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)

[redacted]

Below is the list of questions to be answered. Provided by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

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?

1. Answer: The proposed purpose of import is to bring my personal Eclectus parrot, which is a household pet, from New Zealand to Australia. The source of import is New Zealand, where the parrot has been living as my companion animal.

Purpose: Household Pet This Eclectus parrot is my personal companion animal and will continue to serve as a household pet after importation to Australia. It will not be used for commercial, research, or breeding purposes.

Number of Animals: I am seeking to import only one Eclectus parrot.

Eclectus parrots are native to parts of Australia, making them well-suited to the climate. This particular bird has been my companion for 1.5 years, and maintaining our bond is important for both the bird's well-being and my own.

I am fully committed to complying with all Australian quarantine and importation requirements. This

includes any necessary pre-export quarantine in New Zealand, tests, treatments, and post-arrival quarantine in Australia as mandated by the Department of Agriculture, Water and the Environment.

The parrot will be housed in my private residence in Sydney. It will be the only Eclectus parrot on the premises.

As this is a single pet bird, there are no plans for breeding. The bird will not be paired with others, eliminating concerns about excess progeny or genetic variation management.

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.)

2. Answer: Taxonomy of Eclectus Parrots:

Family: Psittaculidae Genus: Eclectus

Species: Eclectus roratus (sic)

Common Names:

- Eclectus Parrot
- Red-sided Eclectus Parrot

Please note I am unsure whether my Eclectus is Red-sided or, their subspecies.

Subspecies: There are generally recognized to be 9 subspecies of Eclectus roratus (sic), including:

1. E. r. roratus
2. E. r. vosmaeri
3. E. r. cornelia
4. E. r. riedeli
5. E. r. polychloros
6. E. r. solomonensis
7. E. r. macgillivrayi
8. E. r. westermani
9. E. r. aruensis

Synonyms: Historically, due to the extreme sexual dimorphism of the species, males and females were initially classified as separate species. Some older synonyms include:

- Psittacus roratus (Müller, 1776)
- Lorius roratus

Taxonomic References:

1. del Hoyo, J., Elliott, A., & Sargatal, J. (1997). Handbook of the Birds of the World. Vol. 4: Sandgrouse to Cuckoos. Lynx Edicions, Barcelona.

2. Forshaw, J.M. (2006). Parrots of the World: An Identification Guide. Princeton University Press.

3. Juniper, T., & Parr, M. (1998). Parrots: A Guide to Parrots of the World. Yale University Press.

4. Collar, N. (1997). Family Psittacidae (Parrots). In: del Hoyo, J., Elliott, A., & Sargatal, J. (eds.) Handbook of the Birds of the World. Vol. 4. Lynx Edicions, Barcelona.

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.

3. Answer: No, this Eclectus parrot is not a genetically modified organism (GMO).

The Eclectus parrot (Eclectus roratus (sic)) I am seeking to import is a naturally occurring species that has not undergone any genetic modification or engineering. This bird is a standard domestically bred Eclectus parrot, raised as a pet, and possesses only the genetic traits that occur naturally within the species.

Eclectus parrots in the pet trade, including those in New Zealand, are bred from wild-type individuals and have not been subject to any artificial genetic manipulation or modification. The variations in appearance among Eclectus parrots are the result of natural genetic diversity within the species and selective breeding for certain traits, but this does not involve genetic modification as defined by regulatory bodies.

As this bird is not a GMO, there is no need to contact the Office of the Gene Technology Regulator (OGTR) regarding this application.

I affirm that this information is true to the best of my knowledge, and I understand the importance of accurate reporting in the import application process.

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).

4. Answer: Eclectus parrots are known for their extreme sexual dimorphism, making identification of males and females straightforward:

Adult Males:

- Predominantly bright green plumage
- Sides of body and underwing coverts are bright red
- Upper mandible is orange-yellow, lower mandible is black
- Size: Approximately 35-40 cm in length

Adult Females:

- Primarily bright red with purple/blue on the breast, back, and wings
- Upper and lower mandible is black
- Size: Slightly larger than males, approximately 35-42 cm in length

Juveniles:

- Resemble adults of their respective sex but with duller coloration
- Both sexes have dark brown to black beaks until about 1 year of age

Nestlings:

- Born with sparse white down, which is quickly replaced by pin feathers

- Sex-specific coloration becomes apparent as feathers grow

Distinguishing from Other Species: Eclectus parrots are not easily confused with other parrot species due to their unique and striking sexual dimorphism. However, some potential points of confusion include:

- Female Eclectus might be mistaken for some Lory species, but Eclectus have a larger, more curved beak and lack the brush-tipped tongue of Lories.
- Male Eclectus could potentially be confused with some Amazon parrot species, but Eclectus have a more slender build and distinctive red underwing coloration.

Life Stages: Eclectus parrots reach sexual maturity at around 2-3 years of age. They don't go through dramatically different plumage stages after their initial juvenile plumage, unlike some other parrot species.

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.

5. Answer: Body Size and Sexual Dimorphism in Eclectus Parrots (Eclectus roratus(sic)):

Eclectus parrots are medium to large-sized parrots. They exhibit slight sexual dimorphism in size, with females typically being slightly larger than males. However, the size difference is not dramatic and may not be easily noticeable without direct comparison.

Body Measurements:

Total Length (TL):

- Males: Approximately 35-40 cm (14-16 inches)
- Females: Approximately 35-42 cm (14-17 inches)

Wingspan:

- Both sexes: Approximately 50-60 cm (20-24 inches)

Weight:

- Males: Approximately 375-500 grams (13-18 oz)
- Females: Approximately 400-550 grams (14-19 oz)

While there is a slight size dimorphism, with females being marginally larger, the most striking dimorphism in Eclectus parrots is in their coloration rather than their size. Males are predominantly bright green, while females are primarily red and purple.

