ACT. Nearest confirmed records are from the Wagga Wagga district (Michael and Lindenmayer 2010).

**Climate/ecoregion:** Eastern warm temperate, cool temperate.

**Habitat:** Woodlands and semi-arid shrub lands (Cogger 2014). Specific habitat components include sandy or semi-compacted loam soils often associated with rocky outcrops. Shelter sites include logs, rocks or litter (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
  Oviparous. Clutch size up to 4.

- **Dietary generalisation:** HIGH  
  Generalist carnivore – soft-bodied invertebrates.

- **Climate suitability:** HIGH  
  Climate match with ACT = 90%

- **Populations established outside of range:** NR  
  Not reported.

- **Aquatic/riparian species:** LOW  
  Terrestrial.

- **Potential range (ACT):** HIGH  
  Lower altitude drier parts of the ACT associated with the major river corridors may be suitable for this species.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW

- **Potential for environmental/economic impacts:** LOW  
  No similar species in ACT.

- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Liburnascincus coensis*  
**Common name:** Coen Rainbow Skink  
**Other common name:** A skink with very well-developed limbs (snout-vent length to 6 cm)

**Conservation status:** Not threatened.  
**Distribution:** McIlwraith range east of Coen, Cape York, QLD.  
**Climate/ecoregion:** Tropical, monsoonal east.  
**Habitat:** Boulder slopes, rock faces and rocky creek beds, especially near rainforest and thick monsoonal scrub (Cogger 2014; Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Likelihood</th>
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<td>Reproductive potential</td>
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<tr>
<td>Dietary generalisation</td>
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<td>Climate suitability</td>
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<td>Potential range (ACT)</td>
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**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

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**CONSEQUENCES OF ESTABLISHMENT**

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<th>Feature</th>
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<tr>
<td>Potential for impact on threatened species (ACT)</td>
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</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
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</tr>
<tr>
<td>Potential for harm to humans</td>
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</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

SPECIES  
Liopholis inornata

Common name: Desert Skink
Other common name: Unadorned Desert Skink

A burrowing skink from desert regions (snout-vent length to 7.5 cm)

Conservation status: Not threatened.
Distribution: Widely distributed through the southern half of WA, SA and lower NT to western Qld, NSW and north-western Victoria.
Climate/ecoregion: Arid, semi arid.
Habitat: A desert dunes, sand plains and semiarid areas of Sandy and loamy soils will stop vegetation ranges from mallee woodland to hummock grassland and shrubland (Ehmann 1992; Swan et al. 2004). Digs a complex burrow system.

LIKELIHOOD OF ESTABLISHMENT
Reproductive potential: LOW  Viviparous. Up to 3 young.
Climate suitability: MOD  Climate match with ACT = 40%
Populations established outside of range: NR  Not reported.
Aquatic/riparian species: LOW  Terrestrial.
Potential range (ACT): LOW  No sandy arid environments in ACT.
OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

CONSEQUENCES OF ESTABLISHMENT
Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW
Family: Scincidae (Skink lizards)

**SPECIES**

*Liopholis modesta*

**Common name:** Eastern Ranges Rock-skink

**Other common name:** A *Liopholis* skink (snout-vent length to 10 cm)

**Conservation status:** Not threatened.

**Distribution:** Slopes and ranges of north eastern NSW and south-eastern Qld, extending to the Hunter River valley NSW.

**Climate/ecoregion:** Warm temperate east.

**Habitat:** Hillsides with rock outcrops, especially granite and basalt. Vegetation includes open forest and woodland with an understorey of shrubs or tussock grasses (Ehmann 1992). Shelter in burrows under large, well embedded rocks and within deep rock cavities.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Viviparous. Up to five young.
- **Dietary generalisation:** HIGH Omnivore – invertebrates and some soft plant material (Ehmann 1992).
- **Climate suitability:** MOD Climate match with ACT = 60%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** HIGH Appears to occupy similar habitat to *Liopholis whitii* and therefore may be capable of occupying granite areas of the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** MOD Potential to compete with local *Liopholis* species.
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE

Potentially could compete with White’s Skink *Liopholis whitii*. If it could survive at high montane elevations could compete with *L. montana*. 

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Family: Scincidae (Skink lizards)

**SPECIES**  
*Liopholis pulchra*

**Common name:** South-western Rock-skink  
**Other common name:** A *Liopholis* skink (snout-vent length to 10 cm)

**Conservation status:** Subspecies *L.p.longicauda* listed as Vulnerable (nationally), Threatened (WA).  
**Distribution:** Far south-west WA.  
**Climate/ecoregion:** Western warm temperate.  
**Habitat:** Rocky islands, high moist ranges of the hinterland with rocky outcrops, sandy soil usually with Heath and woodland or forest over story (Ehmann 1992). Excavates extensive burrow systems in sandy soils under partly buried rocks (Ehmann 1992).

![Map of Australia highlighting South-western Rock-skink range](image)

**Likelihood of Establishment**

<table>
<thead>
<tr>
<th>Category</th>
<th>Likelihood</th>
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<tr>
<td>Reproductive potential</td>
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<tr>
<td>Dietary generalisation</td>
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<td>Climate suitability</td>
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<tr>
<td>Climate match with ACT = 50%</td>
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<td>Aquatic/riparian species</td>
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<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
</tr>
<tr>
<td>Potential to occupy similar habitat to <em>L. whitii</em> and therefore may be capable of occupying granite areas of the ACT at lower elevations.</td>
<td>MOD</td>
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**Overall Likelihood of Establishment in ACT:** MOD

**Consequences of Establishment**

<table>
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<tr>
<th>Category</th>
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<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
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<tr>
<td>Potential for environmental/economic impacts</td>
<td>MOD</td>
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<tr>
<td>Potentially could compete with White’s Skink <em>L. whitii</em>.</td>
<td>MOD</td>
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</table>

**Overall Consequences of Establishment:** MOD

**Overall Risk Level for Introduction to ACT:** MODERATE
Family: Scincidae (Skink lizards)

**SPECIES**  
*Liopholis whitii*

**Common name:** White’s Skink  
**Other common name:** White’s Rock Skink  
A *Liopholis* skink (snout-vent length to 9.5 cm)

**Conservation status:** Not threatened (endangered population near Broken Hill, NSW).  
**Distribution:** Eastern and south-eastern Australia from Brisbane to Adelaide, Tasmania. Occurs in the ACT where it is common in granite areas.  
**Climate/ecoregion:** Subtropical, warm temperate, cool temperate.  
**Habitat:** A range of open forest, woodland, heath and grassland environments (Cogger 2014; Ehmann 1992). Often found beneath logs and rocks.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD  
- **Dietary generalisation:** HIGH Generalist omnivore – invertebrates and some soft plant material (Ehmann 1992).

**Climate suitability:** HIGH  
**Populations established outside of range:** NR  
**Aquatic/riparian species:** LOW Terrestrial.

**Potential range (ACT):** HIGH Already widespread in the foothills and ranges of the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Menetia greyii*

**Common name:** Common Dwarf Skink

**Other common name:**
A very small skink (snout-vent length to 3 cm)

**Conservation status:** Not threatened.

**Distribution:** Throughout Australia except eastern and south-eastern coastal areas. Does not occur in Tasmania. Occurs in the ACT where it is common.

**Climate/ecoregion:** Monsoonal, tropical, subtropical, warm temperate, cool temperate.

**Habitat:** A range of open forest, woodland, shrubland and grassland environments (Cogger 2014; Ehmann 1992). In the ACT also occurs commonly in natural temperate grassland and land cleared for livestock grazing that is dominated by native grasses (native pasture).

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
  Oviparous. Clutch size up to 4.

- **Dietary generalisation:** HIGH  
  Generalist carnivore – invertebrates.

- **Climate suitability:** HIGH  
  Climate match with ACT = 100%

- **Populations established outside of range:** NR  
  Not reported.

- **Aquatic/riparian species:** LOW  
  Terrestrial.

- **Potential range (ACT):** HIGH  
  Already widespread at lower elevation in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH  
Already present in ACT

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**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW

- **Potential for environmental/economic impacts:** LOW

- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Morethia boulengeri*

**Common name:** South-eastern Morethia Skink  
**Other common name:** Boulenger’s Skink  
A small skink (snout-vent length to 4.5 cm)

**Conservation status:** Not threatened.  
**Distribution:** Southern Queensland, inland NSW, Northern Vic, SA, eastern interior of WA and the lower end of NT. Occurs in the ACT, where it is common.

**Climate/ecoregion:** Warm temperate, arid, semi arid.  
**Habitat:** A wide range of open forest, woodland, shrubland and grassland environments (Cogger 2014; Ehmann 1992). In the ACT common in the drier hilly woodland and rocky sites associated with the major river corridors and foothills. Often observed on, and near, logs and litter at ground level (Bennett 2011).

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
  Oviparous. Clutch size up to 6.
- **Dietary generalisation:** HIGH  
  Generalist carnivore – invertebrates.
- **Climate suitability:** HIGH  
  Climate match with ACT = 100%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** LOW  
  Terrestrial.
- **Potential range (ACT):** HIGH  
  Already widespread at lower elevation in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH  
Already present in ACT

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**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**  
*Tiliqua multifasciata*

**Common name:** Centralian Blue-tongued Lizard

**Other common name:** A large blue-tongued skink (snout-vent length to 30 cm)

**Conservation status:** Vulnerable (NSW), not threatened elsewhere.

**Distribution:** Northern half of WA, through southern SA and the NT to western QLD.

**Climate/ecoregion:** Western tropical, subtropical, arid, semi-arid.

**Habitat:** Found in a variety of arid and semi-arid habitats including stony areas, hummock grasslands and sandy deserts (Cogger 2014). Shelters in the interior of grass hummocks, in animal burrows, in deep litter and in gaps under stones (Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW   Viviparous. Up to 10 young.
- **Dietary generalisation:** HIGH   Generalist omnivore – invertebrates, carrion, soft plant material (Ehmann 1992).
- **Climate suitability:** LOW   Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR   Not reported.
- **Aquatic/riparian species:** LOW   Terrestrial.
- **Potential range (ACT):** LOW   No suitable arid and semi-arid habitats.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**

*Tiliqua nigrolutea*

Common name: Blotched Blue-tongued Skink
Other common name: Blotched Bluetongue

A large, robust blue-tongued skink with blotch-like markings (snout-vent length to 25cm)

Conservation status: Not threatened.
Distribution: South-eastern Australia (parts of NSW, ACT, Vic and Tas). Occurs in the ACT where it is common in the foothills and ranges.
Climate/ecoregion: Warm temperate, cool temperate.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Viviparous. Up to ten young.
Climate suitability: HIGH Climate match with ACT = 100%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW Terrestrial.
Potential range (ACT): HIGH Naturally occurs in ACT.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**
*Tiliqua occipitalis*

Common name: Western Blue-tongued Skink

Other common name: A large blue-tongued skink (snout-vent length to 30 cm)

Conservation status: Vulnerable (NSW), not threatened elsewhere.

Distribution: Drier parts of southern Australia from the coast of WA through much of SA to north-western Vic and central western NSW.

Climate/ecoregion: Western warm temperate, arid, semi-arid.

Habitat: Found in a variety of arid and semi-arid habitats including hummock grasslands, woodland, mallee, shrubland and heath (Cogger 2014; Ehmann 1992). Shelters in excavated burrows, fallen timber and in deep litter (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: LOW Viviparous. Up to seven young.


Climate suitability: MOD Climate match with ACT = 50%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): MOD No arid and semi-arid habitats, but dry woodland might provide suitable habitat.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
**Family:** Scincidae (Skink lizards)

**SPECIES**

**Tiliqua rugosa**

**Common name:** Shingle-back

**Other common name:** Stumpy-tailed Lizard; Bogeye

A very large, short-tailed Tiliqua lizard with distinctive pine cone like scales (snout-vent length to 25 cm)

**Conservation status:** Not threatened (Rottnest Isl. subspecies *T.r.konowi* listed as threatened in WA).

**Distribution:** Much of southern Australia. Does not occur in coastal regions in the east of its distribution. Occurs in the northern parts of the ACT.

**Climate/ecoregion:** Arid, semi-arid, warm temperate.

**Habitat:** Found in virtually all arid and semi-arid vegetation types (Ehmann 1992). Also in drier woodlands, mallee, shrublands and grasslands (Cogger 2014). Shelters under fallen timber, in animal burrows, deep in leaf litter and under flattened mats of vegetation.

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Viviparous. Up to 3 young (typically 2).
- **Dietary generalisation:** HIGH Omnivore – mainly plant material including soft vegetation, berries, flowers, fungi but also carrion and invertebrates (Ehmann 1992).
- **Climate suitability:** HIGH Climate match with ACT = 100%
- **Populations established outside of range:** HIGH West of Melbourne, parts of Sydney.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** HIGH Already widespread at lower elevation in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

---

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Scincidae (Skink lizards)

**SPECIES**

*Tiliqua scincoides*

**Common name:** Eastern Blue-tongued Lizard

**Other common name:** Common Blue-tongued Lizard

A large blue-tongued skink (snout-vent length to 30 cm)

Conservation status: Not threatened.

Distribution: Much of Northern, eastern and south-eastern Australia. Occurs in the ACT where it is common.

Climate/ecoregion: Monsoonal, tropical, subtropical, warm temperate, cool temperate, semi-arid.

Habitat: A wide variety of habitats including open forest, woodland, shrubland heath and grassland (Cogger 2014; Ehmann 1992). In the ACT also occurs in land cleared for livestock grazing and in urban areas. Shelters under fallen timber, hollow logs, animal burrows, under flattened rocks and in dense litter.

[Map of Australia showing distribution of Tiliqua scincoides]

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: HIGH Viviparous. Up to 24 young.
- Climate suitability: HIGH Climate match with ACT = 100%
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): HIGH Already widespread at lower elevation in ACT.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: **HIGH** Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: **LOW**

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** **LOW**
12  Dragon Lizards
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Amphibourus burnsi*

**Common name:** Burn’s Dragon  
**Other common name:** A medium-sized semi-arboreal dragon somewhat similar to a Jacky Dragon (*A. muricatus*) (snout-vent length to 12 cm)

Conservation status: Not threatened.  
Distribution: Northern NSW and southern Qld, west of the Great Dividing Range.  
Climate/ecoregion: Subtropical east (inland), warm temperate, semiarid.  
Habitat: Dry eucalypt, cypress and brigalow woodlands - especially along the banks of larger inland river systems (Cogger 2014; Wilson and Swan 2010).

**LIKELIHOOD OF ESTABLISHMENT**

- Dietary generalisation: NR Not reported.  
- Climate suitability: MOD Climate match with ACT = 40%  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW Terrestrial.  
- Potential range (ACT): MOD Drier lower elevation woodlands.  

