

Setting the scene

Many exotic bird species have been imported into Australia, using appropriate quarantine practises, as part of the pet and aviary trade. Historically, some exotic bird species have escaped captivity (or have been deliberately released) and have established wild populations but many escapees have not established wild populations.

A Victorian bird enthusiast is keen to import the Red-billed Quelea into Australia as many people view it as an attractive bird with bright plumage and a pleasant song. Large numbers of red-billed quelea occur in the wild and the collection of specimens for the pet and aviary trade would not affect wild population numbers. It is well known that the bird adapts readily to captivity and will happily breed if the correct conditions are supplied.



What to do

Biosecurity Australia, a Government agency responsible for assessing the risk from allowing the import of pests, has sought comment from your business (Conservation Matters) on your views about the risk from permitting the import of red-billed quelea into Australia.

1. Research the biology of the Red-billed quelea to assess the potential for this animal to become an established pest.
2. Use your findings to complete the pest risk assessment guide and create a score for each of the following sections:
 - ▶ Risk to public safety
 - ▶ Risk of establishing a wild population
 - ▶ Risk of becoming a pest
3. Use the pest risk assessment table and calculate the probability of the red-billed quelea becoming a pest in Australia if it escapes or is released from an aviary.
4. Review information about the characteristics of successful pests.
5. Prepare your response in the form of a detailed report to Biosecurity Australia.
Include in your response:
 - ▶ the animal's threat status to Australia based on the completed risk assessment activity
 - ▶ the characteristics that would aid this animal in becoming a pest
 - ▶ the economic consequences if this animal established a wild population
 - ▶ impact on primary industry
 - ▶ global industry
 - ▶ tourism industry
 - ▶ the cultural / social consequences if this animal established a wild population
 - ▶ safeguards, if any, that would be required to keep the public safe
 - ▶ the risk of the spread of disease
 - ▶ would public activity / outdoor recreation be affected?

- ▶ the environmental consequences if this animal established a wild population
 - ▶ competition with native animals and birds
 - ▶ are there any critically endangered species that may be adversely affected?
 - ▶ is there a particular habitat that may be adversely affected?

A small icon of a stylized eye, similar to the one in the Feral Focus logo, positioned to the left of the section header.

Feral fact

Common (Indian) Mynas were deliberately released in Canberra in the late 1960s because people liked them in their gardens. They are now an established pest in the city and have begun to spread into woodland and neighbouring towns. It is predicted Mynas will eventually spread to much of the south-east coast and sub-coast. The bird has the potential to become a major pest capable of damaging fruit and vegetable crops, fouling public places, spreading weeds, competing with native birds and animals for food, shelter and breeding sites and assisting in the spread of disease. It is currently considered impossible to completely eradicate.

Source: Penny Olsen. *Australia's Pest Animals: New Solutions to Old Problems*, Bureau of Resource Sciences and Kangaroo Press, 1998.

Risk to public safety

Harm to people	no risk to people	0
	very low risk to people	1
	injuries, harm or annoyance likely to be minor and a few people at risk	2
	injuries, harm or annoyance minor but many people at risk	3
	injuries or harm severe or fatal but few people at risk	4
	injuries or harm severe or fatal and many people at risk	5
	AND	
Harm to property (includes damaging buildings, vehicles, fences and roads by chewing or burrowing or polluting with droppings or nesting material)	no harm to personal or public property	0
	very little damage to personal or public property	1
	moderate damage to personal or public property	2
	severe damage to personal and public property	3
	unknown damage potential	3
Spread disease	all birds and animals likely or unlikely to spread disease	2
	TOTAL SCORE A	

Risk of establishing a wild population

Reproduction	more than 4 offspring per year	3
	less than 4 offspring per year	1
Diet and feeding	a mammal that is a strict carnivore (only eats other animals) and arboreal (climbs trees)	3
	a mammal that is a strict carnivore but not arboreal	2
	a mammal that is a non-strict carnivore (eats animals and plants)	1
	a mammal that is primarily a grazer or browser	3
	other herbivorous mammal or not a mammal	0
	Unknown diet	3
TOTAL SCORE B		
Competition with native fauna for tree hollows	can nest or shelter in tree hollows	2
	does not nest or shelter in tree hollows	0
	unknown	2
Habitat	can live in human-disturbed habitats (including agricultural and grazing land, plantations, urban environments)	3
	can only live in undisturbed (natural) habitat	1
	TOTAL SCORE C	
Overseas <u>environmental</u> pest status	the species is not an environmental pest in any country or region	0
	minor environmental pest in any country or region	1
	moderate environmental pest in any country or region	2
	major environmental pest in any country or region	3
	unknown environmental pest status	3
Overseas <u>primary production</u> pest status	the species does not damage crops or other primary production in any country or region	0
	minor pest of primary production in any country or region	1
	moderate pest of primary production in any country or region	2
	major pest of primary production in any country or region	3
	unknown primary production pest status	3
TOTAL SCORE D		