It's worth noting that size can vary slightly among different subspecies of Eclectus parrots. For instance, the Australian subspecies (E. r. macgillivrayi) is generally considered to be one of the larger subspecies.

In terms of physical structure:

- Both sexes have a large, curved beak typical of parrots.
- The tail is relatively short and square compared to some other parrot species.
- They have a stocky build with a large head in proportion to their body.

While snout-to-vent length (SVL) is a common measurement for reptiles, it's not typically used for birds. For parrots, total length (TL) from the tip of the beak to the end of the tail is the standard measurement.

These measurements represent averages for the species. Individual birds may fall slightly outside these ranges while still being considered healthy and typical for the species.

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)

6. Answer: Country of Origin and Natural Distribution of Eclectus Parrots (Eclectus roratus (sic)):

Eclectus parrots are native to a range of countries in Australasia and parts of Southeast Asia. Their natural distribution includes:

1. Australia: Specifically, the Cape York Peninsula in Queensland (subspecies E. r. macgillivrayi)
2. Indonesia: Various islands including the Moluccas (Maluku Islands), West Papua, and some of the Lesser Sunda Islands
3. Papua New Guinea: Including surrounding islands
4. Solomon Islands
5. Palau: Specifically on the island of Ngemilis in Kayangel State

The natural habitat of Eclectus parrots is primarily lowland rainforests, although they can also be found in forest edges, secondary growth forests, and sometimes in plantations or gardens adjacent to forested areas.

It's important to note that Eclectus parrots are not naturally found in New Zealand, where the individual in question is currently located. Their presence in New Zealand is solely as a result of the pet trade and captive breeding.

Specific distribution by subspecies (generally accepted classification):

1. E. r. roratus: Southern Moluccas (Maluku Islands), Indonesia
2. E. r. vosmaeri: Northern Moluccas, Indonesia
3. E. r. cornelia: Sumba, Indonesia
4. E. r. riedeli: Tanimbar Islands, Indonesia
5. E. r. polychloros: New Guinea and surrounding islands, Western Papuan islands
6. E. r. solomonensis: Solomon Islands
7. E. r. macgillivrayi: Cape York Peninsula, Australia
8. E. r. westermani: (Uncertain natural range - possibly Kai Islands, Indonesia)
9. E. r. aruensis: Aru Islands, Indonesia

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).

7. Answer: Eclectus parrots primarily occupy tropical and subtropical rainforests, but they can also adapt to various other forested environments. Their preferred habitats include:

1. Lowland Rainforests: Eclectus parrots are most commonly found in primary lowland rainforests, where they have access to abundant food sources and suitable nesting sites.
2. Secondary Forests: They are also found in secondary growth forests, which develop after primary forests are disturbed or cleared.
3. Forest Edges and Clearings: These areas provide a mix of food resources and are often used by Eclectus parrots.
4. Plantations and Gardens: In some regions, Eclectus parrots may frequent plantations, orchards, and gardens adjacent to forested areas, particularly if these areas provide fruiting trees or other food sources.

Nest Sites: Eclectus parrots are cavity nesters, relying heavily on tree hollows for nesting and rearing their young. Specific nesting preferences include:

1. Tree Hollows: The primary nesting sites for Eclectus parrots are natural hollows in large, mature trees. These hollows provide shelter and protection for their eggs and chicks. The parrots prefer hollows located high up in the canopy, which offer safety from ground predators.
2. Nest Characteristics: They typically choose hollows with a wide entrance and a deep cavity to accommodate the female and the growing chicks. The same nest site may be used repeatedly if it remains suitable.
3. Tree Species: While they do not have a strict preference for particular tree species, they often nest in large trees such as figs, eucalyptus, and other native tree species that develop suitable cavities.
4. Nest Location: Nests are generally located in forests, but they can also be found in isolated trees within agricultural or suburban areas if suitable hollows are present.

Behaviour: Eclectus parrots exhibit strong site fidelity, meaning they often return to the same nesting sites year after year if the site remains viable. The female typically takes the lead in selecting and preparing the nest site.

In summary, Eclectus parrots are obligate cavity nesters, primarily occupying tree hollows in a variety of forested habitats, including primary and secondary rainforests, forest edges, and occasionally plantations and gardens. They rely on the presence of large, mature trees with suitable hollows to raise their young.

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.

8. Answer: Diet: Eclectus parrots are primarily frugivores, meaning that they predominantly consume a diet of fruits. However, they have a generalist diet and can consume a wide variety of plant-based foods. Their diet consists of:

1. Fruits: The bulk of their diet is made up of various fruits, including figs, guavas, papayas, bananas, pomegranates, and berries. They are particularly fond of fruits with high moisture content.
2. Nuts and Seeds: They also consume seeds and nuts, which provide essential fats and proteins. Commonly consumed seeds include those from native trees and plants.
3. Flowers and Nectar: Eclectus parrots occasionally feed on flowers and nectar, which provide additional sugars and nutrients. They are known to visit flowering trees and shrubs.

4. Leaf Buds and Blossoms: They may also eat young leaf buds and blossoms, especially during the breeding season when nutritional needs are higher.
5. Vegetables: In captivity, they can be fed a variety of vegetables to ensure a balanced diet. Common vegetables include leafy greens, carrots, and peas.

Feeding Behaviour:

Foraging: Eclectus parrots are active foragers, spending a significant portion of their day searching for food. They forage both in the canopy and understory layers of the forest.

Social Feeding: They often feed in small groups or pairs, which may help in locating food sources and providing protection from predators.