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Amphibolurus muricatus*

**Common name:** Jacky Dragon  
**Other common name:** Jacky Lizard; Tree Dragon

A medium-sized arboreal dragon (snout-vent length to 10 cm)

- Conservation status: Rare (S.A.), not threatened elsewhere.  
- Distribution: South-eastern continental Australia. Occurs in the ACT.  
- Climate/ecoregion: Subtropical, warm temperate, cool temperate.  
- Habitat: A range of open forest, woodland, heathland and rocky environments (Cogger 2014; Ehmann 1992). Often seen perched on stumps and logs, and can climbs trees when disturbed.

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>MOD Oviparous. Clutch size up to eight (Ehmann 1992; Greer 1989).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH Generalist carnivore – invertebrates.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>HIGH Climate match with ACT = 100%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>HIGH Already widespread at lower to mid elevations in ACT.</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:</td>
<td>HIGH Already present in ACT</td>
</tr>
</tbody>
</table>

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts:   | LOW |
| Potential for harm to humans:                   | LOW |
| OVERALL CONSEQUENCES OF ESTABLISHMENT:          | LOW |

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:**  LOW
Family: Agamidae (Dragon lizards)

**SPECIES**

*Chlamydosaurus kingii*

Common name: Frill-necked Dragon
Other common name: Frilled Lizard; Frill-necked Lizard

A large, spectacular arboreal dragon with distinctive erectable frill behind head (snout-vent length to 22 cm)

Conservation status: Not threatened.
Distribution: Far northern Australia from the Kimberley region to Brisbane.
Climate/ecoregion: Northern monsoonal, tropical north and subtropical east.
Habitat: A range of dry forest, woodland and grassy woodland environments (Cogger 2014; Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**

Dietary generalisation: HIGH Generalist carnivore – invertebrates, occasionally small lizards.
Climate suitability: MOD Climate match with ACT = 40%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW Terrestrial.
Potential range (ACT): LOW No tropical suitable habitat in the ACT.
OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

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**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

---

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW
Family: Agamidae (Dragon lizards)

**SPECIES**

*Ctenophorus cristatus*

Common name: Crested Dragon  
Other common name: Bicycle Lizard

A medium-sized fast-moving terrestrial dragon (snout-vent length to 10 cm)

Conservation status: Not threatened.  
Distribution: Drier parts of southern WA to south-western SA.  
Climate/ecoregion: Warm temperate west, southerly semi-arid, arid.  
Habitat: Open woodland, shrubland, scrub (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Oviparous. Clutch size up to five (Ehmann 1992; Greer 1989).

Dietary generalisation: HIGH Generalist carnivore – invertebrates.

Climate suitability: LOW Climate match with ACT ≤ 30%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): LOW No suitable semi-arid and arid environments.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW
Family: Agamidae (Dragon lizards)

**SPECIES**

**Ctenophorus decresii**

Common name: Tawny Dragon

Other common name: A medium-sized terrestrial dragon confined to rocky areas (snout-vent length to 10 cm)

Conservation status: Endangered (NSW).

Distribution: Kangaroo Island and the Mount Lofty and Flinders Ranges SA. Outliers at Mootwingee, NSW.

Climate/ecoregion: Warm temperate, southerly semi-arid.

Habitat: Rocky ridges with extensive rock outcrops and crevices, landscapes typically with escarpments, broad valleys and gullies (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Oviparous. Clutch size up to eight (Ehmann 1992; Greer 1989).

Dietary generalisation: HIGH Generalist carnivore – invertebrates.

Climate suitability: MOD Climate match with ACT = 40%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): MOD Rocky valleys and escarpments at low elevation in ACT.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: MOD Some potential to compete with *D. nobbi*

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Ctenophorus fionni*

**Common name:** Peninsula Dragon  
**Other common name:** Peninsula Crevice Dragon

A small terrestrial dragon (snout-vent length to 8.5 cm)

Conservation status: Not threatened.  
Distribution: Eyre Peninsular, Gawler range and many off shore islands in SA.  
Climate/ecoregion: Southern warm temperate, cool temperate.  
Habitat: Stony ranges and rock outcrops with exfoliation is in crevices and fringing vegetation, which varies from open woodland to open shrub land and hummock grassland (Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

- Dietary generalisation: HIGH Generalist carnivore – invertebrates.
- Climate suitability: MOD Climate match with ACT = 40%
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): MOD Rocky ranges at low elevation in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

---

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: MOD Some potential to compete with *D. nobbi*
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Ctenophorus nuchalis*

**Common name:** Central Netted Dragon  
**Other common name:** A medium-sized terrestrial desert dragon (snout-vent length to 10 cm)

- **Conservation status:** Not threatened.  
- **Distribution:** Coast of WA through the drier parts of central and northern Australia to central Qld and north-western NSW.  
- **Climate/ecoregion:** Arid, semi-arid.  
- **Habitat:** Open country with sandy soils (Cogger 2014). Sandy loam and loam plains with open shrubland of Acacia and perennial saltbush (Ehmann 1992). Burrows under timber or rock.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size up to six (Greer 1989).  
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates.  
- **Climate suitability:** MOD Climate match with ACT = 40%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** LOW No similar arid and semi-arid habitats in the ACT.  
- **OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Ctenophorus pictus*

**Common name:** Painted Dragon  
**Other common name:**  
A small, stout, terrestrial dragon with a short head (snout-vent length to 7 cm)

**Conservation status:** Not threatened.
**Distribution:** North-western Victoria, western NSW, south-western Qld extending west through SA to southern inland parts of WA.”
**Climate/ecoregion:** Arid, semi-arid.
**Habitat:** Sandy soils at the edges of temperate low-lying flats with perennial saltbush; also mallee woodland with hummock grasses (Ehmann 1992). Shelters in deep burrows up to 2 m long.

---

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH</td>
<td>Generalist carnivore – invertebrates.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>MOD</td>
<td>Climate match with ACT = 50%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR</td>
<td>Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW</td>
<td>Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW</td>
<td>No extensive terrestrial sandy habitats in ACT.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts: | LOW |
| Potential for harm to humans: | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Ctenophorus vadnappa*

Common name: Red-barred Dragon  
Other common name: A small terrestrial rock dragon with obvious sexual dimorphism (snout-vent length to 8 cm)

Conservation status: Not threatened.  
Distribution: Northern Flinders Ranges and the nearby Willouran Range.  
Climate/ecoregion: Arid; semi-arid.  
Habitat: Confined to stony ranges and rock outcrops. Shelters under exfoliating rock slabs and amongst boulders and in rock crevices (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: NR Not reported.  
Dietary generalisation: NR Not reported.  
Climate suitability: LOW Climate match with ACT ≤ 30%  
Populations established outside of range: NR Not reported.  
Aquatic/riparian species: LOW Terrestrial.  
Potential range (ACT): LOW No rocky arid or semi-arid environments in ACT.  
OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW  
Potential for environmental/economic impacts: LOW  
Potential for harm to humans: LOW  
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**

*Diporiphora australis*

**Common name:** Tommy Roundhead  
**Other common name:** Eastern Two-line Dragon

A small semi-arboreal dragon with a long tail (snout-vent length to 7 cm)

**Conservation status:** Not threatened.  
**Distribution:** Coast and hinterland of Qld; a few records from near the border in north-eastern NSW.  
**Climate/ecoregion:** Monsoonal north; tropical; subtropical.  
**Habitat:** A range of habitats from coastal dunes, open woodland, melaleuca swamp lands and other seasonally dry forests and wetlands (Cogger 2014; Ehmann 1992).

![Map of Australia highlighting the distribution of Diporiphora australis](image)

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential:</td>
<td>MOD Oviparous.</td>
</tr>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH Generalist carnivore – invertebrates.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>MOD Climate match with ACT = 40%</td>
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<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW woodland, though no monsoonal, subtropical or tropical environments in ACT.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT):</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW

Native Reptile Import Risk Assessment 127
Family: Agamidae (Dragon lizards)

SPECIES  Diporiphora nobbi
Common name: Nobbi
Other common name: Nobbi Dragon
A small semi-arboreal dragon (snout-vent length to 7.5 cm)

Conservation status: Not threatened.
Distribution: Eastern SA, northern Vic, NSW and eastern QLD (not including Cape York). Occurs in the ACT.
Climate/ecoregion: Eastern tropical, subtropical, warm temperate, cool temperate, semi-arid.

LIKELIHOOD OF ESTABLISHMENT
Reproductive potential: MOD Oviparous. Clutch size up to 8 (Ehmann 1992)
Dietary generalisation: HIGH Generalist carnivore – invertebrates.
Climate suitability: HIGH Climate match with ACT = 100%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW Terrestrial.
Potential range (ACT): HIGH Already occurs naturally in ACT.
OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

CONSEQUENCES OF ESTABLISHMENT
Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW
Family: Agamidae (Dragon lizards)

**SPECIES**

*Gowidon longirostris*

**Common name:** Long-nosed Dragon  
**Other common name:** Long-snouted Lashtail  
A swift-moving, arboreal dragon with a long snout (snout-vent length to 9 cm)

**Conservation status:** Not threatened.  
**Distribution:** Arid regions of northern Australia from the coast of WA through central Australia to near the Queensland border.  
**Climate/ecoregion:** Northern subtropical, monsoonal, arid, semi-arid.  
**Habitat:** Found in association with watercourses, creeks, waterholes and gorges with trees and shrubs (Cogger 2014; Ehmann 1992). Usually found perched in trees or shrubs.

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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH Generalist carnivore – invertebrates, lizards.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW No subtropical or arid environments.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

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**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts:   | LOW |
| Potential for harm to humans:                   | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**

*Gowidon temporalis*

Common name: Swampland’s Lashtail

Other common name: A medium-sized arboreal dragon with a moderately long snout (snout-vent length to 10 cm)

Conservation status: Not threatened.

Distribution: Far northern coastal Australia.

Climate/ecoregion: Monsoonal, tropical north.

Habitat: Found in a range of habitats from coastal dunes to tropical woodlands and monsoonal forests: usually associated with melaleuca swamps, lagoons, creeks and riverine vegetation including low-lying seasonally flood prone areas (Cogger 2014; Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**


Dietary generalisation: NR Not reported.

Climate suitability: LOW Climate match with ACT ≤ 30%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: MOD Riparian and flood prone areas.

Potential range (ACT): LOW No tropical coastal environment’s in ACT.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

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**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Hypsilurus boydii*

**Common name:** Boyd’s Forest Dragon  
**Other common name:** A spectacular slow-moving arboreal forest dragon (snout-vent length to 10 cm)

**Conservation status:** Not threatened.  
**Distribution:** North-eastern Queensland.  
**Climate/ecoregion:** Tropical east.  
**Habitat:** Rainforest where there is an intermediate understory of smaller trees and vines or where there are breaks in the forest canopy (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

**Reproductive potential:** MOD Oviparous. A clutch size of three has been recorded (Ehmann 1992; Greer 1989).  
**Dietary generalisation:** HIGH Generalist carnivore – invertebrates.  
**Climate suitability:** LOW Climate match with ACT ≤ 30%  
**Populations established outside of range:** NR Not reported.  
**Aquatic/riparian species:** LOW Terrestrial.  
**Potential range (ACT):** LOW No tropical rainforest in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

**Potential for impact on threatened species (ACT):** LOW  
**Potential for environmental/economic impacts:** LOW  
**Potential for harm to humans:** LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**  
_Hypsilurus spinipes_

**Common name:**  
Southern Angle-headed Dragon

**Other common name:**  
A rainforest dragon (snout-vent length to 10 cm)

**Conservation status:**  
Not threatened.

**Distribution:**  
South-eastern Qld. and North eastern NSW.

**Climate/ecoregion:**  
Subtropical, warm temperate.

**Habitat:**  
Edges and openings in warm temperate rainforest and moist sclerophyll forest  
(Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Likelihood</th>
</tr>
</thead>
</table>
| Reproductive potential | MOD  
Oviparous. Clutch size up to 7 (Greer 1989). |
| Dietary generalisation | HIGH  
Generalist carnivore – invertebrates. |
| Climate suitability | MOD  
Climate match with ACT = 40% |
| Populations established outside of range | NR  
Not reported. |
| Aquatic/riparian species | LOW  
Terrestrial. |
| Potential range (ACT) | LOW  
No subtropical and warm temperate rainforest or moist sclerophyll forest in ACT. Wet sclerophyll forest in the Brindabella Range is too cold. |

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Consequence</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
**Family:** Agamidae (Dragon lizards)

**SPECIES**

<table>
<thead>
<tr>
<th><strong>Intellagama lesueurii</strong></th>
</tr>
</thead>
</table>

**Common name:** Eastern Water Dragon

**Other common name:**

A large semi-aquatic and arboreal water dragon found near streams; escapes into water and is a powerful swimmer - the ACT subspecies *Intellagama* *l.* *howittii* is distinctive and should not be confused with the more northerly subspecies *L.* *l.* *lesueurii* (snout-vent length to 20 cm)

**Conservation status:** Not threatened.

**Distribution:** Ranges and slopes of eastern Australia, from Cape York Peninsula to eastern Victoria. Occurs in the ACT where it is common at low to mid elevations.

**Climate/ecoregion:** Eastern tropical, subtropical, warm temperate.

**Habitat:** Riparian areas associated with rivers, streams, creeks and lakes in the coastal and hinterland ranges. Includes a range of forest, open forest, woodland, scrub and rocky (Cogger 2014; Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** HIGH Oviparous. Clutch size up to 20 (Ehmann 1992; Greer 1989).
- **Dietary generalisation:** HIGH Omnivore – invertebrates, crustaceans, frogs, fish, smaller lizards, fruit.
- **Climate suitability:** HIGH Climate match with ACT = 100%
- **Populations established outside of range:** HIGH Both subspecies established in Melbourne.
- **Aquatic/riparian species:** HIGH Semi-aquatic and riparian.
- **Potential range (ACT):** HIGH Already widespread at lower elevation in ACT.
- **OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** HIGH
- **Potential for harm to humans:** LOW
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD (for *L.* *l.* *lesueurii*)

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE

There is a high potential for the northern subspecies (*L.* *l.* *lesueurii*) to establish in the ACT. This may pose a threat to the local subspecies and lead to genetic inter-mixing.
**Family:** Agamidae (Dragon lizards)

**SPECIES**  
*Lophognathus gilberti*

**Common name:** Gilbert’s Dragon  
**Other common name:** Ta-ta Lizard

An alert, fast moving dragon; sprints on hind limbs; arm waving signalling is obvious (snout-vent length to 10 cm)

| Conservation status: | Not threatened. |
| Distribution: | Widely distributed throughout northern Australia from coastal regions to the arid interior. |
| Climate/ecoregion: | Monsoonal north, tropical, subtropical. |
| Habitat: | A wide range of habitats from coastal sand dunes to savannah woodlands and riparian vegetation (Cogger 2014; Ehmann 1992). |

## LIKELIHOOD OF ESTABLISHMENT

| Reproductive potential: | MOD Oviparous. Clutch size up to eight (Ehmann 1992). |
| Dietary generalisation: | HIGH Generalist carnivore – invertebrates, small lizards. |
| Climate suitability: | LOW Climate match with ACT ≤ 30% |
| Populations established outside of range: | NR Not reported. |
| Aquatic/riparian species: | MOD Northern riparian habitats. |
| Potential range (ACT): | LOW Monsoonal, tropical subtropical habitats do not occur in ACT. |

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

## CONSEQUENCES OF ESTABLISHMENT

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts: | LOW |
| Potential for harm to humans: | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Pogona barbata*

**Common name:** Eastern Bearded Dragon  
**Other common name:**  
A large bearded dragon often seen perched on a stump or fence post (snout-vent length to 25 cm)

**Conservation status:** Not threatened. Vulnerable (Vic Advisory List).  
**Distribution:** Eastern and south-eastern Australia excluding Cape York Peninsular and Tasmnia. Occurs in the lower elevation parts of the ACT.  
**Climate/ecoregion:** Eastern tropical, subtropical, warm temperate.  
**Habitat:** A range of open forest, woodland, grassy woodland, coastal shrubland and rocky environments (Cogger 2014; Ehmann 1992). Shelters in leaf litter and under bushes, overwinters in a burrow that it digs (Ehmann 1992). In the ACT also occurs in partially cleared farmland and along quiet country roads that have sufficient retention of woodland trees and ground cover. Often found beneath logs and rocks.

