

Blackbird

Turdus merula



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Taxonomy

Species: *Turdus merula*

Common names: blackbird, common blackbird and Eurasian blackbird.

Family: Turdidae

Related species:

Turdus albocinctus (white-collared blackbird), *Turdus boulboul* (grey-winged blackbird), *Turdus ludoviciae* (Somali thrush), *Turdus philomelos* (song thrush).

Similar species: *Sturnus vulgaris* (European starling)

Subspecies:

T. m. merula—Europe, introduced to New Zealand and Australia

T. m. azorensis—Azores

T. m. cabrerae—Madeira and Canary Islands

T. m. mauretanicus—Morocco, Algeria and Tunisia

T. m. aterrimus—Hungary, Crete, Greece, Turkey, Iran, Iraq and Egypt.

T. m. syriacus—Turkey, Jordan, Israel and Egypt.

T. m. intermedius—Russia, Tajikistan, Afghanistan and China.

T. m. maximus—Afghanistan, Himalayas, Sikkim, Assam, Tibet and China.

T. m. mandarinu—China, Hong Kong, Laos and Vietnam.

T. m. sowerbyi—China

T. m. nigropileus—western India

T. m. spence—eastern India

T. m. simillimus—southwest India

T. m. bourdilloni—India

T. m. kinnisii—Sri Lanka

There are several separate geographical subspecies recognised (Wikipedia 2008).

The information in this risk assessment is focussed on subspecies *T. m. merula* which has naturalised in Australia.

Description

The blackbird is 23 to 29 cm long (including a 9–10 cm tail) and have a wingspan of 34 to 38 cm. Weight ranges from 80 to 125 g. The male is glossy black with brown-black legs and has a yellow eye-ring and a bright orange to yellow bill. The female is dark grey-brown with mottled light grey-brown underparts, a paler chin and dull brownish-yellow bill. Juveniles are similar in appearance to females, but lighter brown with more mottled upper parts. Sub-adult males are brownish black with a black bill (Department of Agriculture and Food WA 2008; Istituto Veneto di Scienze undated; Wikipedia 2008).



Figure 1. Female blackbird on left, male blackbird on right showing differences in plumage and colouration (Photos: Tony Wills. Image from Wikimedia Commons under a *Creative Commons Attribution 2.5 License*).



Figure 2. Juvenile blackbird (Photo: QPIF Photo Library, Volume 3).

Biology

Life history

Incubation period: 12–14 days.

Number of eggs: 3–5 (average 4).

Breeding interval: Up to 3 broods each annual breeding season.

Fledging: 10–19 (average 13.6) days.

Sexual maturity: 12 months (Desrochers, 1992)

Life span: 2.4 years average in wild birds. Oldest recorded age of captive bird is 21 years.

(Wikipedia 2008)

Blackbirds are monogamous (pairs stay together for life). The male initially attracts a female with a courtship display. The pair then select a suitable nest site, usually in a low, dense shrubby plant or creeper that offers protection for the open-cupped nest (Kentish et al. 1995). The female builds the nest using grass and dry vegetation lined with mud. Both parents feed the young and will continue feeding for up to three weeks after fledging. However, if the female starts another nest, the male alone will continue feeding the young. Females often reuse the same nest in a breeding season (Wikipedia 2008).

Young birds produce smaller numbers of clutches and chicks as they are not as proficient at catching prey as older birds (Desrochers 1992). In Australia, the breeding season is from August to February, which is longer than the breeding season in colder places such as Europe and New Zealand.

Social organisation

Blackbirds are territorial during the breeding season, with males defending their territory from other males and females competing with each other for suitable nesting territory. Males establish a territory during their first year and keep the same territory in subsequent years. After fledging, and while adults are moulting, territory boundaries are not as strong and birds feed outside their territory. Blackbirds can be quite aggressive when defending their territories, mobbing other birds and in some cases killing them (Grim & Honza 2001).

Male blackbirds sing to establish a territory and both male and female make a number of other calls, including an alarm call to warn of predators. They can also mimic certain native birds.

