



Live animal imports of exotic species/specimens

Terms of Reference for Mammals, Birds, Reptiles, Amphibians and Invertebrates

Application to amend the List of Specimens taken to be Suitable for Live Import (Live Import List)

The purpose of the Terms of Reference is to provide the information required to assess the potential impact that a species may have on the Australian environment. This enables the Minister for the Environment and Water to make a decision on the species proposed for import, based on a thorough assessment of the potential risks to the environment.

Guidelines

These guidelines have been written to assist applicants in completing an application to amend the List of Specimens taken to be Suitable for Live Import (Live Import List) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to include a new species/specimen.

To apply for any vertebrate or invertebrate animal specimens (excluding biocontrol agents) to be included on the Live Import List it is necessary to submit to the department the form '*Application to amend the List of Specimens Suitable for Live Import*' along with a draft assessment report. The draft assessment report enables the Minister to make a decision on the species proposed for import, based on a thorough assessment of the potential risks to the environment.

The draft report must include an assessment of the potential impacts of the species on the Australian environment, based on the Terms of Reference. Applicants may complete this assessment themselves or may wish to employ a suitable consultant.

Inclusion of a species/specimen on the Live Import List means that anyone can then import it, not just the proponent. It is very important therefore for the department to assess all potential environmental impacts regardless of the nature of the proponent's intended import.

Environment as defined in the EPBC Act includes:

- a) ecosystems and their constituent parts, including people and communities; and
- b) natural and physical resources; and
- c) the qualities and characteristics of locations, places and areas; and
- d) Heritage values of places; and
- e) the social, economic and cultural aspects of a thing mentioned in paragraph (a), (b), (c) or (d).

Draft Assessment Report

All Terms of Reference must be addressed in the draft report for it to be processed. Additional information not included in the Terms of Reference may be included if the applicant chooses. It is strongly recommended that the Terms of Reference be used as subject headings in the report. This will ensure that all the information required by the Minister to make a decision is clearly incorporated within the report.

The document titled [Risk assessment models for establishment of exotic vertebrates in Australia and New Zealand \(PDF 2MB\)](#) provides further context on the types of risk assessment processes employed by the department to inform decisions in relation to import of live mammals, birds, reptiles, amphibians and invertebrates under the EPBC Act.

The draft assessment report is published on the department's website for at least 20 business days and stakeholders are invited to provide comments. At the same time, the Minister contacts the relevant Commonwealth, state and territory ministers advising them of the publication of the report and inviting their comments. The Minister may also consult with other organisations or individuals before making a decision to amend the list.

At the end of the consultation period the department collates all comments received from stakeholders, and the Commonwealth, state and territory ministers, and forwards them to the applicant. The applicant must incorporate all relevant comments in the final report. This final report and a risk assessment prepared by the department will then be sent to Commonwealth, state, and territory departments for comments during a second consultation round.

The Minister will make a decision about the proposed amendment based upon the applicant's final report, a report of the risk assessment prepared by the department, and the outcomes of the consultation. If the Minister does not approve an amendment to add the species to the Live Import List, the import of the proposed species will remain prohibited. Where this occurs, the applicant will be advised in writing of the decision.

Here are a few considerations when preparing the report:

- Ensure you use copyright-free images in your report.
- Research and present all information in a clear and professional manner.
- Peer-reviewed, scientific information should be drawn upon with references cited.
- Where it is not possible to obtain information from published literature, information from other sources, such as the Internet, can be included in the report. Information obtained from these sources must be cited. For example, the web site address should be cited after the relevant information.

Terms of Reference

1. What is the proposed purpose and source of import?

Provide a summary of the types of activities that the specimen may be used for if imported into Australia (e.g., research, education, exhibition, conservation breeding, household pet or travelling exhibition, or for commercial purposes) and from where the animals will be obtained. Please include information on the

rationale for this species, the numbers you want to import, details on where the animals are obtained and standards for importation. If the purpose is for breeding discuss the management and control of excess progeny in the breeding program. How many animals will be kept at any time on the premises? How will lack of genetic variation be managed in the breeding program?