Handling Food: They use their strong beaks to peel and manipulate fruits, nuts, and seeds. Their dexterous feet also aid in handling food items.

Feeding Technique: They are known to be quite methodical in their feeding, often taking their time to eat and savour their food. They may drop uneaten portions, which can benefit other animals in the ecosystem.

1. Water Consumption: Eclectus parrots obtain most of their water from the fruits they consume, but they will drink from water sources when available.

Dietary Adaptations:

1. Digestive System: Their digestive system is adapted to handle a high fruit diet, with a relatively short digestive tract that efficiently processes soft, sugary fruits.
2. Nutritional Needs: In captivity, it's important to provide a varied diet to meet all their nutritional needs, including vitamins and minerals. Pelleted diets formulated for parrots can be a useful supplement.

In summary, Eclectus parrots are primarily frugivores with a generalist diet that includes a variety of fruits, seeds, nuts, flowers, nectar, and leaf buds. They are active foragers, often feeding in social groups, and they have specific dietary adaptations that allow them to efficiently process their primarily plant-based diet.

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.

9. Answer: Eclectus parrots (Eclectus roratus (sic)) primarily consume a diet consisting of fruits, nuts, seeds, and flowers. The feeding behaviours of this species do not result in significant habitat alteration or degradation that could negatively impact native species. Unlike some other parrot species, Eclectus parrots do not engage in behaviours such as burrow construction or aggressive foraging methods that could lead to erosion or habitat destruction.

Eclectus parrots' nest in natural tree cavities, relying on existing hollows in large trees rather than creating new burrows. This nesting behaviour does not cause harm to the trees or reduce habitat quality. Instead, it is part of a natural ecological process that has been occurring for millennia.

In their natural habitats, Eclectus parrots contribute to seed dispersal, which can benefit vegetation and support overall ecosystem health. While there may be some overlap in the dietary preferences of

Eclectus parrots and native species, there is no substantial evidence to suggest that the presence of Eclectus parrots would reduce habitat quality or adversely affect native fauna or flora.

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?

10. Answer: Lifespan and Sexual Maturity of Eclectus Parrots (Eclectus roratus (sic))

Sexual Maturity: Eclectus parrots typically reach sexual maturity at different ages for males and females. Males generally reach sexual maturity around 2 to 3 years of age, while females tend to reach sexual maturity slightly earlier, around 1.5 to 2 years of age. At sexual maturity, they are fully capable of breeding and exhibit the adult coloration and behaviours characteristic of their sex.

Lifespan: The lifespan of Eclectus parrots varies between wild and captive environments:

- In the Wild: In their natural habitat, Eclectus parrots can live up to 20-30 years, although their lifespan may be influenced by factors such as predation, disease, and environmental conditions.
- In Captivity: With proper care, nutrition, and veterinary attention, Eclectus parrots in captivity often live longer than their wild counterparts. They can live up to 30-40 years, and in some cases, even longer. This extended lifespan in captivity is due to the controlled environment, absence of predators, and regular health care.

The longevity of Eclectus parrots, combined with their relatively early sexual maturity, makes them a species that requires a long-term commitment from their caretakers.

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)

11. Answer: Reproductive Ability: Eclectus parrots exhibit a moderate reproductive rate, with females typically laying between 2 to 3 eggs per clutch. These eggs are incubated for about 26-28 days, primarily by the female, while the male provides food. Eclectus parrots have the ability to produce offspring multiple times within their lifecycle, often having an extended breeding season that can occur up to two to three times per year, particularly in favourable conditions.

Triggers for Breeding: The breeding behaviour of Eclectus parrots can be influenced by several factors, including environmental conditions, availability of food, and the presence of suitable nesting sites. In captivity, breeding can be encouraged by ensuring a stable and nutritious diet, optimal environmental conditions, and providing appropriate nesting facilities.

Breeding Site Requirements: Eclectus parrots prefer to nest in existing tree cavities. These natural hollows provide the necessary shelter and security for egg-laying and rearing of chicks. In captivity, providing artificial nest boxes that mimic these natural cavities can facilitate breeding.

Breeding Frequency: In the wild, Eclectus parrots can breed multiple times a year, depending on the availability of resources and suitable nesting sites. In captivity, with controlled and supportive conditions,

they may also breed two to three times annually. The frequency of breeding can vary and is generally tied to the overall health and environmental conditions experienced by the parrots.

Sex Change Ability: Eclectus parrots do not possess the ability to change sex. This phenomenon is more commonly observed in certain reptiles and amphibians. Eclectus parrots exhibit clear sexual dimorphism from a young age, with males and females being distinctly different in coloration and remaining fixed in their respective sexes throughout their lives.

Conclusion: The reproductive behaviour of Eclectus parrots indicates a species with a moderate fecundity and an extended breeding season under favourable conditions. Their reliance on natural or artificial tree cavities for nesting and the absence of sex change ability are notable aspects of their biology.

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)

12. Answer: Eclectus parrots are not capable of asexual reproduction (i.e., parthenogenesis). Females do not store sperm. Individuals of the species are single sexed, meaning they are either male or female, and are not hermaphroditic.

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 (crossbreeding with native species).

13. Answer: Hybridisation in the Wild: Eclectus parrots are not known to hybridize in the wild. They are a distinct species with specific mating behaviours and clear sexual dimorphism, which reduces the likelihood of crossbreeding with other parrot species.

Hybridisation with Native Australian Species: There is no evidence to suggest that Eclectus parrots would hybridize with native Australian species. The Eclectus parrot's unique genetic makeup and specific mating preferences make hybridisation with other species unlikely. Additionally, no known crossbreeding incidents between Eclectus parrots and native Australian species have been documented.