Aggregations of blackbirds may form when feeding or roosting in the same area. However, they are generally solitary or occur in pairs, with young birds forming small groups after fledging. Depending on the location, blackbirds may be fully or partially migratory or resident. For example, blackbirds found in Northern Europe migrate to southern Europe in winter. Blackbirds in Australia are sedentary, rarely moving more than ten kilometres. Juveniles may initially disperse up to 500 km from their nests (Department of Agriculture and Food WA 2008; Istituto Veneto di Scienze undated; RSPB 2008; Tracey et al. 2007; Wikipedia 2008).

Diet and feeding behaviour

Blackbirds are generalist omnivores. They mostly forage on the ground amongst leaf litter or on lawns, eating a wide variety of foods such as ground invertebrates, flying insects, earthworms, snails, spiders, molluscs, frogs, tadpoles, small reptiles and vegetable matter. Blackbirds also feed arboreally on fruits such as cherries, peaches, nectarines, figs, olives, berries, as well as native fruits such as *Exocarpus cupressiformis* (Department of Agriculture and Food WA 2008; Tracey et al. 2007; Wikipedia 2008).



Figure 3. Blackbird feeding on invertebrates. (Photo: Piotra Jaszczyka. Image from Wikimedia Commons under a *Creative Commons Attribution 2.5 License*.)

Preferred habitat

The subspecies *Turdus merula merula* originated in woodlands of Europe. Since the early nineteenth century this native range has expanded to new and increasing urban habitats. Blackbirds have proved highly adaptable, occasionally displaying new traits such as higher breeding density, an extended breeding season, longer daily activity time, greater longevity, tamer behaviour and reduced migration, after extending their range into previously unoccupied habitats (Partecke et al. 2006). This adaptability has enabled blackbirds to colonise relatively undisturbed areas of native vegetation in Australia such as rainforest, wet sclerophyll, mallee, riverine communities, coastal dune communities, wet mountain ash (*Eucalyptus regnans*) gullies, dry *Eucalyptus* woodlands and offshore islands, as well as urban habitats such as gardens, urban bushland, parks, horticultural areas, and orchards (Department of Agriculture and Food WA 2008; Kentish et al. 1995; NSW Government undated; Tracey et al. 2007).

Blackbirds have been recorded at elevations up to 2300 m but do not breed when temperature falls below 4°C. They tend to prefer habitats with vegetation that is suitable for both nesting and feeding. A study in Melbourne showed that blackbirds successfully use a range of habitats for breeding (forest, woodland, grassland, urban, orchard, buildings) and most commonly build nests in low shrubby plants, particularly exotic species (Kentish et al. 1995).

Predators and diseases

Blackbirds are prey for domestic cats, foxes and predatory birds. In Australia, pied currawongs (*Strepera graculina*), little ravens (*Corvus mellori*), cats and rodents have been identified as predators of eggs and chicks in Melbourne (Kentish et al. 1995). Australian magpies (*Gymnorhina tibicen*) and New Zealand falcons (*Falco novaeseelandiae*) have also been observed eating adult blackbirds (Lawrence 2002; Parker 2007).

Blackbirds are often infected with intestinal and haematozoan parasites, as well as external parasites such as ticks, which can then infect other blackbirds with illnesses such as Lyme disease (Wikipedia 2008).

Distribution overseas

Blackbirds occupy an estimated global area of 10,000,000 km².