2. Taxonomy

Provide information on the taxonomy of the species including family, genus, species and subspecies, common names, as well as any synonyms. Include the taxonomic reference (e.g. Axelrod, page no., illustration page no.)

3. Genetic Modification

Is the species a genetically-modified organism (GMO)? Identify if the species has been genetically modified. If the species has been genetically modified or engineered, you will need to contact the Office of the Gene Technology Regulator ([OGTR website](#)) before proceeding with this application.

4. Identification

Describe the identification of the individuals in this species, including if the sexes and different life stages of the species. Is the species difficult to distinguish from other species? Provide representative images of all sexes and life stages. Ensure you have appropriate copyright permission, as the report will be published on the department's website and acknowledge the source of image(s).

5. What is the species' body size, and is the species sexually dimorphic (males and females have a different body size)?

For example, snout-to-vent length (SVL), total length (TL), etc.

6. What is the geographic distribution of the species?

What is the country of origin and what is the natural distribution of this species? Where does the species occur naturally? Exclude any areas where the species has been introduced through human intervention. Provide a distribution map for the species. Acknowledge the source of image(s)

7. What habitat does the species occupy?

For example, disturbed habitat, obligate rainforest, does the species nest or shelter in tree hollows, etc. •What nest sites can the species use? 'Nest' is taken to mean a specific area individuals return to in order to sleep, bear or rear young. Identify where the species does/can nest. For example tree hollows; burrows; caves; buildings; cliff faces; dams, lake, pond marsh, swamp, reed-bed; particular ground surface; particular vegetation type; other (specify).

8. What is the diet and feeding behaviour of the species?

For example, does the species have a specialist or generalist diet, is the species a carnivore, herbivore, etc.

9. Does feeding or other behaviours of the species reduce habitat quality for native species?

For example, burrow construction that leads to an increase in erosion.

10. What is the lifespan of the species and at what age/size does it reach sexual maturity?

At what age does this species reach sexual maturity (males and females)? How long do they live in the wild? In captivity?

11. What is the fecundity of the species (number of eggs, offspring, etc.) and does it produce offspring multiple times in a lifecycle, or have an extended breeding season?

Discuss the species' ability to reproduce; triggers for breeding; breeding site requirements. How frequently does breeding occur? Can individuals of the species change sex? (reptiles, amphibians)

12. Is the species capable of asexual reproduction (i.e., parthenogenesis)? Can the female store sperm?

Are individuals single sexed? (i.e. either male or female) or hermaphroditic (i.e. have both male and female reproductive organs)

13. Does the species hybridise in the wild? Is the species likely to hybridise with native species in Australia?

Describe any known crosses. Are progeny of such crosses fertile? Could the species hybridise with any Australian native species? Identify whether the species could negatively impact native species through hybridisation (cross-breeding with native species).

14. Does the species have any adaptations that would enhance their ability to establish in Australia or to prey upon native species?

For example, does the species have adaptations for climbing, night vision, webbed toes for swimming, etc.

15. What are the species environmental tolerances, e.g., temperature ranges, able to survive without access to free drinking water?

Outline the habitat requirements for all life stages of the species, physical parameters (e.g. salinity, oxygen, pH, temperature) of the natural habitat, climate.

16. Is the species present and/or established in Australia?

What is the status of this species in Australia? Are they known to be in Australia in the pet trade, in zoos, in research facilities? Or are they known to have been introduced and/or established in the wild in Australia?

17. Are there any Commonwealth, state and territory legislative controls on the species in Australia?

Provide information on all other Commonwealth, state and territory legislative controls on the species, including the species' current quarantine status, or pest or noxious status, or whether it is prohibited or controlled by permit or licence in any state or territory. Is the species you are proposing to have added to the Live Import List allowed to be imported under the Biosecurity Act 2015? If there are not yet quarantine conditions in place for this organism, contact the Department of Agriculture, Fisheries and Forestry to discuss the undertaking of an Import Risk Analysis (IRA) by telephone on 1800 900 090 or visit the website for more information at [Home - DAFF \(agriculture.gov.au\)](http://Home - DAFF (agriculture.gov.au)).