Known Crosses and Fertility: There are no documented cases of Eclectus parrots interbreeding with other parrot species in captivity or in the wild. As such, there is no data on the fertility of progeny from such hypothetical crosses.

Impact on Native Species: Given the lack of evidence for potential hybridisation, it is highly unlikely that Eclectus parrots would negatively impact native species in Australia through hybridisation. Their distinct species characteristics, mating behaviours, and ecological niches further reduce the likelihood of any such impact.

Conclusion: In summary, Eclectus parrots are not prone to hybridisation in the wild and are unlikely to crossbreed with native Australian 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.

14. Answer: Adaptations: Eclectus parrots possess several adaptations that aid their survival, but these are not specifically advantageous for establishing in new environments, such as Australia, or for preying upon native species. Key adaptations include:

- Climbing Ability: Eclectus parrots are excellent climbers, with strong, zygodactyl feet (two toes facing forward and two backward) that allow them to grasp branches and navigate through the forest canopy efficiently. This adaptation primarily aids in foraging and mobility within their arboreal habitats.
- Colour Vision: Like many parrots, Eclectus parrots have well-developed colour vision, which helps them locate fruits and flowers. This adaptation is crucial for their diet but does not enhance their ability to prey upon other species.
- Beak Strength: They have strong beaks designed to crack open nuts and seeds. This adaptation is beneficial for their feeding habits but is not geared towards predation on other animals.

Lack of Predatory Adaptations: Eclectus parrots are primarily frugivores and granivores, feeding on fruits, seeds, nuts, and flowers. They do not possess adaptations for hunting or preying upon other animals. Their beak and claw structures are adapted for handling plant material rather than capturing and consuming prey.

Potential for Establishment: While their climbing ability and generalist diet could theoretically aid in their survival if they were to escape into the wild, these adaptations do not provide a significant competitive edge over native species. Eclectus parrots require specific nesting sites (tree cavities) and a diet that is dependent on particular fruiting trees, which may limit their ability to establish populations in new environments without human assistance.

In summary, the adaptations of Eclectus parrots, such as climbing ability and strong beaks, are primarily suited to their frugivorous and granivorous lifestyle. These adaptations do not enhance their ability to establish populations in Australia or to prey upon native species. Therefore, the risk of Eclectus parrots negatively impacting native fauna through predation or competition is minimal.

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.

15. Answer: The Eclectus parrot (Eclectus roratus (sic)) is native to the tropical rainforests of the Solomon Islands, New Guinea, and surrounding islands. As such, its environmental tolerances and habitat requirements are closely aligned with a tropical climate.

Temperature Ranges: Eclectus parrots thrive in temperature ranges between 20°C to 30°C (68°F to 86°F). They can tolerate temperatures as low as 15°C (59°F) for short periods, but prolonged exposure to temperatures below this range can be detrimental to their health.

Water Availability: While Eclectus parrots are accustomed to a humid environment with access to fresh drinking water, they possess a certain degree of resilience. They can survive for short periods without

free drinking water, particularly in cooler conditions, provided they have access to moisture-rich foods such as fruits and vegetables. However, consistent access to clean water is essential for their overall health and well-being.

Habitat Requirements: Eclectus parrots inhabit lowland and hill rainforests, often at elevations up to 1,000 meters. Their habitat typically features dense foliage, which provides cover from predators and facilitates the foraging of fruits, nuts, flowers, and seeds.

Physical Parameters of Natural Habitat:

- Salinity: Eclectus parrots are not tolerant of saline environments, as they are primarily found in freshwater ecosystems.
- Oxygen Levels: Their natural habitat is rich in oxygen due to dense vegetation, which supports a diverse range of flora and fauna.
- pH Levels: The pH of their natural habitat generally ranges from 5.5 to 7.5, reflecting the acidic to neutral conditions typical of tropical forest soils.
- Temperature: As previously mentioned, the optimal temperature range is 20°C to 30°C, with humidity levels generally exceeding 60%.

Climate: The climate in the regions inhabited by Eclectus parrots is characterized by high humidity and significant rainfall, averaging 1,500 to 3,000 mm annually. Seasonal variations exist, with a distinct wet season that supports the abundance of food sources necessary for their survival and reproduction.

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?

16. Answer: Eclectus parrots (Eclectus roratus (sic)) have been present in Australia primarily through the pet trade and are commonly found in private collections, as well as in some zoos and research facilities. However, there is no evidence to suggest that Eclectus parrots have established self- sustaining populations in the wild within Australia. Their presence is predominantly within controlled environments, and they are not known to have been introduced into the wild successfully. As such, the species is not considered established in Australian ecosystems.

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).

17. Answer: Eclectus parrots are subject to various legislative controls across Commonwealth, state, and territory levels in Australia. Currently, they do not hold a pest or noxious status and are not prohibited under the Biosecurity Act 2015. However, any importation of Eclectus parrots requires adherence to strict quarantine protocols to mitigate potential biosecurity risks.

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.

18. Answer: Eclectus parrots are currently listed as "Least Concern" on the IUCN Red List of Threatened Species. This classification indicates that the species is not currently facing significant threats that could lead to its extinction in the near future. However, habitat loss and the illegal pet trade pose potential threats to their populations in certain regions. Conservation efforts are essential to maintain their populations and habitat integrity, especially in areas where human activity may impact their natural environment.

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)

19. Answer: Eclectus parrots are listed under CITES Appendix II, which means that while they are not currently threatened with extinction, their trade is regulated to prevent unsustainable exploitation. This listing requires that any international trade in Eclectus parrots be accompanied by appropriate permits to ensure that it does not negatively impact their survival in the wild. The species is popular in the pet trade due to its striking coloration and friendly temperament, which contributes to its demand. However, ongoing monitoring of their populations and trade practices is necessary to ensure that these birds remain secure within their natural range.