### LIKELIHOOD OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>MOD</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>HIGH</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>HIGH</td>
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</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH

### CONSEQUENCES OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**

*Pogona henrylawsoni*

Common name: Downs Bearded Dragon  
Other common name: Black-soil Bearded Dragon

A medium-sized, but squat, bearded dragon with a poorly formed “beard” - according to Cogger (2014) has been bred in vast numbers overseas for the pet trade (snout-vent length to 13 cm)

Conservation status: Not threatened.  
Distribution: Black soil grasslands of central Qld.  
Climate/ecoregion: Warm temperate, cool temperate.  
Habitat: Treeless cracking clay plains vegetated with Mitchell grass. Shelters in soil cracks (Wilson and Swan 2013).

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: HIGH  
Dietary generalisation: HIGH  
Climate suitability: LOW  
Populations established outside of range: NR  
Aquatic/riparian species: LOW  
Potential range (ACT): MOD  

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW  
Potential for environmental/economic impacts: LOW  
Potential for harm to humans: LOW  
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW-MODERATE
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Pogona microlepidota*

**Common name:** Small-scaled Bearded Dragon  
**Other common name:** A medium-sized bearded dragon (snout-vent length to 14 cm)

**Conservation status:** Not threatened.  
**Distribution:** Known only from Drysdale region NW Kimberly, WA.  
**Climate/ecoregion:** Monsoonal north-west, tropical.  
**Habitat:** Open woodland and sandstone areas (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size not reported.  
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates.  
- **Climate suitability:** LOW Climate match with ACT ≤ 30%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** LOW No monsoonal and tropical habitats in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Pogona minor*

**Common name:** Dwarf Bearded Dragon  
**Other common name:** Western Bearded Dragon

A small bearded dragon (snout-vent length to 16 cm)

- Conservation status: Subspecies *P.m.minima* Threatened (WA).
- Distribution: Much of the western part of Australia from southern Kimberley region to the Eyre Peninsular in SA.
- Climate/ecoregion: Western subtropical, western warm temperate, semiarid, arid.
- Habitat: A wide range of habitats including open forest, woodland, shrubland, heath, mallee and mulga – sandy and stony soils (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: HIGH Oviparous. Clutch size up to 19 (Greer 1989).
- Dietary generalisation: HIGH Omnivore – invertebrates, flowers, fruits and soft leaves.
- Climate suitability: MOD Climate match with ACT = 50%
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW Terrestrial.
- Potential range (ACT): MOD Parts of ACT likely to be suitable given range at similar latitudes in WA.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: MOD May compete with *P. barbatus* although smaller body size would indicate dietary overlap may only occur with subadult *P. barbatus*.
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Agamidae (Dragon lizards)

**SPECIES**

**Pogona vitticeps**

**Common name:** Central Bearded Dragon  
**Other common name:** Inland Bearded Dragon

A large-bodied bearded dragon from the inland, commonly kept in captivity (snout-vent length to 25 cm)

- **Conservation status:** Not threatened.
- **Distribution:** Interior of all eastern continental states to the eastern half of SA and south-eastern parts of NT.
- **Climate/ecoregion:** Arid, semiarid.
- **Habitat:** A wide range of habitats, including dry forest, mallee, Callitris, Acacia scrub sand plains sandwich deserts (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** HIGH  
  Oviparous. Clutch size up to 35 (Greer 1989).
- **Dietary generalisation:** HIGH  
  Omnivore – invertebrates, flowers, fruits and soft leaves.
- **Climate suitability:** MOD  
  Climate match with ACT = 50%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** LOW  
  Terrestrial.
- **Potential range (ACT):** MOD  
  Drier low elevation parts of ACT such as wooded slopes of the river corridors.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW  
  Potentially could compete with *P.barbatus*.
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Agamidae (Dragon lizards)

**SPECIES**  
*Rankinia diemesis*

**Common name:** Mountain Dragon  
**Other common name:** Mountain Heath Dragon

A small squat terrestrial dragon (snout-vent length to 7.5 cm)

**Conservation status:** Not threatened.

**Distribution:** South-eastern NSW and eastern and southern Vic. Primarily an upland species, but also occurs near coast in Sydney region and at Anglesea in southern Victoria. Occurs at higher elevations in the ACT (to about 1750 m).

**Climate/ecoregion:** Cool temperate.

**Habitat:** Montane and subalpine woodland and dry open heath, coastal heath and open woodland. Associated with bare ground and more open patches within those vegetation types.

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>MOD</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>HIGH</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Agamidae (Dragon lizards)

**SPECIES**
*Tympanocryptus lineata*

**Common name:** Lined Earless Dragon  
**Other common name:** A small cryptic terrestrial earless dragon (snout-vent length to 5 cm)

**Conservation status:** Critically Endangered (Vic), not threatened elsewhere.  
**Distribution:** There is uncertainty about the distribution of this species, and the number of taxa that may be involved (Cogger 2014). It occurs through much of the dry inland of Australia, from north-western Vic and coastal SA, through the centre of the continent including western Qld, NT and westerly parts of WA. There is some disagreement as to whether this species occurs in NSW (Swan et al 2004). We have accepted the advice of Peter Robertson that it has definitely been recorded in far western NSW. The point-based map provided by AROD has been used for the distribution map reproduced here.

**Climate/ecoregion:** Semi-arid NW, warm temperate east, arid, semi-arid south.  
**Habitat:** A wide range of open habitats - desert sandhills, hummock grassland, gibber and black soil plains, chenopod shrublands and open woodland. Shelters in usually found in earth cracks, grasses or ground litter (Cogger 2014; Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>HIGH Generalist carnivore – invertebrates.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>MOD Climate match with ACT = 50%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>MOD Drier, lower elevation parts of ACT may be suitable.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Potential for impact on threatened species (ACT):</th>
<th>HIGH Potential for competition with the endangered <em>T. pinguicolla</em>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** HIGH

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE-HIGH
13 Monitors
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus acanthurus*

Common name: Ridge-tailed Monitor  
Other common name: Spiny-tailed Monitor

A medium-sized monitor lizard from north-western Australia (total length to about 70 cm)

Conservation status: Not threatened.  
Distribution: Throughout the arid and dry parts of northern and north-western Australia.  
Climate/ecoregion: Arid, semi arid dry tropics; mostly within the tropical zone.  

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Clutch size up to 8 (Greer 1989; Ehmann 1992).
- **Dietary generalisation:** HIGH Generalist, invertebrates.
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW
- **Potential range (ACT):** LOW Arid and semi-arid environments are not present in ACT although there are drier lowland areas that are rocky, but these are not extensive.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** MOD Potentially could compete with *V. rosenbergi* but *V. acanthurus* much smaller in size.
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**

*Varanus baritji*

**Common name:** Black-spotted Spiny-tailed Monitor

**Other common name:** Black-spotted Ridge-tailed Monitor, Lemon-throated Monitor

A small monitor lizard from the Northern Territory (total length 60 cm)

- **Conservation status:** Not threatened.
- **Distribution:** Far north of the NT.
- **Climate/ecoregion:** Monsoonal north-west, tropical.
- **Habitat:** Stony ranges and scarps, tropical woodland and shrubland (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW Oviparous. Known to lay at least 3 eggs (only one record cited in Ehmann 1992).
- **Dietary generalisation:** HIGH Generalist, invertebrates.
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW
- **Potential range (ACT):** LOW No tropical, monsoonal habitats present in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW Could potentially compete with juvenile *V. rosenbergi*.
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus brevicaudus*

**Common name:** Short-tailed Pygmy Monitor  
**Other common name:** A small monitor lizard with very short limbs (total length to about 25 cm)

**Conservation status:** Not threatened.  
**Distribution:** Arid regions of northern WA and southern NT to far western Qld.  
**Climate/ecoregion:** Western arid and semiarid, subtropical.  
**Habitat:** Sandy deserts; sandy and gravely soils with hummock grasslands (Cogger 2014; Ehmann 1992). Shelters in narrow, short burrows. In sandy soils digs quite extensive burrows.

### LIKELIHOOD OF ESTABLISHMENT

- **Reproductive potential:** LOW  
  Oviparous. Up to 8 eggs.
- **Dietary generalisation:** HIGH  
  Generalist, invertebrates; reptile eggs.
- **Climate suitability:** LOW  
  Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** LOW  
  No suitable habitat present; no arid and semi arid environments in ACT

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

### CONSEQUENCES OF ESTABLISHMENT

- **Potential for impact on threatened species (ACT):** LOW  
  Could potentially compete with juvenile *V. rosenbergi*.
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus caudolineatus*

**Common name:** Stripe-tailed Monitor  
**Other common name:**  
A small arboreal monitor lizard (total length to about 30 cm)

Conservation status: Not threatened.  
Distribution: Coast and interior of far WA.  
Climate/ecoregion: Arid, semiarid.  
Habitat: Mulga, other acacia shrublands, exfoliating rock outcrops (Ehmann 1992). Shelters under bark or in crevices of trees, also has been found in crevices of exfoliating granite outcrops (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW  
  Oviparous. Clutch up to 5 eggs.
- Dietary generalisation: HIGH  
  Generalist, invertebrates and small lizards.
- Climate suitability: LOW  
  Climate match with ACT ≤ 30%
- Populations established outside of range: NR  
  Not reported.
- Aquatic/riparian species: LOW  
  No suitable habitat present; no arid and semi arid environments in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
  Could potentially compete with juvenile *V. rosenbergi*.
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**

<table>
<thead>
<tr>
<th>Common name:</th>
<th>Varanus giganteus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perentie</strong></td>
<td></td>
</tr>
<tr>
<td>A very large, distinctive, monitor lizard from the interior (total length to 2.5 metres)</td>
<td></td>
</tr>
</tbody>
</table>

Conservation status: Not threatened.
Distribution: Arid interior of Australia from far Western Qld to the coast of WA.
Climate/ecoregion: Arid, semi arid.
Habitat: Inhabits rocky outcrops throughout its range, and forages widely away from these rock outcrops into the adjacent sandy desert, sand plains and clay pans (Cogger 2014; Ehmann 1992). Shelters in deep crevices and burrows (Cogger 2014).

---

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>MOD Oviparous. Up to 11 eggs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD Preys on vertebrates.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW No suitable habitat present; no arid and semi arid environments in ACT.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Potential for impact on threatened species (ACT):</th>
<th>MOD Potentially could compete with V.rosenbergi.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>MOD</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE

If cornered, can be dangerous to inexperienced handlers (from scratching, biting and tail-lashing). The bite is painful and can do much damage from laceration and resulting infection.
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus gilleni*  
Common name: Pygmy Mulga Monitor  
Other common name: A small arboreal monitor lizard from the interior of Australia (total length to about 35 cm)

Conservation status: Not threatened.  
Distribution: Desert areas of SA and the NT through the interior of WA to the NW coast.  
Climate/ecoregion: Subtropical, arid, semiarid.  
Habitat: Desert habitats with acacia scrub (mulga, myall) and areas with scattered casuarina or eucalypts. Shelters in tree hollows or trees cracks or under loose bark.

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
<td>Oviparous. Up to 7 eggs.</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
<td>Generalist, geckos and invertebrates.</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>MOD</td>
<td>Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
<td>Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW</td>
<td>No suitable habitat present; no arid and semi arid environments in ACT.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>MOD</td>
<td>Could potentially compete with juvenile <em>V. rosenbergi</em>.</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
<td></td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
<td></td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus glauerti*

Common name: Kimberley Rock Monitor  
Other common name: A medium-sized monitor lizard from the Northern Territory (total length to about 80 cm)

Conservation status: Not threatened.  
Distribution: The Kimberley region of WA.  
Climate/ecoregion: Monsoonal north-west, tropical.  
Habitat: Tropical forest and riverine forest with rock outcrops, boulder fields or gorges (Ehmann 1992). According to Ehmann (1992) hunts on rock outcrops and rock faces. Shelters in narrow deep cracks and tissues of large boulders on rock outcrops.

---

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous. Clutch details not reported.  
- Dietary generalisation: MOD Feed on small reptiles.  
- Climate suitability: LOW Climate match with ACT ≤ 30%  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW  
- Potential range (ACT): LOW No tropical rocky environments in ACT.  

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: **LOW**

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): MOD Potentially could compete with *V. rosenbergi*.  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  

OVERALL CONSEQUENCES OF ESTABLISHMENT: **LOW**

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** **LOW**
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus gouldii*  
Common name: Sand Monitor  
Other common name: Sand Goanna

A large monitor lizard very widespread in Australia (total length to about 1.6 m)

Conservation status: Not threatened.
Distribution: Throughout most parts of continental Australia except for parts central NW Qld, high rainfall forested areas and the extreme south-east of Australia.
Climate/ecoregion: Monsoonal north, tropical, subtropical, warm temperate, arid and semi-arid.
Habitat: Wide range of habitats from coastal forest, woodland, shrub land, grassland and deserts. Sites typically have sandy soils. Digs its own burrow system.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Oviparous. Clutch size up to 11 (Ehmann 1992; Greer 1989).
Dietary generalisation: HIGH Generalist carnivore: invertebrates, lizards, small mammals.
Climate suitability: HIGH Climate match with ACT = 80%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW
Potential range (ACT): MOD Nearest records are from near Harden and Cootamundra (Swan et al. 2004). Parts of ACT may be suitable but soils generally not sandy enough for this burrow constructing species. Eggs overwinter in burrow in sandy soil and this may also be difficult with colder ACT climate.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): MOD Potentially could compete with *V. rosenbergi*.
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus indicus*

Common name: Mangrove Monitor

Other common name:  
A medium-sized monitor lizard from the Northern Territory (total length to about 1 metre)

Conservation status: Not threatened.
Climate suitability: LOW Climate match with ACT ≤ 30%
Potential range (ACT): LOW No monsoonal, tropical environments in ACT.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: NR Oviparous. Clutch size not reported.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus kingorum*

**Common name:** Long-tailed Rock Monitor  
**Other common name:** A medium-sized monitor lizard from the Northern Territory (total length to about 60 cm)

**Conservation status:** Not threatened.  
**Distribution:** Known only from a small area in the eastern Kimberley region and adjacent part of north-western NT.  
**Climate/ecoregion:** Monsoonal north-west, tropical.  
**Habitat:** Rocky hills, slopes with open shrubby woodland. Boulders and outcrops provide suitable shelter sites (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
  Oviparous. Clutch size not listed.  
- **Dietary generalisation:** MOD  
  Carnivore- small lizards and some invertebrates (Ehmann 1992).  
- **Climate suitability:** LOW  
  Climate match with ACT ≤ 30%  
- **Populations established outside of range:** NR  
  Not reported.  
- **Aquatic/riparian species:** LOW  
  No monsoonal, tropical environments in the ACT.  
- **Potential range (ACT):** LOW

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**

*Varanus mertensi*

Common name: Merten’s Water Monitor

Other common name: A medium-sized aquatic monitor lizard from the Northern Territory (total length to about 1 metre)

Conservation status: Not threatened.