They are native to Albania; Algeria; Andorra; Armenia; Austria; Azerbaijan; Belarus; Belgium; Bhutan; Bosnia and Herzegovina; Bulgaria; Canada; China; Croatia; Cyprus; Czech Republic; Denmark; Egypt; Estonia; Faroe Islands; Finland; France; Georgia; Germany; Gibraltar; Greece; Hong Kong; Hungary; Iceland; India; Iran, Islamic Republic of; Iraq; Ireland; Israel; Italy; Jordan; Kazakhstan; Kuwait; Kyrgyzstan; Lao People's Democratic Republic; Latvia; Lebanon; Libyan Arab Jamahiriya; Liechtenstein; Lithuania; Luxembourg; Macedonia, the former Yugoslav Republic of; Malta; Moldova, Republic of; Montenegro; Morocco; Nepal; Netherlands; Norway; Poland; Portugal; Romania; Russian Federation; Saudi Arabia; Serbia; Slovakia; Slovenia; Spain; Sweden; Switzerland; Syrian Arab Republic; Tajikistan; Tunisia; Turkey; Turkmenistan; Ukraine; United Kingdom; United States; Uzbekistan; Vietnam; and the Western Sahara.

The subspecies *Turdus merula merula* has been introduced into Australia and New Zealand.

Blackbirds were introduced to Saint Helena but are now regionally extinct. They are vagrant in Afghanistan; Cambodia; Japan; Korea, Republic of; Myanmar; Svalbard and Jan Mayen; Taiwan, Province of China; and Thailand (BirdLife International 2004).

Distribution and abundance in Australia

A number of separate introductions occurred in the 1860s and 1870s in Melbourne and South Australia. These introductions were part of acclimatisation activities of the early colonies. Blackbirds now exist throughout south eastern Australia, from the Eyre Peninsular in South Australia to South East Queensland. They are abundant in Tasmania and have successfully colonised offshore islands such as Lord Howe Island, Norfolk Island, Kangaroo Island and Flinders Island (Bird Gard Australia 2007; Department of Agriculture and Food WA 2008; Gillbank 1986; Long 1981).

Conservation status

The IUCN 'Red List' lists blackbirds as a species of "Least Concern".

Blackbirds have a global population estimated at 79–160 million individuals in Europe alone (BirdLife International 2004).

Threat to human safety

Blackbirds do not present a direct threat to human safety.

History as a pest elsewhere

Blackbirds were first introduced into New Zealand in 1862. By the 1920s they were considered common throughout most of the country and were causing considerable damage to fruit crops, including grapes and cherries. They are now one of the most widespread bird species in New Zealand (Long 1981).

Blackbirds can find openings in protective nets and feed on grapes hanging low on the vine (Bailey & Smith 1979; Bomford & Sinclair 2002; Saxton et al. 2003; Temby 2003).

In their native Israel they are a pest of nectarines (Moran 2003).

Blackbirds can disperse certain weed species by consuming the fruit and then depositing the seeds in new locations (Williams 2006). Weeds include sweet pittosporum (*Pittosporum undulatum*), blackberry (*Rubus fruticosus*), South African boneseed (*Momilifera chrysanthemoides*), wreath-vine (*Asparagus asparagoides*), bridal veil (*Asparagus declinatus*), olives (*Olea europaea*), and bitou bush (*Chrysanthemoides monilifera*) (Kentish et al. 1995; Lawrie 2006; NSW Government undated; Spennemann & Allen 2000).

Blackbirds pose a threat to certain native birds such as the Bassian Thrush (*Zoothera lunulata*) and Lord Howe Island Woodhen (*Gallirallus sylvestris*) since these species compete for similar food resources. Blackbirds may hybridize with species such as the Norfolk Island race of the Island Thrush (*Turdus poliocephalus poliocephalus*) (NSW Government undated; NSW National Parks and Wildlife Service 2002). On Lord Howe Island, blackbirds consume certain endangered invertebrates, namely the *Pericryptodrilus nanus* (Lord Howe earthworm) and *Placostylus bivaricosus* (Lord Howe flax snail) (Coutts-Smith et al. 2007).

Potential distribution and impact in Queensland

Blackbirds were first detected in Queensland at Cooby Dam, Toowoomba, in 1986. They are now breeding in Toowoomba and at nearby Highfields and there are recent reports of blackbirds in Stanthorpe (Toowoomba Bird Observers 2008).

Since climate is a primary factor that determines a species' distribution, climate-modelling software (CLIMATE version 1) was used to predict the area of Australia where climate is considered suitable for blackbirds (Figure 4).

