Fauna notes

Information about Western Australia's fauna



No. 6 Red-tailed black cockatoo

Description

Red-tailed black cockatoos (*Calyptorhynchus banksii*) are large black birds with a black crest and a large bill. They are 53-60 centimetres in length, weigh 565-730 grams and their tail is about half of the body length. Red-tailed black cockatoos give a metallic, rolling, farcarrying 'karee' or 'krar-raak' call.

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The male birds are glossy black with dark grey bills and large red to orange panels on the tail. Females are brownish-black in colour, with paler underparts and yellow to whitish spots on the head, neck and wings. The breast and belly feathers have yellow to orange fringing and the black tail is barred with yellow to orange to red panels. The bill of the female is whitish in colour with a darker tip and the tail has orange to yellow bars. Immature birds are similar to females but are duller in colour. It takes four to five years before male birds attain their full adult plumage.

There are three subspecies of the red-tailed black cockatoo in Western Australia (see Figure 2) and they vary in size and colouring. The forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) is slightly larger, with a heavier bill and a more brightly coloured female than the inland red-tailed black cockatoo (*C. b. samuell*). The northern red-tailed black cockatoo (*C. b. macrorhynchus*) is similar in appearance to the forest subspecies, except it has longer wings, a larger bill and the female's tail is barred with yellow, not orange or red.

Distribution and habitat

In Western Australia, the red-tailed black cockatoo occurs in three distinct regions, the south-west, the northern

Wheatbelt/Murchison/Pilbara and the Kimberley. Red-tailed black cockatoos also occur in the Northern Territory, Queensland, New South Wales, South Australia and Victoria.

The forest red-tailed black cockatoo is restricted to the jarrah (*Eucalyptus marginate*), marri (*Corymbia calophylla*) and karri (*E. diversicolor*) forests of the south-west of Western Australia, from Gingin to Albany. It is unclear what effect logging has had on this subspecies but it is now rare and patchily distributed over a contracted range.

Prior to European settlement, the inland red-tailed black cockatoo was restricted to the watercourses of the semi-arid and arid regions of Western Australia. The provision of watering points and the introduction and spread of the weed double gee (*Emex australis*), resulted in an increase in the distribution of this subspecies. It is now found in arid and semi-arid eucalypt woodlands, partly cleared

farmlands and Acacia scrubs. It ranges over an area from the De Grey River, south to Moora and it is also found in eastern Australia.

The northern red-tailed black cockatoo is found in forest and woodland areas of the Kimberley region of Western Australia and in other parts of northern Australia.



Figure 1 Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (Photo Rick Dawson / DEC).

Diet

The forest red-tailed black cockatoo's enlarged bill is thought to be an adaptation to feeding on marri nuts. The bill is used to open the base of the nuts to extract the seeds. This subspecies also consumes seed from jarrah, blackbutt (*E. patens*), Albany blackbutt (*E. staeri*), karri, forest sheoak (*Allocasuarina fraseriana*) and snotty gobble (*Persoonia longifolia*).



Figure 1 Distribution of the three subspecies of the red-tailed black cockatoo in Western Australia (Modified from Johnstone and Storr (1998)).

Prior to European settlement, the inland red-tailed black cockatoo fed on the seeds of grasses and native plants and insect larvae. It now feeds primarily on the seeds of the double gee and to a lesser extent on other weed seeds including saffron thistle (*Carthamus lanatus*) and wild radish (*Rhaphanus raphanistrum*). It also feeds on small quantities of seed from native plants including banksia and grevillea species. The northern red-tailed black cockatoo consumes seed from trees, shrubs and other plants, including woollybutt (*E. miniata*), swamp bloodwood (*E. ptychocarpa*), *Terminalia* and *Acacia* species.

Breeding

The breeding biology of the forest red-tailed black cockatoo has been studied by staff from the Western Australian Museum. The cockatoos nest in marri, jarrah and karri trees. Usually, one egg is laid in

October and November and the female incubates the egg for 29 to 31 days.

The breeding biology of the inland red-tailed black cockatoo has also been studied in detail. This subspecies nests in hollows in the trunks of live and dead salmon gum (*E. salmonophloia*), wandoo (*E. wandoo*), and york gum (*E. loxophleba*). Large hollows are needed for nesting because the birds back down into the hollow. One egg is usually laid between July and November, or February and May. The female incubates the egg for about 30 days. Only about a third of nesting attempts produce fledglings. The young usually weigh about 75 per cent of the weight of adult females, which is low in comparison with other cockatoo species.

The northern red-tailed black cockatoo nests in hollows in eucalypts including woollybutt. Eggs are laid between March and August.

Hollow availability

At present in the Wheatbelt, there are sufficient eucalypts capable of providing hollows for cockatoos, including the inland red-tailed black cockatoo. However, few new trees have grown there for more than 50 years due to grazing by livestock and rabbits and the remaining trees are primarily dead or dying. Establishment of new trees is urgently needed in reserves and shelter belts so that future generations of cockatoos have hollows in breed in.

Behaviour

Forest red-tailed black cockatoos are usually observed in pairs or small flocks and sometimes in larger flocks of up to 200 individuals. Birds often drink from water stored in tree hollows. The inland subspecies is most common in the northern and north-eastern Wheatbelt and is usually observed in pairs or small flocks. The northern subspecies is thought to be nomadic and is generally common. These birds are usually observed in pairs or small flocks of up to 30 individuals.

Damage

The red-tailed black cockatoo is sometimes blamed for damage to fruit and nut crops but there is no evidence that this species is responsible for any damage. Damage to fruit and nut crops is usually found to have been caused by white-tailed black cockatoos such as Baudin's cockatoo (*Calyptorhynchus baudini*) or Carnaby's cockatoo (*Calyptorhynchus latirostris*). Red-tailed black cockatoos however, have been observed nipping the shoots off of the tips of branches of fruit and plantation trees.

Status

All three subspecies of red-tailed black cockatoo are protected native species under provisions of the *Wildlife Conservation Act 1950*, administered by the Department of Environment and Conservation

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Further Information

Contact your local office of the Department of Environment and Conservation.

See the Department's website for the latest information: www.dec.wa.gov.au.



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(DEC).

The forest red-tailed black cockatoo is listed on the State's Threatened Fauna List, because the population has declined in distribution and number.

It is illegal to destroy these birds and offenders will be subject to prosecution.

DEC wildlife officers monitor interactions between people and wildlife in Western Australia and investigate reports of illegal shooting of redtailed black cockatoos.

If you are prosecuted for killing a red-tailed black cockatoo, you face:

- Confiscation of your firearms.
- A fine of up to \$10,000 for each offence.

Further reading

• <u>Karrak Watch</u>, DEC, Western Australia.

References

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