Distribution: Far northern Australia from north-western WA to the west of Cape York Peninsula.

Climate/ecoregion: Monsoonal north, tropical.

Habitat: Coastal and inland waters (Cogger 2014). Includes riverbanks, swamps and lagoon edges (Ehmann 1992). Can climb trees and dives into the water to escape predators.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Oviparous. Up to 12 eggs. Take about 270 days to hatch.

Dietary generalisation: MOD Carnivore: feeds on fish, crabs, frogs, insects and turtle eggs.

Climate suitability: LOW Climate match with ACT ≤ 30%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW

Potential range (ACT): LOW No monsoonal, tropical environments in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus mitchelli*

**Common name:** Mitchell’s Water Monitor

**Other common name:** A small monitor lizard (total length to about 60 cm)

Conservation status: Not threatened.

Distribution: Far north of the NT.

Climate/ecoregion: Monsoonal north-west, tropical.

Habitat: shallow edge creeks, rivers and lagoons with fringing trees and bushes (Ehmann 1992). Climbs trees to escape predators.

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  Oviparous. Up to 11 eggs.
- **Dietary generalisation:** MOD  Carnivore: feeds on fish, crabs, invertebrates.
- **Climate suitability:** LOW  Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR  Not reported.
- **Aquatic/riparian species:** LOW
- **Potential range (ACT):** LOW  No monsoonal, tropical environments in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

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**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**

*Varanus panoptes*

**Common name:** Yellow-spotted Monitor

**Other common name:**
A medium-sized monitor lizard from the Northern Territory (total length to about 60 cm)

**Conservation status:** Not threatened.

**Distribution:**
Arid regions of central far western WA, then from the Kimberley through the northern NT to Cape York Peninsula and central Queensland.

**Climate/ecoregion:**
Monsoonal north, tropical, semi-arid, arid.

**Habitat:**
Broad range of habitats from riverside woodland, billabongs, floodplains and black soil plains along lower lying drainage lines, to red loams with acacia trees and hummock grassland understorey (Ehmann 1992). Digs its own burrow in Sandy soils (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>OVERALL LIKELIKHOOD OF ESTABLISHMENT IN ACT</td>
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</tr>
</tbody>
</table>

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>MOD</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
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<td>LOW</td>
</tr>
<tr>
<td>OVERALL CONSEQUENCES OF ESTABLISHMENT</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus primordius*

Common name: Northern Ridge-tailed Monitor  
Other common name: A small monitor lizard from the Northern Territory (total length to about 30 cm)

Conservation status: Not threatened.
Distribution: Far north-west of the NT.
Climate/ecoregion: Monsoonal north-west, tropical.
Habitat: Low rock outcrops in combination with nearby more open areas with alluvial soils and woodland (Swan et al. 2004; Ehmann 1992). Shelters in deep soil cracks, in short burrows under small stones or amongst rocks.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW Oviparous.
- Dietary generalisation: High Generalist carnivore: feeds on small lizards, and invertebrates.
- Climate suitability: LOW Climate match with ACT ≤ 30%
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: LOW
- Potential range (ACT): LOW No monsoonal, tropical environments in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus rosenbergi*  

Common name: Heath Monitor  
Other common name: Rosenberg’s Monitor  

A large terrestrial monitor lizard (total length to about 1.2 metres)

Conservation status: Vulnerable in NSW, Vic and SA.  
Distribution: Far south of WA and SA, far western Victoria, Southern Tablelands of NSW, ACT and Sydney region.  
Climate/ecoregion: Warm temperate.  
Habitat: A wide range of vegetation types including coastal heath, scrub, woodland and open forest. Shelters in burrows, in crevices amongst piles of rocks or in logs.

**LIKELIHOOD OF ESTABLISHMENT**

- Dietary generalisation: HIGH Generalist carnivore – lizards, small mammals, large invertebrates, carrion, bird eggs and fledglings.  
- Climate suitability: HIGH Climate match with ACT = 100 %  
- Populations established outside of range: NR Not reported.  
- Aquatic/riparian species: LOW  
- Potential range (ACT): HIGH Already occurs naturally in the ACT.  
- OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: LOW  
- OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW  

Escaped individuals might breed with local wild individuals. Although there do not appear to be genetic differences between widely separated populations (W. Smith pers comm.) the Southern Tablelands populations are nevertheless very distinctive in appearance (characterised by larger body size and larger ocelli (dots) on the body when compared to coastal eastern Australian populations).
Family: Varanidae (Monitor lizards or goannas)

**SPECIES** *Varanus scalaris*

Common name: Spotted Tree Monitor

Other common name: A medium-sized, arboreal monitor lizard (total length to about 60 cm)

Conservation status: Not threatened.
Distribution: Far northern Australia.
Climate/ecoregion: Monsoonal north, tropical.
Habitat: Open woodland to rainforest that has tree hollows present. Shelters in tree hollows and underneath loose bark (Cogger 2014; Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>NR</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>HIGH</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW</td>
</tr>
<tr>
<td>Populations established outside of range</td>
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</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:</td>
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</tbody>
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**CONSEQUENCES OF ESTABLISHMENT**

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<tr>
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</tr>
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</tr>
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<td>Potential for harm to humans:</td>
<td>LOW</td>
</tr>
<tr>
<td>OVERALL CONSEQUENCES OF ESTABLISHMENT:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
*Varanus spenceri*

**Common name:**  
Spencer’s Monitor

**Other common name:**  
A large monitor lizard from the Northern Territory (total length to about 1.2 metres)

**Conservation status:**  
Not threatened.

**Distribution:**  
Black soil plains of north-western Qld extending across the Barkly Tablelands to the eastern parts of NT.

**Climate/ecoregion:**  
Monsoonal north; tropical, semiarid.

**Habitat:**  
Black cracking clay soil plains usually with tussocks of Mitchell grass. Juveniles sheltering cracks in the soil, adults dig their own burrows or extend those of rodents (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:**  
  HIGH  
  Oviparous. Up to 35 eggs.

- **Dietary generalisation:**  
  HIGH  
  Generalist carnivore – lizards, invertebrates.

- **Climate suitability:**  
  LOW  
  Climate match with ACT ≤ 30%

- **Populations established outside of range:**  
  NR  
  Not reported.

- **Aquatic/riparian species:**  
  LOW

- **Potential range (ACT):**  
  LOW  
  No suitable black clay soil landscapes, no tropical or semiarid environments.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:**  
LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):**  
  LOW  
  Potentially could compete with *V. rosenbergi*.

- **Potential for environmental/economic impacts:**  
  LOW

- **Potential for harm to humans:**  
  LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:**  
LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:**  
LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**  
Varanus storri

**Common name:** Storr’s Monitor

**Other common name:** A small monitor lizard from the north of Australia (total length to about 30 cm)

Conservation status: Not threatened.

Distribution: Patchily distributed in northern Australia - interior of Queensland, north east NT to the Kimberley in WA.

Climate/ecoregion: Northern inland areas, tropical, subtropical and semiarid.

Habitat: Rocky ranges and hills (Cogger 2014). Areas with compacting reddish soils with small to large surface stones that are well embedded, tussocks and other grasses, especially Mitchell grass (Ehmann 1992). Shelters in burrows that it digs.

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: LOW Oviparous. Up to 7 eggs.

Dietary generalisation: MOD Invertebrates and geckos.

Climate suitability: LOW Climate match with ACT ≤ 30%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW

Potential range (ACT): LOW No tropical or semiarid environments in ACT.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW Potentially could compete with juvenile V. rosenbergi.

Potential for environmental/economic impacts: LOW

Potential for harm to humans: LOW

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**

*Varanus tristis*

**Common name:** Black-headed Monitor

**Other common name:** Freckled Monitor, Black-headed Monitor

A medium-sized arboreal monitor lizard (total length to about 80 cm)

- **Conservation status:** Not threatened.
- **Distribution:** Much of continental Australia except the far south. Occurs in northern NSW.
- **Climate/ecoregion:** Monsoonal, tropical, subtropical, warm temperate, arid, semi-arid.
- **Habitat:** Dry tropical open forest, tropical woodland, arid stony ranges. Shelters in tree hollows, rock crevices or under exfoliations, holes in the ground.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Up to 17 eggs in a clutch.
- **Dietary generalisation:** HIGH Generalist carnivore – invertebrates, lizards, small snakes, nestling birds (Ehmann 1992).
- **Climate suitability:** MOD Climate match with ACT = 40%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW
- **Potential range (ACT):** MOD Nearest records of the species are from west of Condobolin NSW (Swan et al 2004). Parts of ACT may be suitable. Cold conditions may prevent establishment.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Varanidae (Monitor lizards or goannas)

**SPECIES**

**Varanus varius**

**Common name:** Lace Monitor

**Other common name:**

A large, familiar, tree-climbing monitor lizard from eastern Australia (total length to more than 2 metres)

**Conservation status:** Not threatened.

**Distribution:** Eastern and south-eastern Australia from south eastern SA to Cape York Peninsula Qld.

**Climate/ecoregion:** Monsoonal east, tropical, subtropical, warm temperate, semi-arid.

**Habitat:** Rainforest, open forest, woodland, river red gum forest. Shelters in hollows in trees

**LIKELIHOOD OF ESTABLISHMENT**

**Reproductive potential:** LOW Oviparous. Up to 14 eggs in a clutch. Eggs laid in a termite nest, or a hole in the ground (Ehmann 1992).

**Dietary generalisation:** HIGH Feeds on insects, reptiles, small mammals and is a major predator of nestling birds (Cogger 2014).

**Climate suitability:** LOW Climate match with ACT = 100%

**Populations established outside of range:** NR Not reported.

**Aquatic/riparian species:** LOW

**Potential range (ACT):** LOW Known to occur in the ACT where it is very rare (Bennett 2011).

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT** HIGH Already known from the ACT.

**CONSEQUENCES OF ESTABLISHMENT**

**Potential for impact on threatened species (ACT):** LOW

**Potential for environmental/economic impacts:** LOW

**Potential for harm to humans:** MOD

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW

Can become a nuisance at camping grounds by scavenging food from bins and from campsites. According to Ehmann (1992) is easily shooed away. Usually climbs a tree when disturbed. Care is required in handling this large, strong species to prevent damage from scratching, biting and tail-lashing. The bite is painful and can do much damage from laceration and resulting infection.
Blind Snakes
Family: Typhlopidae (Blind Snakes)

**SPECIES**  
*Ramphotyphlops nigrescens*

**Common name:** Blackish Blind Snake  
**Other common name:** A very distinctive worm like snake with a blunt round snout and eyes that are reduced to small dark spots under the scales (total length to 75 cm)

**Conservation status:** Not threatened. An uncommon species that is rarely seen because of its habitat of sheltering in ant nests and termite mounds.

**Distribution:** South-eastern Australia – occurs naturally in the ACT.

**Climate/ecoregion:** Subtropical east (inland), warm temperate, semiarid.

**Habitat:** Forest and woodland, rock outcrops. Shelters under stones and logs and in termite mounds.

---

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size up to 20 eggs (Ehmann 1992).
- **Dietary generalisation:** LOW Pupae, larvae and eggs of ants and termites.
- **Climate suitability:** HIGH Climate match with ACT = 100%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** HIGH Occurs throughout the lowland woodlands, and partially cleared unimproved farmlands of the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT

---

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
15 Pythons
Family: Boidae (Pythons)

SPECIES  Antaresia childreni
Common name: Children’s Python
Other common name: A small, slender python (total length to about 1 metre)

Conservation status: Not threatened.
Distribution: North-western Australia, from the Kimberley region WA, across NT to the Gulf of Carpentaria Qld.
Climate/ecoregion: Monsoonal, tropical west, semiarid.

LIKELIHOOD OF ESTABLISHMENT
Dietary generalisation: MOD Vertebrate animals - small mammals (esp. bats), frogs and lizards.
Climate suitability: LOW Climate match with ACT ≤ 30%
Populations established outside of range: NR Occasional wild records from Sydney, but none yet are thought to have established breeding populations (G.Shea pers. comm.).
Aquatic/riparian species: LOW Terrestrial.
Potential range (ACT): LOW No tropical monsoonal environments in ACT. Cold overnight temperatures likely to be limiting.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

CONSEQUENCES OF ESTABLISHMENT
Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: LOW
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW
Family: Boidae (Pythons)

**SPECIES**  
*Antaresia maculosa*

**Common name:** Spotted Python  
**Other common name:**  
A small python with dark brown blotches (total length to about 1 metre)

**Conservation status:** Not threatened. A reasonably common species that is rarely seen because of its habitat of sheltering in ant nests and termite mounds.

**Distribution:** Eastern and north-eastern Australia, from far northern NSW to the tip of Cape York Peninsula.

**Climate/ecoregion:** Monsoonal, tropical and subtropical east.

**Habitat:** Wet coastal forests to seasonally dry woodlands in the north and dry savannahs west of the Great Dividing Range in the south (Cogger 1992). Shelters in tree hollows, rock crevices, caves and rocky grottos (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

**Reproductive potential:** MOD  
Oviparous. Clutch size up to 16 eggs (Ehmann 1992).

**Dietary generalisation:** MOD  
Vertebrate animals - small mammals (including bats), small birds and lizards.

**Climate suitability:** MOD  
Climate match with ACT = 60%

**Populations established outside of range:** NR  
Not reported.

**Aquatic/riparian species:** LOW  
Terrestrial.

**Potential range (ACT):** LOW  
No tropical or subtropical environments in the ACT. Cold over-night temperatures likely to be limiting.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

**Potential for impact on threatened species (ACT):** LOW

**Potential for environmental/economic impacts:** LOW

**Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Boidae (Pythons)

**SPECIES**  
*Antaresia perthensis*

**Common name:** Pygmy Python  
**Other common name:** The smallest Australian python, the scientific name incorrectly implies that it occurs near Perth (total length to about 60 cm)

**Conservation status:** Not threatened.  
**Distribution:** Mid-western WA, from the arid Pilbara region to the adjacent coastal areas.  
**Climate/ecoregion:** Western warm temperate, arid, semiarid.  
**Habitat:** Arid plains, peneplains and ranges with rocky outcrops; hummock grasslands and acacia shrublands with termite mounds. Shelters in termite mounds, rock crevices and deep soil cracks.