18. What is the status of the species on the IUCN Red List of Threatened Species?

For example, is the species included in the IUCN Red List of Threatened Species? Provide information on the species conservation value, status, threats and use.

19. What is the status of the species on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)?

For example, is the species listed on CITES Appendix I, II or III, and if so, are there any specific restrictions on the international trade of this species? Discuss the popularity of the species in trade, the status of the species in its natural range, and the reasons it is CITES listed. ([Checklist of CITES species](#))

20. Is the species migratory?

Identify if the species moves seasonally between different habitats. Migratory behaviour may occur between countries, within one country, or may occur on a small scale, for example from high altitudes to low altitudes on a mountain range.

21. If yes, what is the status of the species on the Conservation of Migratory Species of Wild Animals (CMS)?

For example, is the species listed as Appendix I or II on the CMS ([CMS | Convention on the Conservation of Migratory Species of Wild Animals](#))?

22. Does the species have any harmful characteristics (i.e., is it poisonous, venomous, aggressive), or pose a risk to human health?

For example, aggressive behaviour, or the possession of organs capable of inflicting harm, such as sharp teeth, claws, spines, a sharp bill, or toxin-delivering apparatus (including toxic skin) may enable animals to harm people

23. Is the species kept in captivity? If yes, do captive individuals pose a risk to public safety?

Any potential threat to humans, any available mitigation measures (such as anti-venom), and methods for appropriate handling. Is the species susceptible to, or could it transmit any pests or diseases? Identify if the species could potentially transmit harmful diseases or parasites to humans or any other species.

24. Are there areas in Australia that are climatically similar to the species' native range?

Using Climatch, and/or by comparing with the Köppen–Geiger zones to make a 'best estimate', are there areas in Australia that have an appropriate climate to enable the establishment of self-sustaining populations?

25. Has the species established one or more self-sustaining populations beyond its native distribution?

Has this species ever established a breeding population outside of its native range? Provide information on the locations this species has been introduced and/or established populations outside its range, and if so, where those populations are.

26. Does the species tolerate or benefit from environmental disturbance?

For example, floods, desiccation, human modified environments, etc. Describe the characteristics or behaviour that would enhance its ability to survive extreme climatic conditions (e.g. drought) and its ability to adapt to different environments. Can the species live in modified habitats? Identify if this species can live in habitats that have been modified by humans, either directly or indirectly, e.g. plantation forests; gardens; orchards; vineyards; crops; cities or towns; buildings; improved pastures; dams, channels or drains; other (please specify).

27. Has the species been reported to cause declines in abundance of any native species of plant or animal or cause degradation to any natural communities in any country or region of the world?

Is the species considered a pest anywhere in its natural or introduced range? A pest is a species of animal that causes wide-scale economic cost or amenity loss through its presence or activities. Identify whether this species is subject to active management to reduce population numbers. Does the species attack or prey on wildlife? Identify if the species has the capacity to attack or prey on wildlife. If 'yes', specify whether the prey are: waders or waterfowl; other birds; mammals < 1 kg; mammals 1–5 kg; mammals > 5 kg; amphibians; vertebrate eggs; fish; aquatic invertebrates; reptiles; insects; land invertebrates; other; (specify).

28. Has the species been reported to damage crops or other primary production in any country or region of the world?

Does the species attack or prey on domestic or commercial animals or plants?

29. Is the species likely to be deliberately released (due to growth rate, behaviour, etc.)?

For example, growing to a size that is difficult to maintain in captivity (such as a very large > 5 m mature reticulated python), or social (a wish for the species to be in the wild), anti-social behaviour (aggressive)

30. In the event of the establishment, what would be the likely diet for the species in Australia? For prey, include species names, particularly for threatened species.