Risk to public safety

Taxonomic group	a mammal in one of the orders that cause serious effects on prey abundance and/or habitat destruction (Carnivora, Artiodactyla, Rodentia, Lagomorpha, Perissodactyla and Marsupialia)	2
	a mammal in one of the families that cause agricultural damage resulting in loss of revenue (Canidae, Mustelidae, Cervidae, Leporidae, Muridae and Bovidae)	2
	a bird in one of the families that cause agricultural damage resulting in loss of revenue (Psittaciformes, Fringillidae, Polceidae, Sturnidae, Anatidae and Corvidae)	2
	none of the above	0
	TOTAL SCORE E	
Overseas range size (including today's range and the past 300 years)	overseas geographic range less than 10 million square kilometres	0
	overseas geographic range 10 – 30 million square kilometres	1
	overseas geographic range greater than 30 million square kilometres	2
	overseas geographic range unknown	2
Migration pattern	does not migrate in its native range	1
	migrates in its native range	0
	migration unknown	1
	TOTAL SCORE F	
Reproduction	maximum offspring per year is greater than 4	3
	maximum offspring per year is less than 4	1
Diet and feeding	a mammal that is a strict carnivore (only eats other animals) and arboreal (climbs trees)	3
	a mammal that is a strict carnivore but not arboreal	2
	a mammal that is a non-strict carnivore (eats animals and plants)	1
	a mammal that is primarily a grazer or browser	3
	other herbivorous mammal or not a mammal	0
	unknown diet	3
	TOTAL SCORE G	
Competition with native fauna for tree hollows	can nest or shelter in tree hollows	2
	does not use tree hollows	0
	unknown	2
Habitat	can live in human-disturbed habitats (including agricultural and grazing land, plantations, urban environments)	3
	can only live in undisturbed (natural) habitat	1
	TOTAL SCORE H	
Overseas <u>environmental</u> pest status	the species is not an environmental pest in any country or region	0
	minor environmental pest in any country or region	1
	moderate environmental pest in any country or region	2
	major environmental pest in any country or region	3
	unknown environmental pest status	3
Overseas <u>primary production</u> pest status	the species does not damage crops or other primary production in any country or region	0
	minor pest of primary production in any country or region	1
	moderate pest of primary production in any country or region	2
	major pest of primary production in any country or region	3
	unknown primary production pest status	3
TOTAL SCORE I		

Transfer these scores to the Pest Risk Assessment Table to complete your assessment of the animal.

Add the following scores together in each category and record the total.

	SCORES	TOTAL
Risk to public safety	A	
Risk of establishing a wild population	B + C + D	
Risk of becoming a pest	E + F + G + H + I	

Locate the level of risk for each category.

Level of risk	LOW	MODERATE	HIGH	EXTREME
Risk to public safety	2	3 – 5	6 – 8	9 – 10
Risk of establishing a wild population	2 – 5	6 – 9	10 – 13	14 – 17
Risk of becoming a pest	2 – 7	8 – 13	14 – 19	20 – 22

Locate the level of risk for each category and record the threat status.

Risk of becoming a pest	Risk of establishment	Risk to public safety	Threat status
extreme	extreme	extreme, high, moderate, low	EXTREME
high	extreme	extreme, high, moderate, low	EXTREME
moderate	extreme	extreme, high, moderate, low	EXTREME
low	extreme	extreme, high, moderate, low	EXTREME
extreme	high	extreme, high, moderate, low	EXTREME
high	high	extreme, high, moderate, low	EXTREME
moderate	high	extreme, high, moderate, low	SERIOUS
low	high	extreme, high, moderate, low	SERIOUS
extreme	moderate	extreme, high, moderate, low	EXTREME
high	moderate	extreme, high, moderate, low	SERIOUS
moderate	moderate	extreme, high	SERIOUS
moderate	moderate	moderate, low	MODERATE
low	moderate	extreme, high	SERIOUS
low	moderate	moderate, low	MODERATE
extreme	low	extreme, high, moderate, low	SERIOUS
high	low	extreme, high, moderate, low	SERIOUS
moderate	low	extreme, high	SERIOUS
moderate	low	moderate, low	MODERATE
low	low	extreme, high	SERIOUS
low	low	moderate	MODERATE
low	low	low	LOW