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>LOW</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>LOW</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>LOW</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Consequence</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Boidae (Pythons)

**SPECIES**  
*Antaresia stimsoni*  
Common name: Stimson’s Python  
Other common name: Large-blotched Python  
A small python (total length to about 1 metre)

<table>
<thead>
<tr>
<th>Conservation status:</th>
<th>Vulnerable (NSW).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution:</td>
<td>Widely distributed throughout Australia, except the far north and the extreme south and southeast. Nearest natural occurrences are at Bourke and near Broken Hill.</td>
</tr>
<tr>
<td>Climate/ecoregion:</td>
<td>Arid, semiarid, warm temperate</td>
</tr>
<tr>
<td>Habitat:</td>
<td>A wide range of arid environments. Often associated with rock outcrops and stony ranges, but also sand plains and dunes and the margins of dry watercourses where it is associated with isolated larger trees. Shelters in deep rock crevices, tree hollows, cavities in termite mounds and clumps of spinifex (Cogger 2014).</td>
</tr>
</tbody>
</table>

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>MOD Oviparous. Clutch size up to 19 eggs recorded (Ehmann 1992).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD Adults eat small mammals (esp. bats) and geckos. Juveniles take geckos and skinks.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW No arid or semiarid environments in ACT.</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts: | LOW |
| Potential for harm to humans: | LOW |
| OVERALL CONSEQUENCES OF ESTABLISHMENT: | LOW |

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Boidae (Pythons)

**SPECIES**  
*Aspidites melanocephalus*

**Common name:** Black-headed Python  
**Other common name:** A large and distinctively marked python with a jet black head neck and throat (total length up to 2.5 metres)

**Conservation status:** Not threatened.  
**Distribution:** Northern half of Australia except for extremely arid regions.  
**Climate/ecoregion:** Monsoonal, tropical, subtropical, semiarid.  
**Habitat:** Wide range of habitats from humid coastal forests and seasonally dry woodlands to the arid interior, tussock and hummock grasslands (Cogger 2014; Ehmann 1992). Shelter in burrows, deep soil cracks, fallen trees with hollows, rock crevices, open cavities in termite mounds and in grass hummocks (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD</td>
<td>Generalist carnivore - feed on reptiles (including snakes), small mammals, and ground birds.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW</td>
<td>Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR</td>
<td>Occasional records of their occurrence in Sydney, but none yet are thought to have established breeding populations (G. Shea pers. comm.)</td>
</tr>
</tbody>
</table>

**Aquatic/riparian species:** Low  
**Potential range (ACT):** Low  
**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** Low

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Potential for impact on threatened species (ACT):</th>
<th>LOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** Low

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** Low
Family: Boidae (Pythons)

**SPECIES**  
*Aspidites ramsayi*

**Common name:**  
Woma; Ramsay’s Python

**Other common name:**  
A large, thick bodied python without black on head or neck (total length to 2.7 metres)

**Conservation status:**  
Vulnerable (NSW). Near Threatened (Qld), Special Protection (WA), Rare (SA), Endangered IUCN Red List.

**Distribution:**  
Arid parts of inland Australia extending almost to the eastern ranges in southern Qld. An apparently isolated population in south-eastern WA may now be extinct (Ehmann 1992).

**Climate/ecoregion:**  
Arid, semiarid, western warm temperate, semiarid.

**Habitat:**  
Restricted to arid and dry inland areas, including desert sandhills and deep cracking black-soil plains. Shelters in animal burrows (including rabbit burrows) and under grass hummocks.

![Distribution Map](image)

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Up to 19 eggs in a clutch (Greer 1997).
- **Dietary generalisation:** HIGH Generalist carnivore – preys on reptiles (including snakes), small mammals, and birds.
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** LOW Suitable arid and semiarid environments not present in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Boidae (Pythons)

**SPECIES**  | *Leiopython albertisii*
---|---
Common name: | D’Albertis’ python; White-lipped python
Other common name: | A very large python with white markings on lips (total length to about 3 metres)

Conservation status: | Not threatened. A reasonably common species that is rarely seen because of its habitat of sheltering in ant nests and termite mounds.
Distribution: | Southern New Guinea, but also found on the mud islands of Torres Strait.
Climate/ecoregion: | Monsoonal, tropical, coastal.
Habitat: | A variety of forested habitats as well as coconut plantations and coast palms swamps (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

| Dietary generalisation: | NR Not reported.
| Climate suitability: | LOW Climate match with ACT ≤ 30%
| Populations established outside of range: | NR Not reported.
| Aquatic/riparian species: | LOW Terrestrial.
| Potential range (ACT): | LOW No monsoonal tropical forests in ACT. Cold over-night temperatures likely to be limiting.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW.

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW
| Potential for environmental/economic impacts: | LOW
| Potential for harm to humans: | LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Boidae (Pythons)

**SPECIES**  
*Liasis fuscus*

**Common name:** Water Python  
**Other common name:** A large semi aquatic python (total length to about 3 metres)

<table>
<thead>
<tr>
<th>Conservation status:</th>
<th>Not threatened.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution:</td>
<td>Coast and hinterland of northern and north-eastern Australia.</td>
</tr>
<tr>
<td>Climate/ecoregion:</td>
<td>Monsoonal, tropical.</td>
</tr>
<tr>
<td>Habitat:</td>
<td>Occurs in and near water courses, swamps and billabongs with fringing and emergent growth. Occupied sites typically have nearby woodland, forest or rocky higher ground to provide retreat and shelter sites. Shelters in burrows, in hollows, in stumps, under fallen matted vegetation, and in crevices. During the warmer part of the year spends a considerable amount of time concealed underwater amongst reeds and other emergent plants (Ehmann 1992).</td>
</tr>
</tbody>
</table>

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD Carnivore – feeds on vertebrate animals including rats, bandicoots, wallabies and waterbirds. Juveniles eat frogs, fish and lizards.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>LOW Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>HIGH Riparian and aquatic.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW No monsoonal tropical wetlands in the ACT.</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts:   | LOW |
| Potential for harm to humans:                   | LOW |
| OVERALL CONSEQUENCES OF ESTABLISHMENT:          | LOW |

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:**  
LOW
Species: *Liasis olivaceus*

Common name: Olive Python

Other common name: A large python often found near water in rocky gorges and ranges (total length to about 3 metres)

Conservation status: Not threatened. One subspecies *L. o. barroni* vulnerable (EPBC), Threatened (WA).

Distribution: Coast and hinterland of northern Australia, including the extreme west of QLD and Cape York Peninsular

Climate/ecoregion: Monsoonal, tropical, subtropical semi-arid.

Habitat: Found in a variety of habitats from monsoonal forests to savannah woodland. Can be abundant in rocky hills and ranges. Shelters in deep rock crevices, caverns and tree hollows (Ehmann 1992).

**Likelihood of Establishment**

Dietary generalisation: MOD Carnivore – feeds on vertebrate animals including mammals, birds and reptiles.  
Climate suitability: LOW Climate match with ACT ≤ 30%.  
Populations established outside of range: NR Not reported. Occasional records in Sydney, but no breeding populations (G. Shea pers. comm.).  
Aquatic/riparian species: MOD Terrestrial; but also spends time in waterholes.  
Potential range (ACT): LOW No suitable environments. No tropical or subtropical environments in the ACT. Cold over-night temperatures likely to be limiting.

**Overall Likelihood of Establishment in ACT:** LOW

**Consequences of Establishment**

Potential for impact on threatened species (ACT): LOW  
Potential for environmental/economic impacts: LOW  
Potential for harm to humans: LOW  
**Overall Consequences of Establishment:** LOW

**Overall Risk Level for Introduction to ACT:** LOW
Family: Boidae (Pythons)

**SPECIES**  
*Morelia amethystina*

Common name: Scrub Python  
Other common name: Amethyst Python

A large python from north-west Queensland – the longest total length in an Australian snake (total length to 8.5 metres; average length 3.5 m).

Conservation status: Not threatened.  
Distribution: North-eastern Queensland. Also occurs in Torres Strait, New Guinea and Indonesia.  
Climate/ecoregion: Monsoonal, tropical.  
Habitat: Found in a variety of habitats, from rainforest to open savannah woodland, monsoon forests, secondary regrowth and scrubby vegetation on coral cays (Cogger 2014). Shelters in tree hollows, in high tree forks within the canopy, under fallen timber slabs, in hollow logs and in deep crevices and caves (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

Dietary generalisation: MOD Feeds on mammals and birds.  
Climate suitability: LOW Climate match with ACT ≤ 30%  
Populations established outside of range: NR Not reported.  
Aquatic/riparian species: LOW Terrestrial.  
Potential range (ACT): LOW No monsoonal, tropical environments in ACT. No tropical or subtropical environments in the ACT. Cold over-night temperatures likely to be limiting.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: **LOW**

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW  
Potential for environmental/economic impacts: LOW  
Potential for harm to humans: LOW  
OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: **LOW**
Family: Boidae (Pythons)

**SPECIES**  
*Morelia bredli*

Common name: Centralian Carpet Snake  
Other common name: Centralian Carpet Python

A large carpet snake from the centre of Australia (total length to about 2 metres)

<table>
<thead>
<tr>
<th>Conservation status:</th>
<th>Least Concern (NT).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution:</td>
<td>Southern parts of NT.</td>
</tr>
<tr>
<td>Climate/ecoregion:</td>
<td>Arid.</td>
</tr>
<tr>
<td>Habitat:</td>
<td>Desert ranges and rocky outcrops and larger tree-lined watercourses flowing from them. Associated with River Red Gums that have abundant hollows in senescent trees and an understory of Acacia shrubs (Ehmann 1992).</td>
</tr>
</tbody>
</table>

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: **HIGH** Oviparous. Clutch size up to 47 eggs (Ehmann 1992).
- Dietary generalisation: **MOD** Preys on vertebrates - small mammals and birds, especially those that nest in hollows (Ehmann 1992).
- Climate suitability: **LOW** Climate match with ACT ≤ 30%
- Populations established outside of range: **NR** Not reported.
- Aquatic/riparian species: **LOW** Terrestrial.
- Potential range (ACT): **LOW** No suitable arid environments.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** **LOW**

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): **LOW**
- Potential for environmental/economic impacts: **LOW**
- Potential for harm to humans: **LOW**

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** **LOW**

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** **LOW**
Family: Boidae (Pythons)

**SPECIES** *Morelia carinata*

**Common name:** Rough-scaled Python

**Other common name:** A poorly known python from the northern Kimberley (total length to 2 metres)

**Conservation status:** Not threatened.

**Distribution:** Known only from the north-western Kimberley of WA.

**Climate/ecoregion:** Monsoonal, tropical, coastal.

**Habitat:** Relict monsoon forest and vine thickets in sheltered sandstone gorges (Cogger 2014; Wilson and Swan 2013). Shelters in rock crevices and beneath sandstone overhangs (Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Reproductive potential:</th>
<th>Oviparous. Clutch size not reported.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>Low Climate match with ACT ≤ 30%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>Low No monsoonal tropical environments in ACT. Cold over-night temperatures likely to be limiting.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** Low

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**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | Low |
| Potential for environmental/economic impacts:   | Low |
| Potential for harm to humans:                   | Low |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** Low

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** Low
Family: Boidae (Pythons)

**SPECIES**

*Morelia spilota*

**Other common name:** Carpet Python; Dimond Python

A large, familiar, semi arboreal python that varies considerably in colour pattern - there are three subspecies/races and a number of other varieties - the subspecies closest in occurrence to the ACT is the Inland Carpet Snake *M. s. metcalfei* (total length to about 2 metres)

**Conservation status:** Not threatened. Three subspecies are under threat in part of their range: *M. s. spilota* Endangered (Victoria), *M. s. metcalfei* Endangered (Victoria), *M. s. imbricata* Special Protection (WA).

**Distribution:** Continental Australia, except southern Victoria, the arid centre and much of WA.

**Climate/ecoregion:** Monsoonal, tropical, subtropical, warm temperate, semiarid, arid.

**Habitat:** Found in a very wide range of habitats from rainforest to a variety of semiarid coastal and inland habitats. Shelters in leaf litter, tree hollows, large hollow logs, fallen trees, deep rock crevices and caves. Sometimes enter buildings (e.g. ceilings).

![Map of Australia showing distribution of Morelia spilota](image)

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>HIGH</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>MOD</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>MOD</td>
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<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>MOD</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD.

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>MOD</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD Establishment of non-local varieties of *M. spilota* in the ACT.
OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: MODERATE

ACT region could present a threat (through cross-breeding) to natural populations of this species.
Family: Boidae (Pythons)

**SPECIES**

*Morelia viridis*

Other common name: Green Python

A very striking, green-coloured, arboreal rainforest python (total length to about 2 metres)

Conservation status: Near Threatened (Qld).
Distribution: Rainforest areas in parts of eastern Cape York Peninsular
Climate/ecoregion: Monsoonal, tropical.

---

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD</td>
<td>Prey on vertebrate animals. Adults feed on small mammals and birds; juveniles eat lizards, frogs, birds and eggs (Ehmann 1992).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Climate suitability:</th>
<th>LOW</th>
<th>Climate match with ACT ≤ 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Populations established outside of range:</td>
<td>NR</td>
<td>Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW</td>
<td>Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>LOW</td>
<td>No tropical rainforest in ACT. Cold over-night temperatures likely to be limiting.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

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**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts: | LOW |
| Potential for harm to humans: | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

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**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Acrochordidae (File Snakes)

**SPECIES**  
*Acrochordus arafurae*

**Common name:** Arafura File Snake  
**Other common name:** A distinctive aquatic snake with skin that has a raspy texture (total length to about 2.5 metres)

**Conservation status:** Not threatened.  
**Distribution:** Coastal and adjacent areas of northern Australia, but not extending into WA.  
**Climate/ecoregion:** Monsoonal, tropical north.  
**Habitat:** Found in freshwater streams and lagoons. Enters estuarine waters during the wet season but later returns to the freshwater habitats (Cogger 2014).

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**LIKELIHOOD OF ESTABLISHMENT**

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<tbody>
<tr>
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<td>Climate match with ACT ≤ 30%</td>
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<tr>
<td>Populations established outside of range:</td>
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<tr>
<td>Aquatic/riparian species:</td>
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<td>Strictly aquatic.</td>
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<tr>
<td>Potential range (ACT):</td>
<td>LOW</td>
<td>No tropical monsoonal environments in ACT.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW.