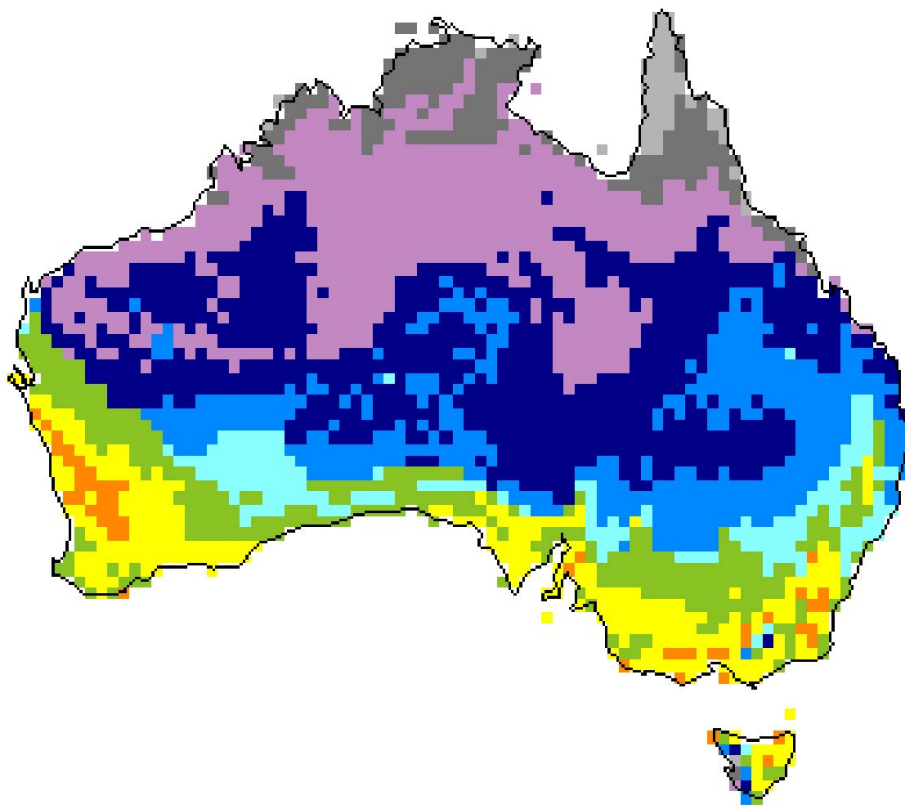


Figure 4. Potential distribution of blackbirds (orange and yellow areas indicate where climate is suitable; lightest blue being marginally suitable; and darker blues, purples and grey unsuitable).

Based purely on an assessment of climatic parameters, blackbirds are likely to survive in cooler upland parts of southern Queensland, with remaining areas considered too hot. It is important to note, however, that other habitat requirements such as the availability of food, and interaction with native bird species, will influence range and abundance.

Blackbirds already cause damage to orchards and vineyards in southern Australia and New Zealand and an expansion of the blackbird population in Queensland may cause damage to grapes, stone fruit and berry crops in upland areas around Stanthorpe, Warwick and Toowoomba.

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Attachment

Using the Bomford (2006) system, blackbirds in Queensland were ranked as a 'serious' threat species.