Is the species a generalist feeder or does it have specific food needs? What is the likelihood of it finding food in Australia if it was released or escaped? Describe the feeding characteristics of the species, including whether it has a similar diet to any Australian native species.

31. In the event of establishment, are there similar niche species present in Australia that it would compete with for food and resources? If yes, what types of resources could be used: food; water; space; rest or shelter sites; nest sites; other. Include species names, particularly for threatened species.

Could wild populations of the species use the same resources as native Australian species, for example that it would compete with for food, shelter etc. How does the species behave towards its own kind and other species? What types of resources could be used, e.g., food; water; space; rest or shelter sites; nest sites; other. Can it climb trees? What Australian native species would be affected by this resource use? Is this species ever territorial or does it exhibit aggressive behaviour? Is the species naturally territorial? If so, what would the natural territory range be? Identify whether this species has ever acted in an aggressive manner towards other species, including humans, outside of any usual predator-prey interactions.

32. In the event of establishment, is there potential for habitat or ecological community changes?

For example, prey for native predators, habitat alterations, facilitation of the survival of other species, changes to community dynamics. Does the species nest, shelter or feed in or around any of the following habitats? Marshes or swamps; estuaries, lakes, ponds or dams, rivers, channels or streams, banks of water bodies; coastal beaches or sand dunes (specify). Is the species susceptible to, or capable of transmitting any pests or diseases? Could the species reduce the ground vegetation cover to an extent where it could cause or increase soil erosion? Could the species inhibit tree seedling regeneration in forests and woodland, or spread weeds?

33. In the event of establishment, are there any potential social or cultural impacts?

Social or cultural effects may arise because of impacts to commercial or recreational values, life support/human health, cultural significance, biodiversity, aesthetics or beneficial uses, social nuisance or danger (e.g., damage to buildings, fences, equipment; invading buildings; forming large noisy colonies or flocks; polluting equipment, buildings, parks or other public facilities with urine, droppings or nesting material; posing a risk to aircraft when present in flight ways or at airports). When considering social and cultural impacts, effects to human and animal health, indigenous cultural values, quality of life, should be considered, e.g., distress caused by dead/dying fish because of disease spread, or at treated infestation sites, pollution of water bodies, reduced access to water bodies due to eradication measures.

34. In the event of establishment, are there any potential economic impacts?

Could a wild population of the species compete with livestock, or eat or damage agricultural crops (e.g., flowers; nuts; root vegetables; leaf vegetables; sugarcane; fodder crops; cotton; nursery/garden plants; timber forests or plantation trees; fruit orchards; stored grain or seeds; legumes; cereal grain in field; oilseeds or coarse grains)? Discuss potential impacts to trade, livestock or crops, aquaculture. Economic impacts may include loss of earnings due to reduced productivity, costs of mitigation, remediation and eradication, research costs, reduced earnings, impacts to export markets, banning of sale of commercially popular species etc.

35. What conditions or restrictions could be applied to the import of the species to reduce potential negative environmental impacts?

For example, single sex imports, size restrictions etc. If the outcome of the assessment is that the specimen can be imported subjected to conditions, limiting imports to eligible non-commercial purposes only, excluding household pets, it will be placed on Part 2 of the Live Import List (i.e., the species of animals and plants suitable

for live import with an import permit issued under the Environment Protection and Biodiversity Conservation Act.). Recommended conditions should be relevant to the conservation status of the species and/or the risks posed by the import. Conditions should mitigate the likely establishment and impact that a species may have.

36. What are the guidelines on how species should be kept?

What are the standards for transporting animals? Will the animals be transported according to International Air Transport Association (IATA) regulations? Discuss the containment and management standards for Australia e.g. the proportion of males to females and the maximum number that should be kept in enclosures/aquaria. Also if single sex populations would be contained within separate enclosures to limit breeding etc. What standards are used for the enclosures/aquaria in which this species would be kept? What are the best practice standards? Who applies these standards? Will enclosures/aquaria be sufficiently large enough for the humane containment of the animals? For example providing sufficient depth and length? Address welfare issues in housing captive specimens.