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts:   | LOW |
| Potential for harm to humans:                    | LOW |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
17  Colubrid Snakes
Family: Colubridae (Colubrid Snakes)

**SPECIES**

*Dendrelaphis calligastra*

**Common name:** Northern Green Tree Snake  
**Other common name:** Northern Tree Snake  

A very slender arboreal snake (total length to about 1.2 metres)

**Conservation status:** Not threatened.  
**Distribution:** Eastern side of Cape York Peninsular and islands of Torres Strait  
**Climate/ecoregion:** Monsoonal, tropical east.  
**Habitat:** Rainforests, mangroves, dense secondary regrowth, tropical woodlands with a dense shrub layer (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

**Reproductive potential:** MOD Oviparous. Clutch size - up to 11 eggs (Ehmann 1992).  
**Dietary generalisation:** MOD Small vertebrate animals – frogs, birds, occasionally reptiles and small mammals (Cogger 2014).  
**Climate suitability:** LOW Climate match with ACT ≤ 30%  
**Populations established outside of range:** NR Not reported.  
**Aquatic/riparian species:** LOW Terrestrial.  
**Potential range (ACT):** LOW No tropical monsoonal environments in ACT.  
**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW.

**CONSEQUENCES OF ESTABLISHMENT**

**Potential for impact on threatened species (ACT):** LOW  
**Potential for environmental/economic impacts:** LOW  
**Potential for harm to humans:** LOW  
**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Colubridae (Colubrid Snakes)

**SPECIES**  
*Dendrelaphis punctulatus*  
**Common name:** Common Tree Snake  
**Other common name:** A slender, large-eyed diurnal snake (total length to about 1.2 metres)

- **Conservation status:** Not threatened.  
- **Distribution:** North-western Australia, from the Kimberley region WA, across NT to the Gulf of Carpentaria Qld; eastern Australia to just south of Sydney.  
- **Climate/ecoregion:** Monsoonal, tropical, subtropical, warm temperate.  
- **Habitat:** A wide range of habitats including rainforest, mangroves, open forest, coastal heath and riparian vegetation along inland rivers and around swamps (Cogger 2014). Shelters in tree hollows, crevices and narrow inaccessible caves (Ehmann 1992).

### LIKELIHOOD OF ESTABLISHMENT

- **Reproductive potential:** MOD Oviparous. Clutch size up to 14 eggs (Ehmann 1992).  
- **Dietary generalisation:** MOD Vertebrate animals - frogs and lizards as well as stranded tadpoles and fish.  
- **Climate suitability:** MOD Climate match with ACT = 50%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** LOW No suitable habitats in ACT – dry conditions and cold winter temperatures likely to be limiting.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

### CONSEQUENCES OF ESTABLISHMENT

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** LOW  

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Colubridae (Colubrid Snakes)

**SPECIES**

*Stegonotus cucullatus*

Common name: Slaty-grey Snake

Other common name: A small, muscular, rounded body, non-venomous snake (total length to about 1 metre)

Conservation status: Not threatened.

Distribution: Coast and adjacent wetter areas of the northern NT and Cape York Peninsula.

Climate/ecoregion: Monsoonal, tropical.

Habitat: A wide range of habitats associated with coastal plains and dunes, slopes and ranges that support tropical shrubland, woodland and forest - usually found in the vicinity of swamps, seepages, and watercourses (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Oviparous. Clutch size up to 16 eggs (Greer 1997).

Dietary generalisation: MOD Vertebrate animals – fish, tadpoles, frogs, lizards and small mammals.

Climate suitability: LOW Climate match with ACT ≤ 30%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): LOW No tropical monsoonal environments in ACT.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: MOD Extremely aggressive when aroused and if cornered or grasped can bite fiercely and repeatedly (Ehmann 1992). Not venomous.

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW
Family: Colubridae (Colubrid Snakes)

**SPECIES**  
*Tropidonophis mairii*

**Common name:** Keelback  
**Other common name:** A semi-aquatic non-venomous snake (total length to about 1 metre)

**Conservation status:** Not threatened.  
**Distribution:** Northern and north-eastern Australia, from the Kimberley region WA to far north-eastern NSW.  
**Climate/ecoregion:** Monsoonal, tropical, subtropical, warm temperate.  
**Habitat:** Lowland areas, slopes and ranges. Found in the general vicinity of streams, rivers, lagoons, swamps and marshes, usually with an abundance of fringing and emergent aquatic vegetation (Ehmann 1992). Forages at ground level, including below the surface of shallow muddy water.

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Clutch size up to 15 eggs (Ehmann 1992).
- **Dietary generalisation:** MOD Vertebrate animals - mostly frogs and tadpoles, but also takes lizards.
- **Climate suitability:** MOD Climate match with ACT = 40%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** HIGH Semi aquatic.
- **Potential range (ACT):** LOW No tropical and subtropical wetlands in ACT.  
**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW Some potential for this species to move downstream in the Murray Darling system (however water likely to be too cold).
- **Potential for harm to humans:** LOW Bites readily when handled (Swan et al. 2004) but is harmless.  
**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Water Snakes
Family: Homalopsidae (Oriental Water Snakes)

**SPECIES**  
*Pseudoferania polylepis*

**Common name:** Macleay’s Water Snake

**Other common name:** A rear-fanged aquatic snake. (total length to about 80 cm)

**Conservation status:** Not threatened.

**Distribution:** North-eastern Qld to northern NT.

**Climate/ecoregion:** Monsoonal, tropical.

**Habitat:** Creeks, clear swamps and larger rivers. Favours wetlands with grassy banks, especially those fringed with aquatic vegetation (Cogger 2014). Remains mostly submerged amongst emergent and submerged aquatic vegetation, especially in the vicinity of banks and exposed tree roots (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** HIGH Live-bearing. Up to 15 young reported (Ehmann 1992).
- **Dietary generalisation:** MOD Aquatic vertebrate animals – fish, frogs, tadpoles.
- **Climate suitability:** LOW Climate match with ACT ≤ 30%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** HIGH Aquatic. Rarely leaves the wetland.
- **Potential range (ACT):** LOW No tropical, monsoonal environments.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Elapid Snakes
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Acanthophis antarcticus*

**Common name:** Common Death Adder  
**Other common name:**

A short-bodied snake with a broad, triangular-shaped head and a rat-like tail ending in a curved soft spine (wriggled to attract prey) (total length to about 1 metre)

**Conservation status:** Near-threatened (Qld).  
**Distribution:** Southern and eastern Australia.  
**Climate/ecoregion:** Tropical, subtropical, warm temperate, semi-arid.  
**Habitat:** A wide range of habitats including dry open forests, woodlands and heaths (Swan et al 2004; Ehmann 1992). Shelters in deep leaf litter (Ehmann 1992)

### LIKELIHOOD OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Feature</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>HIGH</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>MOD</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>HIGH</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH  
Possibly already occurs at low densities in the ACT.

### CONSEQUENCES OF ESTABLISHMENT

<table>
<thead>
<tr>
<th>Feature</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Acanthophis praelongus*

Common name: Northern Death Adder

Other common name: A death adder (total length to about 70 cm)

Conservation status: Not threatened.

Distribution: Cape York Peninsular Qld.

Climate/ecoregion: Monsoonal, tropical.


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**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: NR  
Viviparous. Number of young not reported.

Dietary generalisation: MOD  
Vertebrate animals - lizards, small birds, small mammals and occasionally frogs (Ehmann 1992).

Climate suitability: LOW  
Climate match with ACT ≤ 30%

Populations established outside of range: NR  
Not reported.

Aquatic/riparian species: LOW  
Terrestrial.

Potential range (ACT): LOW  
No tropical monsoonal environments.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: **LOW**

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: MOD  
Competition with *A. antarcticus*.

Potential for harm to humans: HIGH  
A venomous snake that is dangerous. Always capable of inflicting a fatal bite.

OVERALL CONSEQUENCES OF ESTABLISHMENT: **MOD**

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Acanthophis pyrrhus*

Common name: Desert Death Adder  
Other common name: A death adder (total length to about 70 cm)

Conservation status: Vulnerable (SA).  
Distribution: Desert regions of Central Australia extending into the arid parts of all mainland states except Victoria and NSW.  
Climate/ecoregion: Arid, semi-arid.  
Habitat: A wide range of arid habitats, including stony ranges, sand plains and sand ridge deserts with spinifex (Cogger 2014). Shelters in and under the edges of large Triodia hummocks (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: HIGH  
  Viviparous. One female had 13 young (Greer 1997).  
- Dietary generalisation: MOD  
  Reptiles - lizards.  
- Climate suitability: LOW  
  Climate match with ACT ≤ 30%  
- Populations established outside of range: NR  
  Not reported.  
- Aquatic/riparian species: LOW  
  Terrestrial.  
- Potential range (ACT): LOW  
  No arid environments with hummock grasses. tropical monsoonal environments.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: MOD  
  Competition with *A. antarcticus*.  
- Potential for harm to humans: HIGH  
  A venomous snake that is dangerous. Always capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**

**Austrelaps ramsayi**

Common name: Highlands Copperhead

Other common name: A copperhead snake with distinctive pale-barred supralabials (upper lip area) (total length to about 1.7 metres)

Conservation status: Not threatened.

Distribution: Upland areas of NSW and eastern Vic.

Climate/ecoregion: Eastern warm temperate, cool temperate, montane, subalpine and alpine.

Habitat: Found in a range of woodland and forested habitats as well as open grasslands, sphagnum bogs and heathland (Green and Osborne 2012). Also occurs in rocky areas. Shelters under logs, in dense matted vegetation, in deep burrows and under large flat stones (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: **HIGH** Viviparous. Up to 30 young (Ehmann 1992).
- Dietary generalisation: **MOD** Vertebrate animals – lizards and frogs. Sometimes other snakes and small mammals.
- Climate suitability: **HIGH** Climate match with ACT = 100%
- Populations established outside of range: **NR** Not reported.
- Aquatic/riparian species: **LOW** Terrestrial.
- Potential range (ACT): **HIGH** Occurs naturally in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** **HIGH** Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): **LOW**
- Potential for environmental/economic impacts: **LOW**
- Potential for harm to humans: **HIGH** A venomous snake that is dangerous. Always capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** **LOW**

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** **LOW**
Family: Elapidae (Elapid Land Snakes)

**SPECIES**

*Austrelaps superbus*

**Common name:** Lowlands Copperhead  
**Other common name:** Common Copperhead

A copperhead snake with smaller-sized (compared to *A. ramsayi*) markings on supralabials (upper lip area) (total length to about 1.7 metres)

**Conservation status:** Not threatened.  
**Distribution:** Extreme south-east of SA, southern Vic to extreme south-east corner of NSW (Cogger 2014).  
**Climate/ecoregion:** Cool temperate, warm temperate.  
**Habitat:** Found in a range of woodland and forested habitats, particularly near swamps and streams and in grassland. Shelters under, and in, fallen timber, in burrows, under flattened rocks and in dense grass tussocks. (Ehmann 1992).

![Map of Australia highlighting South Australia and New South Wales](image)

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** HIGH  
  Viviparous. Up to 45 young (Ehmann 1992).
- **Dietary generalisation:** MOD  
  Vertebrate animals – mainly frogs and lizards, but also other small vertebrates (Ehmann 1992).
- **Climate suitability:** HIGH  
  Climate match with ACT = 80%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** MOD  
  Some association with streams, seepage lines and swamps.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW  
  Could potentially compete with *A. ramsayi*.
- **Potential for harm to humans:** HIGH  
  A venomous snake that is dangerous. Always capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Cryptophis nigrescens*

**Common name:** Eastern Small-eyed Snake  
**Other common name:** A small shiny black-coloured snake (total length to about 1.2 metres)

**Conservation status:** Not threatened.  
**Distribution:** Coast and ranges of eastern Australia, from Cape York Peninsula to southern Victoria.  
**Climate/ecoregion:** Eastern tropical, subtropical, warm temperate.  
**Habitat:** A range of habitats including coastal heathlands, rainforest, wet tall open forest, woodland (Cogger 2014). Shelters under logs, bark, rocks and in rock crevices (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
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<th>Likelihood</th>
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</thead>
<tbody>
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<tr>
<td>Dietary generalisation</td>
<td>MOD</td>
</tr>
<tr>
<td>Climate suitability</td>
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<td>Populations established outside of range</td>
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<tr>
<td>Aquatic/riparian species</td>
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</tr>
<tr>
<td>Potential range (ACT)</td>
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**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH Already present in ACT.

**CONSEQUENCES OF ESTABLISHMENT**

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</tr>
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<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
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<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>MOD</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
**Family**: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Hoplocephalus bitorquatus*

**Common name**: Pale-headed Snake  
**Other common name**: A small, arboreal, grey-black snake with a distinctive greyish white head (total length to about 60 cm)

**Conservation status**: Vulnerable (NSW).  
**Distribution**: Coast, hinterland and western slopes north of Sydney to near Cairns Qld.  
**Climate/ecoregion**: Monsoonal, tropical and subtropical east, warm temperate.  
**Habitat**: A wide range of tree-covered habitats from rainforest to drier eucalypt forests (Cogger 2014). Often found near water courses (Swan et al. 2004). Shelters in hollow limbs and under the loose bark of trees (Swan et al. 2004).

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: MOD  
  Viviparous. Up to 11 young (Ehmann 1992).  
- Dietary generalisation: MOD  
  Vertebrate animals – frogs, geckos, skinks and small mammals, including bats (Ehmann 1992).  
- Climate suitability: MOD  
  Climate match with ACT = 60%  
- Populations established outside of range: NR  
  Not reported.  
- Aquatic/riparian species: LOW  
  Terrestrial.  
- Potential range (ACT): LOW  
  Lower eucalypt forests, though cold temperatures likely to limit establishment of populations.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT**: MOD

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW  
- Potential for environmental/economic impacts: LOW  
- Potential for harm to humans: MOD  
  Potentially dangerous. Bite is very painful, capable of causing marked local symptoms (Swan et al 2004).

**OVERALL CONSEQUENCES OF ESTABLISHMENT**: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT**: LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Hoplocephalus bungaroides*

**Common name:** Broad-headed Snake  
**Other common name:**

A distinctive, banded, semi-arboreal snake confined to the Sydney sandstone region (total length to about 90 cm)

- **Conservation status:** Endangered (NSW). Vulnerable (Commonwealth).
- **Distribution:** Coast and ranges in the Sydney to Nowra region.
- **Climate/ecoregion:** Warm temperate, coast and hinterland.
- **Habitat:** Confined largely to the Hawkesbury sandstone formation, where it is usually found under large slabs on rocky ridges and in rocky crevices. Spends the cooler months living up in tree hollows (Cogger 2014).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** HIGH  
  Viviparous. Up to 12 young (Ehmann 1992).
- **Dietary generalisation:** MOD  
  Vertebrate animals – mainly lizards but also will take small mammals, birds and sometimes frogs (Ehmann 1992).
- **Climate suitability:** MOD  
  Climate match with ACT = 70%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** LOW  
  Terrestrial.
- **Potential range (ACT):** LOW  
  No suitable sandstone formations in the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** MOD  
  A venomous snake that is potentially dangerous. Capable of inflicting a bite that is a risk to health.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Hoplocephalus stephensii*

**Common name:** Stephen’s Banded Snake  
**Other common name:** A banded, mainly arboreal snake - the largest member of the genus (total length to about 65 cm)

- **Conservation status:** Vulnerable (NSW).  
- **Distribution:** Coast and nearby ranges from Gosford NSW to southern Queensland.  
- **Climate/ecoregion:** Subtropical, warm temperate.  
- **Habitat:** Wet and dry open forest and edges of rainforest (Ehmann 1992). Most of its time spent in trees where it is particularly dependent on tree scar crevices for shelter. Also will shelter in rock crevices (Swan et al. 2004; Ehmann 1992).