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.

20. Answer: Eclectus parrots (Eclectus roratus (sic)) are not migratory. They are typically resident birds that inhabit lowland rainforests, forest edges, and adjacent areas. They do not exhibit seasonal movement between different habitats on a large scale, such as between countries or across significant altitudinal gradients. Their movements are generally limited to seeking food and suitable nesting sites within their established territories.

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)?

21. Answer: Not applicable

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.

22. Answer: Eclectus parrots do not possess harmful characteristics such as being poisonous or venomous. While they have a strong, sharp bill, it is primarily used for feeding on fruits and seeds, and they are not known to be aggressive by nature. Generally, Eclectus parrots are considered gentle and sociable birds. However, like any animal, they may exhibit defensive behaviour if threatened or provoked. Overall, they do not pose a significant risk to human health.

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.

23. Answer: Yes, Eclectus parrots are commonly kept in captivity as pets due to their vibrant colours and friendly nature. Captive Eclectus parrots do not pose a significant risk to public safety. They are generally docile and can be handled safely with proper care and attention.

Regarding disease transmission, Eclectus parrots, like other birds, can potentially carry diseases such as Psittacosis (also known as parrot fever), which can be transmitted to humans. However, the risk is minimal and can be mitigated with regular veterinary check-ups, proper hygiene, and appropriate handling practices.

Overall, with responsible ownership and care, Eclectus parrots in captivity do not pose a substantial threat to public health or safety.

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?

24. Answer: Eclectus parrots are native to regions with tropical climates, such as the lowland rainforests of New Guinea and nearby islands. In Australia, areas with similar climatic conditions include parts of northern Queensland, particularly in regions like the Daintree Rainforest, which fall within the tropical or subtropical Köppen–Geiger climate zones.

These areas offer a climate conducive to the Eclectus parrot's natural habitat preferences, providing the potential for the establishment of self-sustaining populations if they were introduced to the wild. However, such introductions are typically controlled to prevent ecological imbalance.

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.

25. Answer: To date, Eclectus parrots have not established self-sustaining populations outside their native distribution in the wild. While the species is popular in aviculture and has been kept in various regions, there is no documented evidence of breeding populations forming in areas outside of their native range. Any instances of Eclectus parrots being introduced to new locations have not led to stable, self-sustaining populations. Continued monitoring and research are necessary to ensure that any future introductions do not inadvertently lead to ecological disruptions

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).

26. Answer: Eclectus parrots demonstrate a degree of adaptability to altered environments, particularly those modified by human activity. They are known to inhabit a variety of habitats, including suburban gardens, agricultural areas, and plantations, where food sources such as fruits and seeds are available. Their ability to thrive in modified habitats is partly due to their dietary flexibility and behavioural adaptability.

While Eclectus parrots can survive in disturbed environments, extreme climatic events such as prolonged droughts or flooding can affect their populations negatively. Therefore, while they can tolerate some level of environmental change, significant disturbances may pose challenges to their survival. It is important to consider habitat conservation and management practices to support the well-being of this species and ensure their habitat remains viable.

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).

27. Answer: Eclectus parrots have not been widely reported to cause significant declines in the abundance of native plant or animal species, nor have they been noted for degrading natural communities in their native or introduced ranges. However, in some areas where they have been introduced, they may compete with local bird species for food and nesting sites, potentially leading to localized impacts.

Currently, Eclectus parrots are not considered pests in most regions. There is no substantial evidence indicating that they cause widespread economic costs or amenity loss through their presence or activities. As such, there are no active management programs aimed at reducing their population numbers in introduced areas.

While Eclectus parrots primarily consume fruits, seeds, and flowers, they do not actively prey on wildlife. Their diet does not typically include vertebrates or invertebrates that would classify them as predators. Consequently, they do not attack or prey on the following categories: waders or waterfowl, mammals, amphibians, fish, or other wildlife.

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?

28. Answer: Eclectus parrots have been reported to cause some damage to crops, particularly in areas where they have established populations. They may feed on fruits, vegetables, and nuts, potentially leading to economic losses for farmers. However, the extent of this damage is generally localized and not considered widespread or severe.

In terms of domestic or commercial animals, there is no significant evidence to suggest that Eclectus parrots attack or prey on such animals. Their feeding habits are primarily focused on plant materials, and they do not pose a threat to livestock or pets.

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)

29. Answer: The likelihood of Eclectus parrots being deliberately released into the wild appears low. While they are social and visually appealing, their specific care requirements and the potential ecological impacts of their release may deter individuals from intentionally releasing them. Additionally, there is no evidence to suggest that they grow to a size that would make them difficult to maintain in captivity, nor do they exhibit aggressive or anti-social behaviours that would encourage such actions.

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.

30. Answer: In the event of establishment in Australia, the likely diet of Eclectus parrots would consist primarily of fruits, seeds, nuts, and flowers. They are considered generalist feeders, although they do have specific preferences for certain food types, such as soft fruits and blossoms. Given their adaptability, the likelihood of Eclectus parrots finding food in Australia if released or escaped is relatively high, particularly in areas with abundant fruiting trees and flowering plants.

Their feeding characteristics are similar to those of several native Australian species, such as the Rainbow Lorikeet and the Galah, which also consume fruits and seeds. The Eclectus parrot's reliance on specific plant materials may lead to competition with these native birds for food resources, particularly in areas where their diets overlap.

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.

31. Answer: In the event of establishing a population of Eclectus parrots in Australia, it is essential to evaluate the potential competition with similar niche species for food and resources.