Species		<i>Turdus merula</i> (blackbird)
Date of assessment	07/10/2008	
Literature search type and date	See references	
Factor	Score	
A1. Risk to people from individual escapees (0–2)	0	Nil risk.
A2. Risk to public safety from individual captive animals (0–2)	0	Nil risk.
Stage A. Risk posed by captive or released individuals = Sum of A 1 to 2. (0–4)	0	Not dangerous
B1. Climate Match (1–6)	3	Moderate climate match in Australia. CMS = 767
B2. Exotic population Established Overseas (0–4)	4	Blackbirds have established in Australia and New Zealand.
B3. Taxonomic Class (0–1)	0	Bird
B4. Migratory (0–1)	1	Facultative migrant or non-migrant in its native range.
B5. Diet (0–1)	1	Generalist diet of ground invertebrates, flying insects, earthworms, snails, spiders, molluscs, frogs, tadpoles, small reptiles, vegetable matter, fruits.
B6. Habitat (0–1)	1	Blackbirds adapt very well to urban and agricultural environments.
B7. Overseas Range Size (0–2)	1	Overseas range size of approximately 10 million square kilometres.
B. Probability escaped or released individuals will establish a free-living population = Sum of B 1 to 7. (1–16)	11	Moderate Establishment Risk
C1. Taxonomic group (0–4)	0	Other group
C2. Overseas range size including current and past 1000 years, natural and introduced range (0–2)	1	Approximately 10 Million square kilometres.
C3. Diet and feeding (0–3)	0	Not a mammal.
C4. Competition with native fauna for tree hollows (0–2)	0	Does not use tree hollows.

C5. Overseas environmental pest status (0-3)	2	Moderate environmental pest in New Zealand.
C6. Climate match to areas with susceptible native species or communities (0-5)	5	The species has more than 20 grid squares within the highest two climate match classes, and has more than 100 grid squares within the four highest climate match classes, that overlap the distribution of any susceptible native species or communities.
C7. Overseas primary production pest status (0-3)	3	Major pest of primary production in New Zealand and Australia.
C8. Climate match to susceptible primary production (0-5)	3	Score = 60 see Table 1
C9. Spread disease (1-2)	2	Bird
C10. Harm to property (0-3)	0	\$0
C11. Harm to people (0-5)	2	Injuries, harm or annoyance likely to be minor and few people exposed
C. Probability an exotic species would become a pest (for birds, mammals, reptiles and amphibians) = Sum of C 1 to 11. (1-37)	18	Serious Pest Risk
A. Risk to public safety posed by captive or released individuals		
A = 0 = not dangerous; A = 1 = moderately dangerous; A ≥ 2 = highly dangerous	0	Not dangerous
B. Risk of establishing a wild population		
For birds and mammals: B < 6 = low establishment risk; B = 7-11 = moderate establishment risk; B = 12-13 = serious establishment risk; B > 14 = extreme establishment risk	11	Moderate establishment risk
For reptiles and amphibians: B < 3 = low establishment risk; B = 3- 4 = moderate establishment risk; B = 5- 6 = high establishment risk; B > 6 = extreme establishment risk		
C. Risk of becoming a pest following establishment		
C < 9 = low pest risk; C = 9- 14 = moderate pest risk; C = 15-19 = serious pest risk; C > 19 = extreme pest risk	18	Serious pest risk
VPC Threat Category		Serious

Table 1. Calculating Total Commodity Damage Score

Industry	Commodity Value Index ¹	Potential Commodity Impact Score (0–3)	Climate Match to Commodity Score (0–5)	Commodity Damage Score (columns 2 x 3 x 4)
Sheep (includes wool and sheep meat)	10	0	Not estimated	0
Cattle (includes dairy and beef)	10	0	Not estimated	0
Timber (includes native and plantation forests)	10	0	Not estimated	0
Cereal grain (includes wheat, barley sorghum etc)	10	0	Not estimated	0
Pigs	2	0	Not estimated	0
Poultry and eggs	2	0	Not estimated	0
Aquaculture (includes coastal mariculture)	2	0	Not estimated	0
Cotton	2	0	Not estimated	0
Oilseeds (includes canola, sunflower etc)	2	0	Not estimated	0
Grain legumes (includes soybeans)	2	0	Not estimated	0
Sugarcane	2	0	Not estimated	0
Grapes	2	3	5	30
Other fruit	2	3	5	30
Vegetables	2	0	Not estimated	0
Nuts	1	0	Not estimated	0
Other livestock (includes goats, deer, camels, rabbits)	1	0	Not estimated	0
Honey and beeswax	1	0	Not estimated	0
Other horticulture (includes flowers etc)	1	0	Not estimated	0
Total Commodity Damage Score (TCDS)	—	—	—	60