### LIKELIHOOD OF ESTABLISHMENT

- **Reproductive potential:** MOD Viviparous. Up to 8 young (Ehmann 1992).  
- **Dietary generalisation:** MOD Small vertebrate animals – lizards, birds and small mammals, including bats (Ehmann 1992).  
- **Climate suitability:** MOD Climate match with ACT = 70%  
- **Populations established outside of range:** NR Not reported.  
- **Aquatic/riparian species:** LOW Terrestrial.  
- **Potential range (ACT):** MOD Eucalypt forests at lower elevations, but likely to be too cold for this arboreal coastal and coastal hinterland species.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

### CONSEQUENCES OF ESTABLISHMENT

- **Potential for impact on threatened species (ACT):** LOW  
- **Potential for environmental/economic impacts:** LOW  
- **Potential for harm to humans:** MOD A venomous snake that is potentially dangerous. Capable of inflicting a bite that is a risk to health.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Notechis scutatus*

Common name: Tiger Snake

Other common name:
A large venomous snake that is variable in colour and in the presence of cross bands (total length to about 1.2 metres)

Conservation status: Not threatened. Flinders Ranges sub sp. *N.s.ater* Vulnerable (Commonwealth).

Distribution: South-eastern and south-western Australia, from far south-east of Qld through eastern NSW, much of Victoria to the extreme south of SA. Also occurs in south-western WA.

Climate/ecoregion: Warm temperate, Cool temperate.

Habitat: A wide range of habitats including rainforest, open sclerophyll forest, woodland, coastal dune grasslands and heaths, river floodplains, marshes, stream banks, seepages, swamps and rocky areas (Cogger 2014; Ehmann 1992). Shelters in or under fallen timber, in rock crevices, holes in the soil and in deep matted vegetation (Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

- Dietary generalisation: MOD Small vertebrate animals – lizards and frogs, nestling birds, small mammals. Fish and are also eaten.
- Climate suitability: HIGH Climate match with ACT = 100%
- Populations established outside of range: NR Not reported.
- Aquatic/riparian species: HIGH Terrestrial and Riparian.
- Potential range (ACT): HIGH Occurs naturally in ACT.
- OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: HIGH Already present in ACT

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): LOW Known to prey on bell frogs (*Litoria aurea*).
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: HIGH A venomous snake that is dangerous. Always capable of inflicting a fatal bite.

OVERALL CONSEQUENCES OF ESTABLISHMENT: LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**

*Oxyuranus microlepidotus*

**Common name:** Inland Taipan

**Other common name:** A very large snake from the interior of Australia (total length to about 2.5 metre)

**Conservation status:** Near-threatened (Qld).

**Distribution:** Western and south-western Qld, north eastern SA and far western NSW.

**Climate/ecoregion:** Arid, semi arid.

**Habitat:** Found on cracked dark soil plains and floodplains, or on lateritic gibber plains (Cogger 2014; Swan et al. 2004). Vegetation comprises sparse chenopod shrubs, lignum and scattered eucalypt trees near water channels and depressions (Ehmann 1994). Shelters in rodent burrows, in deep soil cracks and in gilgais (sink holes) (Ehmann 1992).

---

**LIKELIHOOD OF ESTABLISHMENT**

Reproductive potential: MOD Oviparous. Up to 20 eggs (Greer 1997).


Climate suitability: LOW Climate match with ACT ≤ 30%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): LOW No semi-arid environments that are suitable.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

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**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: HIGH A shy but highly venomous snake that is extremely dangerous. Always capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

---

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Oxyuranus scutellatus*

**Common name:** Coastal Taipan

**Other common name:**
The largest venomous snake in Australia (total length typically to about 2 metres but specimens over 3 metres have been reported)

**Conservation status:** Not threatened.

**Distribution:**
The extreme north of WA and NT, Cape York Peninsula, eastern Qld to the far north-east of NSW.

**Climate/ecoregion:** Monsoonal, tropical, subtropical, coastal.

**Habitat:** A wide range of habitats from wet sclerophyll forests to drier open forests and woodland (Cogger 2014). Also occurs in sugar cane fields (Ehmann 1992). Shelters in abandoned animal burrows, hollow logs and deep leaf litter. Also attracted to the fringes of properties that have discarded building materials and rubbish lying around them (Ehmann 1992).

### LIKELIHOOD OF ESTABLISHMENT

- **Reproductive potential:** HIGH Oviparous. Up to 22 eggs (Ehmann 1992).
- **Dietary generalisation:** MOD Small to medium-sized mammals. Also takes birds (Ehmann 1992).
- **Climate suitability:** MOD Climate match with ACT = 40%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** LOW No suitable tropical and subtropical habitats.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

### CONSEQUENCES OF ESTABLISHMENT

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** HIGH A shy but highly venomous snake that is extremely dangerous. Always capable of inflicting a fatal bite. Considered to be Australia’s most dangerous snake.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Parasuta flagellum*

**Common name:** Little Whip Snake  
**Other common name:** Whip Hooded Snake

A small, snake with a black head (total length to about 40 cm)

Conservation status: Vulnerable (NSW).
Distribution: From south-east SA through Victoria to the southern Tablelands of NSW.
Climate/ecoregion: Cool temperate, warm temperate, south.
Habitat: Grassland and open grassy woodlands, including particularly in rocky areas (granite and basalt). Shelters under rocks and logs, and in soil cracks and invertebrate burrows.

**LIKELIHOOD OF ESTABLISHMENT**

- Reproductive potential: LOW  
  Viviparous. Up to 7 young (Greer 1997).
- Dietary generalisation: MOD  
  Skinks and sometimes small frogs (Ehmann 1992).
- Climate suitability: HIGH  
  Climate match with ACT = 100%
- Populations established outside of range: NR  
  Not reported.
- Aquatic/riparian species: LOW  
  Terrestrial.
- Potential range (ACT): HIGH  
  Climate and habitat appears to be suitable. Occurs near the ACT at Bungendore, but has not established populations in the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH

**CONSEQUENCES OF ESTABLISHMENT**

- Potential for impact on threatened species (ACT): HIGH  
  Although only known to prey on small skinks, could potentially prey on Grassland Earless Dragons and Striped Legless Lizards.
- Potential for environmental/economic impacts: LOW
- Potential for harm to humans: LOW

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE-HIGH
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
Parasuta spectabilis (includes P. dwyeri)

**Common name:** Spectacled Hooded Snake

**Other common name:** Mallee Black-headed Snake; Krefft’s Snake

A small, snake with a black head - considered to be a composite species (P dwyeri recognised by some authors as the species that occurs in the ACT; Wilson and Swan 2013; Bennett 2011) (total length to about 40 cm)

**Conservation status:** Not threatened.

**Distribution:** From far western WA, through southern SA to western Vic, much of inland and north-eastern NSW to south-eastern Qld.

**Climate/ecoregion:** Southern semi-arid, warm temperate, subtropical.

**Habitat:** A wide range of habitats including Acacia shrubland, mallee, low open shrubland to more mesic woodland in the east and north of its range (Cogger 2014). Shelters under rock slabs and fallen rotting timber and in deep leaf litter under low trees and shrubs (Ehmann 1992).

**LIKELIKHOOD OF ESTABLISHMENT**

- **Reproductive potential:** LOW  
- **Dietary generalisation:** MOD  
  Small reptiles including skinks and geckos (Ehmann 1992).
- **Climate suitability:** MOD  
  Climate match with ACT = 70%
- **Populations established outside of range:** NR  
  Not reported.
- **Aquatic/riparian species:** LOW  
  Terrestrial.
- **Potential range (ACT):** HIGH  
  Occurs naturally in ACT (listed as P. dwyeri).
- **OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH  
  Already present in the ACT.

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** LOW  
  A venomous snake, though not considered dangerous.
- **OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Pseudechis australis*

Common name: Mulga Snake  
Other common name: King Brown Snake  
A large brown-coloured snake widely distributed in Australia (total length to about 2 metres) - can easily be confused with Eastern Brown Snake

Conservation status: Not threatened.
Distribution: Australia-wide except for coast, and eastern ranges and slopes of south eastern Australia.
Climate/ecoregion: Monsoonal, tropical, subtropical, semiarid, arid.
Habitat: A wide range of habitats from tropical forests and woodlands of northern Australia to the deserts of the interior (Cogger 2014). Shelters in disused animal burrows, in cracks in deep soil, under fallen timber, under large rocks and in deep crevices in rock outcrops (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

Dietary generalisation: MOD Small vertebrate animals – lizards and snakes, small mammals, frogs, birds and eggs.
Climate suitability: MOD Climate match with ACT = 60%
Populations established outside of range: NR Not reported.
Aquatic/riparian species: LOW Terrestrial.
Potential range (ACT): MOD Climate in the ACT may be unsuited as closest known occurrence is near Narrandera.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW
Potential for environmental/economic impacts: LOW
Potential for harm to humans: HIGH A venomous snake that is dangerous. Capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**

*Pseudechis butleri*

Common name: Spotted Mulga Snake

Other common name:

A large, yellow-spotted, black-coloured snake (total length to about 1.6 metres)

Conservation status: Not threatened.

Distribution: Arid mid-west of WA.

Climate/ecoregion: Western arid, semiarid.


**LIKELIHOOD OF ESTABLISHMENT**


Dietary generalisation: MOD Vertebrate animals – lizards, snakes and mammals.

Climate suitability: LOW Climate match with ACT ≤ 30%

Populations established outside of range: NR Not reported.

Aquatic/riparian species: LOW Terrestrial.

Potential range (ACT): LOW No suitable arid environments.

OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT: LOW

**CONSEQUENCES OF ESTABLISHMENT**

Potential for impact on threatened species (ACT): LOW

Potential for environmental/economic impacts: LOW

Potential for harm to humans: HIGH A venomous snake that is dangerous. Capable of inflicting a fatal bite.

OVERALL CONSEQUENCES OF ESTABLISHMENT: MOD

OVERALL RISK LEVEL FOR INTRODUCTION TO ACT: LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Pseudechis colletti*

**Common name:** Collett’s Snake  
**Other common name:**

A member of the black snake group with spectacular reddish or yellowish lighter blotches (total length to about 1.5 metres)

**Conservation status:** Near-threatened (Qld).  
**Distribution:** North-western Australia, from the Kimberley region WA, across NT to the Gulf of Carpentaria Qld.  
**Climate/ecoregion:** Warm temperate, semiarid.  
**Habitat:** Black soil plains (Cogger 2014). Open shrubland and riverine woodland along flood channels and flow depressions (Ehmann 1992). Shelters in deep soil cracks and sinkholes and under fallen timber (Ehmann 1992).

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**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Up to 14 eggs (Ehmann 1992).
  - **Dietary generalisation:** MOD Vertebrate animals – mammals, reptiles and frogs.
  - **Climate suitability:** LOW Climate match with ACT ≤ 30%
  - **Populations established outside of range:** NR Not reported.
  - **Aquatic/riparian species:** LOW Terrestrial.
  - **Potential range (ACT):** LOW No black clay soil plains; climate too cold in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** HIGH A venomous snake that is dangerous. Capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Pseudechis guttatus*

**Common name:** Spotted Black Snake  
**Other common name:** Blue-bellied Black Snake  
A large, shiny bluish or dark brown snake (total length to about 1.5 metres)

**Conservation status:** Not threatened.  
**Distribution:** From South eastern Qld into NSW along the western slopes and plains to the Griffith region.  
**Climate/ecoregion:** Eastern subtropical, warm temperate.  
**Habitat:** A wide range of habitats including coastal plains, slopes, ranges and floodplains; often near lakes and swampy ground that may dry seasonally. Vegetation includes tall open-forests and woodlands, as well as riverine forest (Ehmann 1992). Shelters in fallen logs, deep soil cracks, dense matted vegetation and in disused animal burrows (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

**Reproductive potential:** MOD Oviparous. Up to 16 eggs (Ehmann 1992).  
**Dietary generalisation:** MOD Vertebrate animals – frogs, small mammals, lizards and snakes.  
**Climate suitability:** MOD Climate match with ACT = 70%  
**Populations established outside of range:** NR Not reported.  
**Aquatic/riparian species:** LOW Terrestrial.  
**Potential range (ACT):** MOD Some lower parts of the northern ACT might provide potential habitat.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

**Potential for impact on threatened species (ACT):** LOW  
**Potential for environmental/economic impacts:** LOW  
**Potential for harm to humans:** HIGH A venomous snake that is dangerous. Capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Pseudechis porphyriacus*

**Common name:** Red-bellied Black Snake  
**Other common name:** A distinctive large black snake with red belly scales (total length to about 1.5 metres)

**Conservation status:** Not threatened.  
**Distribution:** From far Cooktown in Qld, coastally to near Brisbane, then more widely through NSW, Vic and just into south-east SA.  
**Climate/ecoregion:** Tropical, subtropical, warm temperate, semi-arid (riverine).  
**Habitat:** A wide range of habitats. Typically occurs near streams swamps, lagoons and seepages, but can range well away from these areas (Cogger 2014). Shelters in dense vegetation, in hollow logs, disused animal burrows and under large flat rocks (Ehmann 1992).

![Map of Australia showing distribution of Pseudechis porphyriacus](image)

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive potential</td>
<td>HIGH</td>
</tr>
<tr>
<td>Dietary generalisation</td>
<td>MOD</td>
</tr>
<tr>
<td>Climate suitability</td>
<td>HIGH</td>
</tr>
<tr>
<td>Populations established outside of range</td>
<td>NR</td>
</tr>
<tr>
<td>Aquatic/riparian species</td>
<td>HIGH</td>
</tr>
<tr>
<td>Potential range (ACT)</td>
<td>HIGH</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Consequence</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for impact on threatened species (ACT)</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for environmental/economic impacts</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans</td>
<td>HIGH</td>
</tr>
<tr>
<td>OVERALL CONSEQUENCES OF ESTABLISHMENT</td>
<td>LOW</td>
</tr>
</tbody>
</table>

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:**  
LOW
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Pseudonaja modesta*

**Common name:** Ringed Brown Snake

**Other common name:**
A small species of brown snake with distinctive black bands on head and 5-12 black bands on the body (total length to about 50 cm)

**Conservation status:** Endangered (NSW).

**Distribution:** Drier parts of all mainland states except Victoria

**Climate/ecoregion:** Northern subtropical, arid, semiarid, warm temperate (west).

**Habitat:** Alluvial plains, sandy deserts, lower slopes and ranges, outcrops and watercourse areas, but not on black soil plains (Ehmann 1992). Arid shrub lands and hummock grasslands (Cogger 2014). Shelters in disused animal burrows, under fallen timber and under large rocks (Ehmann 1992).