Competing Niche Species: Eclectus parrots, being primarily frugivorous, may compete with several native Australian species for food resources. Notable competitors include:

- Rainbow Lorikeet (Trichoglossus haematodus): This species feeds on nectar and fruits, and its foraging habits may overlap with those of the Eclectus parrot.
- Sulphur-crested Cockatoo (Cacatua galerita): Known for its capacity to consume a wide variety of seeds and fruits, this species could compete directly for food resources.
- Eastern Rosella (Platycercus eximius): This parrot species also feeds on seeds, fruits, and flowers, potentially overlapping in dietary needs.

Resource Competition: The resources that may be contested include:

- Food: Fruits, seeds, and flowers.
- Water: Access to drinking water sources, particularly in arid regions.
- Space: Foraging areas and territories that could be claimed by Eclectus parrots.
- Rest or Shelter Sites: Nesting sites in tree hollows or similar structures, which are also critical for native bird species.
- Nest Sites: Competition for suitable nesting cavities could impact the reproductive success of native species that rely on such habitats.

Behavioural Interactions: Eclectus parrots are typically non-aggressive and exhibit social behaviours within their own kind. They are known to form small flocks, which can facilitate cooperative foraging. However, they may exhibit territorial behaviour during nesting periods, particularly in the presence of competitors or perceived threats.

Climbing Ability: Eclectus parrots are adept climbers, utilizing their strong feet and beaks to navigate tree branches in search of food and nesting sites. This climbing ability allows them to exploit the same vertical space as many native species, increasing the potential for interaction and competition.

Potential Impact on Native Species: The introduction of Eclectus parrots could negatively affect various native species, particularly those that are already threatened. For instance:

- Orange-bellied Parrot (Neophema chrysogaster): This critically endangered species could face increased competition for food and nesting resources.
- Swift Parrot (Lathamus discolor): Similarly, this endangered species may find its food sources compromised by the presence of Eclectus parrots.

Aggressive Behaviour: While Eclectus parrots are generally not known for aggressive behaviours towards other species, they may display territoriality during breeding seasons. Their natural territory range can vary, but they typically establish territories that provide sufficient resources for foraging and nesting. While they do not typically exhibit aggression towards humans, instances of defensive behaviour can occur if their nests are threatened.

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?

32. Answer: In the event of establishing a population of Eclectus parrots in Australia, it is crucial to consider the potential for habitat and ecological community changes that may result from their introduction.

Habitat Utilization: Eclectus parrots are known to inhabit various environments, including tropical and subtropical forests, which may overlap with existing habitats in Australia. Their nesting and feeding behaviours could lead to alterations in local vegetation dynamics, particularly if they target specific tree species for nesting or food.

Impact on Native Species: As potential prey for native predators, the introduction of Eclectus parrots could influence the dynamics of local food webs. Their presence may provide a new food source for predators, which could subsequently affect the populations of native species, including both avian and terrestrial predators.

Community Dynamics: The establishment of a non-native species such as the Eclectus parrot might lead to shifts in community dynamics. This could occur through competition for food resources with native birds and other wildlife, potentially disadvantaging native species and altering the balance of the ecosystem.

Disease Transmission: It is important to investigate whether Eclectus parrots are susceptible to, or capable of transmitting, any pests or diseases that could adversely affect native species or agricultural interests. Their introduction could pose risks to the health of local wildlife populations and domestic animals.

Vegetation Impact: There is a possibility that Eclectus parrots may reduce ground vegetation cover if their feeding habits lead to significant foraging pressure on certain plants. This could increase soil erosion, particularly in vulnerable areas, and negatively impact the stability of local ecosystems.

Seedling Regeneration and Weed Spread: Additionally, their feeding behaviours may inhibit tree seedling regeneration in forest and woodland habitats. If Eclectus parrots preferentially feed on certain tree species, this could hinder the natural recruitment of those trees. Furthermore, there is the potential for them to facilitate the spread of invasive weed species if their droppings contain viable seeds.

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.

33. Answer: In the event of establishing a population of Eclectus parrots in Australia, it is essential to consider the potential social and cultural impacts that may arise. While the Eclectus parrot is known for its vibrant colours and engaging behaviour, which could positively contribute to the local avian community, there are several factors that need to be carefully evaluated.

Biodiversity and Environmental Impact: The introduction of Eclectus parrots could potentially affect local ecosystems, particularly if they compete with native species for resources. This competition could lead to a decline in native bird populations, which hold significant ecological and cultural value.

Human Health and Safety: The presence of a large parrot population may lead to concerns regarding health and sanitation. Issues such as droppings and nesting materials could pose risks to public facilities and infrastructure, potentially leading to increased maintenance costs and health-related concerns, especially in urban areas.

Cultural Significance: Indigenous communities may have specific cultural associations with native wildlife that could be disrupted by the introduction of a non-native species. It is crucial to engage with these communities to assess and address any potential impacts on their cultural practices and values.

Recreation and Aesthetics: While Eclectus parrots could enhance recreational birdwatching opportunities, they may also form large, noisy flocks that could disrupt local communities and diminish the quality of life for residents. Additionally, their presence may lead to aesthetic concerns if they cause damage to gardens or public spaces.

Economic Considerations: The establishment of Eclectus parrots could have both positive and negative economic impacts. On one hand, they may boost tourism and related businesses; on the other hand, there may be costs associated with managing their population and mitigating their impact on local wildlife.

Safety Risks: Finally, there is a potential risk to aviation safety if Eclectus parrots were to establish large populations near airports, posing a risk to aircraft during take-off and landing.

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.

34. Answer: In the event of establishing a wild population of Eclectus parrots (Eclectus roratus (sic)) in Australia, there are several potential economic impacts that may arise. These impacts could affect agricultural sectors, livestock, trade, and the overall economy.

Competition with Livestock: Though Eclectus parrots primarily feed on fruits, seeds, and flowers, their presence in agricultural areas could lead to competition for food resources. While they are not known to directly compete with livestock for grazing, any increase in their population may result in heightened competition for forage crops and other feed resources, potentially impacting livestock health and productivity.

Damage to Agricultural Crops: Eclectus parrots could pose a threat to various agricultural crops, including:

- Fruits and Nuts: These parrots are known to consume a variety of fruits and nuts, which could result in significant losses for orchards and nut farms.
- Vegetables: They may damage leafy vegetables and root crops, leading to reduced yields and increased costs for farmers.
- Flowers and Nursery Plants: The parrots may also feed on ornamental plants, impacting the horticultural sector and garden centres.

Such damage could lead to losses in earnings due to decreased productivity and increased costs for farmers in terms of crop protection and management.

Economic Impacts on Trade: The establishment of a feral population could affect trade dynamics:

- Export Markets: Countries importing Australian agricultural products may impose restrictions or bans if they perceive a risk of contamination or damage from Eclectus parrots. This could lead to reduced market access and diminished export earnings.
- Commercial Species: The potential for Eclectus parrots to affect other commercially popular species could lead to a decline in demand for certain products, impacting related industries.

Costs of Mitigation and Eradication: Should a wild population of Eclectus parrots establish itself; significant resources may be required for mitigation and eradication efforts. These costs could include:

- Research Costs: Understanding the ecological and economic impacts of the species would necessitate investment in research and monitoring programs.
- Mitigation Strategies: Implementing strategies to protect crops and livestock from damage would require funding for fencing, deterrents, and possibly culling efforts.
- Remediation and Control: If populations become established, eradication programs could incur substantial costs, impacting government budgets and agricultural funding.

Reduced Earnings and Productivity: Farmers and agricultural businesses may experience reduced earnings due to crop damage and increased management costs. This could lead to a broader economic impact in rural communities reliant on agriculture, contributing to reduced productivity and economic viability in affected sectors.

Impacts on Aquaculture: While Eclectus parrots are not aquatic species, their establishment could indirectly affect aquaculture. For instance, competition for resources in shared habitats may arise if

birds are attracted to feed sources used in aquaculture operations. Additionally, changes in local ecosystems may impact fish populations, potentially disrupting aquaculture yields

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.

35. Answer: To mitigate potential negative environmental impacts associated with the importation of Eclectus parrots (Eclectus roratus (sic)), several conditions and restrictions can be considered. These measures aim to ensure responsible management of the species and to protect Australia's native ecosystems.

Single-Sex Imports: To minimize the risk of breeding and potential establishment of feral populations, imports could be restricted to single-sex groups. This approach helps prevent unintentional breeding and mitigates the risk of population establishment in the wild.

Size Restrictions: Implementing size restrictions on imported birds may reduce the likelihood of establishing breeding populations. For instance, limiting the import to a specific number of individuals (e.g., no more than 10 per import permit) can help manage population control and reduce the impact on local ecosystems.

Non-Commercial Purposes: Restricting imports to eligible non-commercial purposes only, such as conservation programs, educational institutions, or accredited zoological facilities, can further ensure that the species is managed in a manner that prioritizes welfare and conservation. This would exclude household pets and discourage the establishment of private ownership that may lead to irresponsible breeding practices.

Import Permit Requirements: All imports should require an import permit issued under the Environment Protection and Biodiversity Conservation Act. This would necessitate a thorough assessment of the intended use of the birds, ensuring that they are aligned with conservation and welfare objectives.

Quarantine and Health Checks: To prevent the introduction of diseases and parasites that could affect native wildlife, all imported Eclectus parrots should undergo rigorous health checks and quarantine procedures prior to release into the general population. This includes veterinary assessments to confirm that birds are free from infectious diseases.

Monitoring and Reporting: Establishing a system for monitoring the health and behaviour of imported individuals will be essential. Importers should be required to report regularly on the status of the birds, including any health issues or behavioural changes that may arise.

Public Awareness and Education: Implementing educational programs aimed at informing the public and potential importers about the ecological risks associated with Eclectus parrots is vital. Raising awareness can help foster responsible ownership and prevent unintentional releases into the wild.

Compliance with Conservation Status: Considering the conservation status of the Eclectus parrot, any importation conditions should reflect its vulnerability to habitat loss and other environmental threats. Restricting imports to ensure that they do not exacerbate existing pressures on wild populations will be crucial.

In summary, the application of these conditions and restrictions on the import of Eclectus parrots is essential to minimize potential negative environmental impacts. By implementing responsible import practices and ensuring compliance with conservation objectives, Australia can safeguard its unique ecosystems while facilitating the responsible management of this species.

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.

36. Answer: Guidelines for Keeping Eclectus Parrots: Eclectus parrots require specific environmental conditions to thrive in captivity. The key guidelines for their care include:

Housing Requirements:

- Enclosures should be spacious, allowing for adequate flight space and exercise. A minimum enclosure size of 2 meters in height, 1 meter in width, and 1 meter in depth is recommended. Larger dimensions are encouraged to promote well-being.
- The enclosure should be constructed of safe, non-toxic materials, with appropriate perches and enrichment items to stimulate natural behaviours.

Proportion of Males to Females:

- It is advisable to maintain a balanced ratio of males to females to prevent aggression and stress. A ratio of 1:1 is often recommended in mixed-sex environments.
- In the case of single-sex populations, separate enclosures should be used to prevent breeding and ensure the welfare of the individuals.

Enclosure Standards:

- Enclosures must meet the standards set by relevant animal welfare organizations and should ensure proper ventilation, lighting, and temperature control.
- Best practice standards include providing a variety of substrates for foraging, hiding spots, and opportunities for social interaction, depending on the species' social structure.