**Reproductive potential:** MOD Oviparous. Up to 11 eggs (Ehmann 1992).

**Dietary generalisation:** MOD Small reptiles.

**Climate suitability:** MOD Climate match with ACT = 40%

**Populations established outside of range:** NR Not reported.

**Aquatic/riparian species:** LOW Terrestrial.

**Potential range (ACT):** LOW No suitable arid and semiarid habitats in ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**Potential for impact on threatened species (ACT):** MOD Potentially could prey on Grassland Earless Dragons.

**Potential for environmental/economic impacts:** LOW

**Potential for harm to humans:** MOD A venomous snake that is potentially dangerous. Capable of inflicting a bite that is a risk to health.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**

*Pseudonaja nuchalis*

**Common name:** Northern Brown Snake  
**Other common name:** A large species of brown snake from northern Australia (total length to about 1.5 metres)

**Conservation status:** Not threatened.  
**Distribution:** Northern Australia, from the Kimberley region WA, across NT to the Gulf of Carpentaria, western Cape York Peninsular and inland northern Qld.  
**Climate/ecoregion:** Monsoonal, tropical, semiarid.  
**Habitat:** Seasonally wet savannah woodlands, stony hills and heavily dissected ranges and scarps (Cogger 2014).

![Map of Australia showing Northern Brown Snake distribution](map_image)

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** HIGH  
  Oviparous. Up to 38 eggs (Ehmann 1992).  
- **Dietary generalisation:** MOD  
  Predator of small mammals and reptiles (Cogger 2014).  
- **Climate suitability:** LOW  
  Climate match with ACT ≤ 30%  
- **Populations established outside of range:** NR  
  Not reported.  
- **Aquatic/riparian species:** LOW  
  Terrestrial.  
- **Potential range (ACT):** LOW  
  No suitable monsoonal, tropical environments in the ACT.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** HIGH  
  A venomous snake that is dangerous. Capable of inflicting a fatal bite.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Pseudonaja textilis*

**Common name:** Eastern Brown Snake

**Other common name:** A very large species of brown snake from eastern Australia (total length to about 2 metres)

<table>
<thead>
<tr>
<th>Conservation status:</th>
<th>Not threatened.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution:</td>
<td>Eastern Australia from lower Cape York Peninsular to south-eastern SA. Occurs well out through semi-arid areas into central Australia.</td>
</tr>
<tr>
<td>Climate/ecoregion:</td>
<td>Monsoonal, tropical east, subtropical, warm temperate, semi-arid, arid.</td>
</tr>
<tr>
<td>Habitat:</td>
<td>A wide range of habitats including wet and dry open forests, heathland, grassland, savannah woodlands to inland grasslands and arid shrubland (Cogger 2014). Shelters in rock crevices, in soil cracks, under logs and rocks, in hollow logs and in burrows (Ehmann 1992).</td>
</tr>
</tbody>
</table>

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD Vertebrate animals – small mammals, reptiles, frogs and birds.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>HIGH Climate match with ACT = 100%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>HIGH Occurs naturally in ACT.</td>
</tr>
<tr>
<td>OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:</td>
<td>HIGH Already present in ACT</td>
</tr>
</tbody>
</table>

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Potential for impact on threatened species (ACT):</th>
<th>LOW known to prey on Grassland Earless Dragons.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>HIGH A venomous snake that is very dangerous. Always capable of inflicting a fatal bite.</td>
</tr>
<tr>
<td>OVERALL CONSEQUENCES OF ESTABLISHMENT:</td>
<td>LOW Already occurs naturally in ACT.</td>
</tr>
</tbody>
</table>

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Suta Suta*

**Common name:** Curl Snake

**Other common name:** A small, stocky snake with darker head markings (total length to about 60 cm)

Conservation status: Not threatened.

Distribution: Widely distributed throughout the eastern two thirds of continental Australia, excluding coastal regions. Extends a short distance into the far north-east of WA.

Climate/ecoregion: Monsoonal, tropical, subtropical, warm temperate, semiarid, arid

Habitat: A wide range of habitats including woodland and monsoonal forests, Acacia shrublands, saltbush plains, and rocky hills in the interior (Cogger 2014). Shelters in deep earth cracks, under logs, rocks and other groundcover, including in grass hummocks (Swan et al. 2004; Ehmann 1992).

![Map of Australia showing distribution of Suta Suta](image)

**LIKELIHOOD OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary generalisation:</td>
<td>MOD Carnivore – small reptiles and small mammals.</td>
</tr>
<tr>
<td>Climate suitability:</td>
<td>MOD Climate match with ACT = 70%</td>
</tr>
<tr>
<td>Populations established outside of range:</td>
<td>NR Not reported.</td>
</tr>
<tr>
<td>Aquatic/riparian species:</td>
<td>LOW Terrestrial.</td>
</tr>
<tr>
<td>Potential range (ACT):</td>
<td>HIGH Nearest records near Grenfell, NSW.</td>
</tr>
</tbody>
</table>

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** MOD

**CONSEQUENCES OF ESTABLISHMENT**

<table>
<thead>
<tr>
<th>Potential for impact on threatened species (ACT):</th>
<th>MOD Potentially could prey on <em>T. pinguicolla</em>.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for environmental/economic impacts:</td>
<td>LOW</td>
</tr>
<tr>
<td>Potential for harm to humans:</td>
<td>MOD A venomous snake that is potentially dangerous. Capable of inflicting a bite that is a risk to health.</td>
</tr>
</tbody>
</table>

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**  
*Tropodechis carinatus*

**Common name:** Rough-scaled Snake  
**Other common name:** A small, snake resembling a tiger snake (total length to about 1 metre)

<table>
<thead>
<tr>
<th>Conservation status:</th>
<th>Not threatened.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution:</td>
<td>Coast and ranges of eastern Australia from Barrington Tops in the south to south-eastern Queensland. An isolated population in the wet tropics between Townsville and Cooktown in Qld.</td>
</tr>
<tr>
<td>Climate/ecoregion:</td>
<td>Eastern tropical and subtropical.</td>
</tr>
<tr>
<td>Habitat:</td>
<td>Rainforest, dense paper bark forest, wet sclerophyll forest; typically in the vicinity of swamps and watercourses with dense fringing vegetation (Ehmann 1992). Shelters in dense, scruffy vegetation, epiphytes, tree hollows, rotted out tree cavities and in partly fallen tree trunks (Ehmann 1992).</td>
</tr>
</tbody>
</table>

**LIKELIHOOD OF ESTABLISHMENT**

| Reproductive potential: | HIGH  
|-------------------------|------|
| Dietary generalisation: | MOD  
Small mammals, frogs, lizards and small birds. |
| Climate suitability:    | LOW  
Climate match with ACT ≤ 30% |
| Populations established outside of range: | NR  
Not reported. |
| Aquatic/riparian species: | LOW  
Terrestrial. |
| Potential range (ACT):  | LOW  
No suitable subtropical and tropical environments. |

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** LOW

**CONSEQUENCES OF ESTABLISHMENT**

| Potential for impact on threatened species (ACT): | LOW |
| Potential for environmental/economic impacts:   | LOW |
| Potential for harm to humans:                   | HIGH  
A venomous snake that is dangerous. Capable of inflicting a fatal bite. |

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** MOD

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW-MODERATE
Family: Elapidae (Elapid Land Snakes)

**SPECIES**

**Vermicella annulata**

**Common name:** Bandy-bandy

**Other common name:**

A small, striking, black and white banded burrowing snake (total length to about 1 metre)

- **Conservation status:** Rare (SA), not threatened elsewhere.
- **Distribution:** Northern and eastern Australia. Does not occur in WA or Tas.
- **Climate/ecoregion:** Monsoonal, tropical, subtropical, warm temperate, semiarid.
- **Habitat:** A wide range of habitats including coastal woodland and forest, savannah woodland, mallee, mulga, spinifex covered desert sand hills (Cogger 2014). Shelters under deeply embedded logs or rocks (Ehmann 1992).

**LIKELIHOOD OF ESTABLISHMENT**

- **Reproductive potential:** MOD Oviparous. Up to 13 eggs (Ehmann 1992).
- **Dietary generalisation:** LOW Feeds only on blind snakes and possibly some semi-burrowing skinks (Ehmann 1992).
- **Climate suitability:** HIGH Climate match with ACT = 100%
- **Populations established outside of range:** NR Not reported.
- **Aquatic/riparian species:** LOW Terrestrial.
- **Potential range (ACT):** HIGH Has not been observed in ACT but specimens have been found in woodland at Queanbeyan and near Yass.

**OVERALL LIKELIHOOD OF ESTABLISHMENT IN ACT:** HIGH

**CONSEQUENCES OF ESTABLISHMENT**

- **Potential for impact on threatened species (ACT):** LOW
- **Potential for environmental/economic impacts:** LOW
- **Potential for harm to humans:** MOD A venomous snake that can inflict a bite that is a risk to health.

**OVERALL CONSEQUENCES OF ESTABLISHMENT:** LOW

**OVERALL RISK LEVEL FOR INTRODUCTION TO ACT:** LOW
20 Conclusion and Recommendations

This report presents risk assessments for 191 native reptile species that potentially might be introduced into the ACT. At the time of writing these species are permitted to be kept by the public in NSW but not in the ACT. The risk assessments focus on the likelihood of a species establishing a wild population in the ACT (based on available climatic, biological and habitat information for each species), and the consequences (Environmental, Social and Economic) if that were to occur. The aim is to identify any species that are potentially of relatively high risk, and hence their introduction warrants careful consideration. Table 1 shows the assessed Overall Risk level for the major taxonomic groups in this report.

Most of the species (161) were assessed as having a low or low-moderate risk for importation. These species are considered to have a low likelihood of establishing wild populations and relatively low consequences if populations become established. Some of these species naturally occur in the ACT or nearby and, whilst there is a high likelihood of escaped/released individuals surviving and breeding, the chance of significant consequences was considered to be low. We consider species assessed as ‘low’ or ‘low-moderate’ risk are unlikely to become a problem if introduced into the ACT.

Table 1. Overall risk levels assessed for each of the major taxonomic groups in this report.

<table>
<thead>
<tr>
<th>TAXONOMIC GROUP</th>
<th>RISK</th>
<th>Low</th>
<th>Low-Mod</th>
<th>Mod</th>
<th>Mod-High</th>
<th>High</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>Turtles</td>
<td></td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>2</td>
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<td>17</td>
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<tr>
<td>Geckos</td>
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<td>23</td>
<td>10</td>
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<td>Legless Lizards</td>
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<td>0</td>
<td>0</td>
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<td>31</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>Dragon Lizards</td>
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<td>16</td>
<td>2</td>
<td>5</td>
<td>1</td>
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<td>24</td>
</tr>
<tr>
<td>Monitors (Goannas)</td>
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<td>17</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>Colubrid Snakes</td>
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<td>Elapid Snakes</td>
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<td>15</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>120</td>
<td>41</td>
<td>24</td>
<td>4</td>
<td>2</td>
<td>191</td>
</tr>
</tbody>
</table>

Twenty-four species were assessed as having a moderate risk for introduction. These species have one of the following:

- Moderate likelihood of establishment combined with ‘moderate’ consequences
- Low likelihood of establishment combined with potentially ‘high’ consequences
- High likelihood of establishment combined with ‘low’ consequences.
These species require careful consideration on an individual basis, taking into account any ‘added’ risk from allowing them to be kept in the ACT (given that they can already be kept in surrounding NSW including Queanbeyan). In particular, the number of escaped/released turtles (and establishment of feral populations in the Murray-Darling Basin) is likely to be related to the number of people keeping them.

Six species were assessed as having a moderate-high or high risk, and include three turtles, a gecko, a dragon lizard and an elapid snake. Collie’s Snake-necked Turtle (*Chelodina colliei*) is the only species assessed as a high risk for importation, having a high likelihood of establishing wild populations and potentially significant consequences should it do so. The natural range of this species in Western Australian has a moderate climate match to the ACT (and a closer climate match to other parts of the Murray-Darling Basin) and being an aquatic species it has the potential to establish in the Murray-Darling Basin where it may directly compete with the Eastern Long-necked Turtle (*Chelodina longicollis*) and Macquarie Turtle (*Emydura macquarii*). Two other turtle species, Steindachner’s Snake-necked Turtle (*Chelodina steindachneri*) and Saw-shelled Turtle (*Wollumbinia latisternum*), were assessed as a moderate-high risk for introduction based on a moderate likelihood of establishing in the Murray-Darling Basin (for *C. steindachneri* the climate match to the ACT is low, but the match to other parts of the MDB is moderate) and potentially significant consequences for directly competing with *C. longicollis* and *E. macquarii*.

The Tree Gecko (*Gehyra variegata*) (a gecko) was assessed as a moderate-high risk for importation based on the high likelihood of establishing wild populations (due a moderate climate match between its natural range and the ACT, and populations known to have established outside its natural range) and the potential to compete with the local Marbled Gecko (*Christinus marmoratus*). The Lined Earless Dragon (*Tympanocryptis lineata*) was assessed as a moderate-high risk because of the moderate likelihood of establishing wild populations and the potential to compete with the closely related Grassland Earless Dragon (*T. pinguicolla*), an endangered species in the ACT. The Little Whip Snake (*Parasuta flagellum*) (listed as a Vulnerable species in NSW) was assessed as a moderate-high risk because of the high likelihood of establishing populations in the ACT and the potential to prey on the endangered Grassland Earless Dragon. We recommend these six species are not added to the list of species that can be kept by the public in the ACT without further detailed risk assessment.

Several species of reptiles have distinctive subspecies that occur in the ACT. The Eastern Water Dragon (*Intellagama lesueurii*) occurs in the ACT as the subspecies *Intellagama lesueurii howittii* (Gippsland Water Dragon). If established in the wild, the non-local subspecies *L. l. lesueurii* potentially could interbreed with the local subspecies and contaminate the local gene pool of this species. It also could potentially compete with the local subspecies. Both subspecies are now established outside their natural range along streams in Melbourne (all originated from released specimens). We recommend the subspecies *Intellagama lesueurii lesueurii* is not added to the list of species that can be kept by the public in the ACT without further detailed risk assessment.
21 Acknowledgements

The following people are thanked for providing information on the occurrence of exotic and native reptiles established in the wild outside of their natural range in Australia: Peter Robertson, Glenn Shea, Ross Sadlier, Chris Banks, John Birkett, Damien Michael, Klaus Henle, Hal Cogger, Dave Hunter, Ross Goldingay, Arthur Georges, Mark Lintermans, Robert Speirs, Garry Daly, and Peter Ormay.
22 References

Australian Reptiles Online Database (AROD). Available at the AROD Database².


Working Group and Science Coordination Group of the South Florida Ecosystem Restoration Task Force. 2010. Invasive Exotic Animals: Managing a Threat to Everglades Restoration. Information Brief Series. Available at this page\(^3\).

\(^3\) [http://www.sfrestore.org/](http://www.sfrestore.org/)