Transportation Standards: Eclectus parrots will be transported in accordance with International Air Transport Association (IATA) regulations to ensure their safety and well-being during transit. These regulations require:

Transport Containers:

- Containers must be well-ventilated, secure, and large enough to allow the birds to stand upright, turn around, and lie down comfortably.
- The use of padded dividers may be necessary to prevent injury during transport.

Health and Welfare Considerations:

- Prior to transport, a health check by a qualified veterinarian is essential to confirm that all birds are fit for travel.
- Adequate food and water provisions must be made for the duration of the journey, along with considerations for maintaining a stable temperature within the transport containers.

Containment and Management Standards in Australia: In Australia, the management of Eclectus parrots falls under the guidelines provided by the Australian Government Department of Agriculture, Water and the Environment, as well as various animal welfare organizations. These standards address:

Welfare Issues in Housing:

- Enclosures must be designed to minimize stress and promote natural behaviours. This includes providing adequate space, social interaction opportunities, and enrichment activities.
- Regular monitoring of the health and behaviour of the birds is necessary to promptly address any welfare concerns.

Size and Design of Enclosures:

- Enclosures should be sufficiently large to accommodate the birds' needs, ensuring adequate depth and length for flight and movement.
- Designs should incorporate natural elements, such as branches and foliage, to create a stimulating environment.

Application of Standards:

- These standards are enforced by various bodies, including local councils, animal welfare organizations, and the relevant government authorities. Compliance is monitored through inspections and assessments.

In conclusion, maintaining the welfare of Eclectus parrots requires adherence to established guidelines for their housing, transportation, and overall care. By following best practices and regulatory standards, we can ensure that these birds are kept in humane conditions that promote their health and well-being.

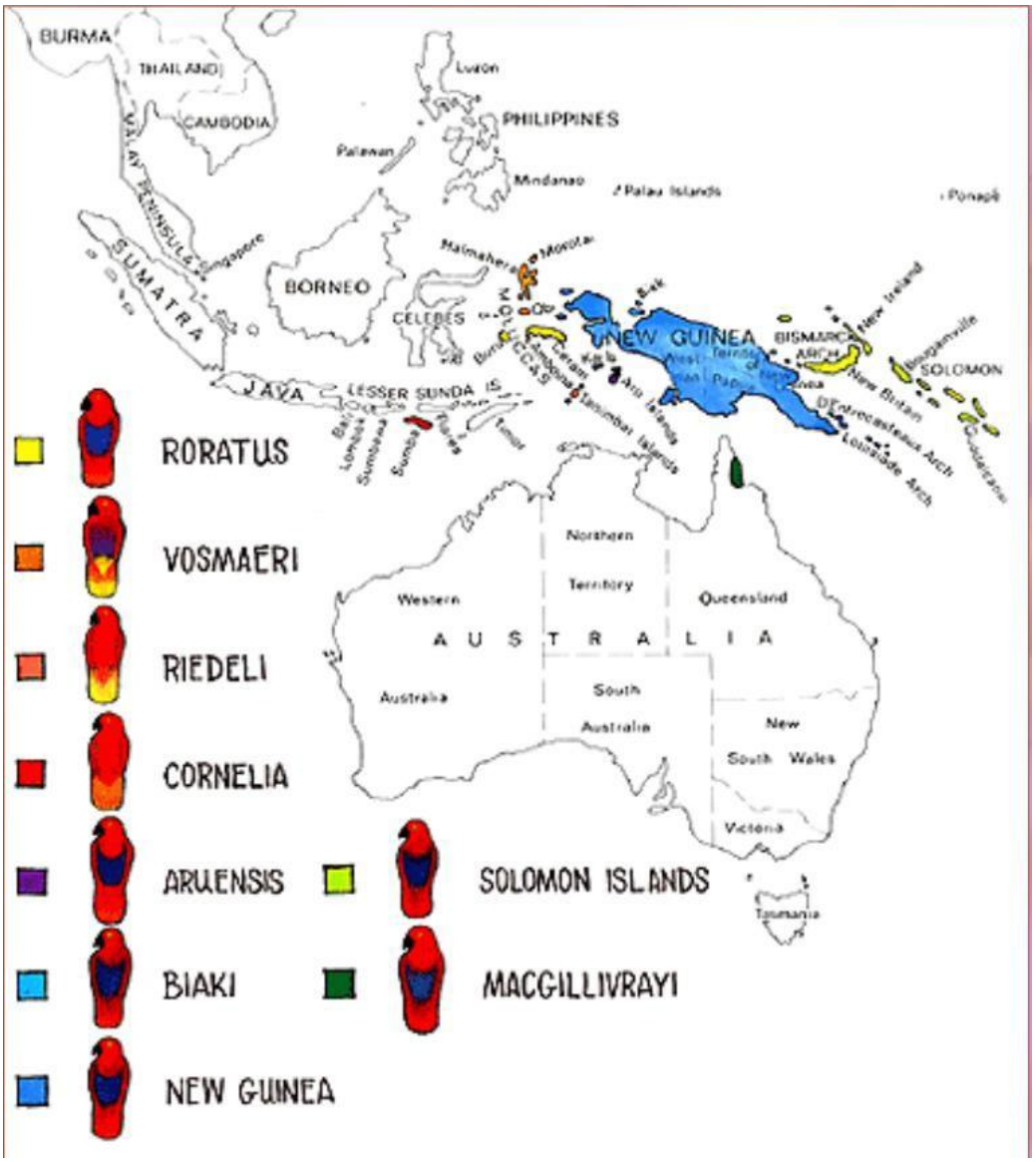

Figure 1 Source https://www.eclectusville.com/The_Eclectus_Parrot.html#

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