



## No.23 Red-capped parrot

### Description

The red-capped parrot (*Purpureicephalus spurius*) is also known as the king parrot or western king parrot in Western Australia. This parrot is 28-39 centimetres in length and weighs 88-139 grams. In full colour, adult males have a crimson cap, yellow-green cheeks and rump and a purplish breast (Figure 1). Females are similar to males but are duller and most have a violet-grey breast (Figure 1). Immature birds are largely green with pale cheek patches.

The red-capped parrot produces a repeating 'churrink' call as well as a chattering contact call and harsh screeches. Immature birds that have just left the nest give a two or three-note whistling call.

The red-capped parrot can be distinguished from the Australian ringneck (*Barnardius zonarius*) and western rosella (*Platycercus icterotis*) by its yellow rump, which is visible when the birds are flying away.



Figure 1 Red-capped parrot (*Purpureicephalus spurius*) adult male (left) and juvenile (right) (Photo Robin Knox/Agriculture Protection Board of Western Australia).

### Distribution and habitat

Endemic to Western Australia, red-capped parrots are found only in the south-west. They are most common in marri (*Corymbia calophylla*) and jarrah (*Eucalyptus marginate*) forests, woodlands and scrubs. They also occur on roadsides and in orchards. They are

found north of Dandaragan, south and west of the Great Southern Railway to Lake Grace and east along the south coast to Esperance and Condingup (Figure 2).

### Population changes

The red-capped parrot appears to be locally extinct in the shires of Moora, York, Dumbleyung and Lake Grace and populations have declined in Dandaragan, Gingin, Wanneroo, Swan and the Perth metropolitan area. The majority of the decline has occurred in the shires north of Perth. This appears to be because the bird was uncommon in this region and the native plants and weeds that they feed on are restricted in distribution.

Since 1981, there have been population increases in five shires bounded by the eastern edge of the jarrah forest, from Wandering to Kojonup, where there has been limited clearing.

### Diet

The red-capped parrot has adapted to the changed environment now found in the south-west by incorporating introduced plants into its diet. However, it feeds on a much smaller range of seeds than the Australian ringneck for example and this is probably why the red-capped parrot has a more limited distribution.

Dietary items include the seeds of marri, thistles (*Carduus* spp.) and (*Silybum marianum*), apples (*Malus sylvestris*) and oats (*Avena sativa*). The birds can extract marri seeds from the fruits using their long bills. When nectar production by marri trees is poor, crop damage may increase. Adult birds eat larger quantities of marri and thistle seed than young birds, which eat more apple seeds.

Other items eaten include the seeds of hakea and acacia species, the nectar from banksia flowers, insects and the flesh of pears and stone fruit.

### Breeding

Red-capped parrots nest in hollows, mainly those in mature marri, jarrah and flooded gum (*E. rudis*). They are less tolerant of interference at the hollow than some other parrots.

The birds begin showing interest in trees containing hollows in March but noisy fights become frequent in July. In August, pairs begin looking into and biting at the entrances of hollows and females begin spending time in the hollow.

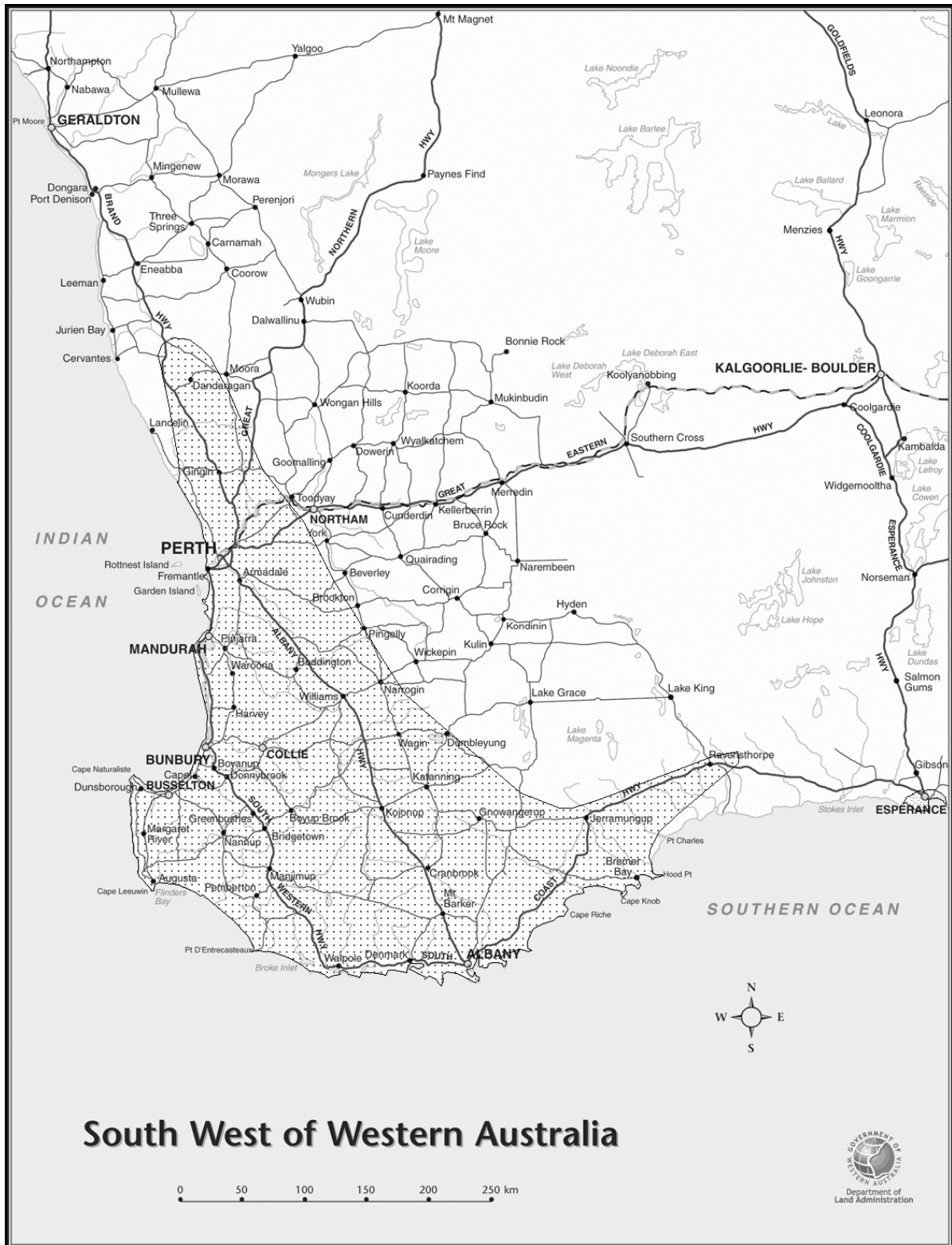


Figure 2 Distribution of the red-capped parrot (*Purpureicephalus spurius*) (Adapted from Johnstone and Storr (1998)).

An average of five (between four to six) eggs are laid between August and December and the eggs hatch after approximately 23 days of incubation by the female. The young leave the nest five weeks after hatching, in November and December. Breeding

success, the percentage of eggs that yield free-flying birds, has been measured at 27 per cent but could be higher in some years.

## Behaviour

Red-capped parrots are sedentary, remaining in the same area throughout their lives. Young birds have been recorded remaining within 2 kilometres of fruit-growing areas. The parrots are often seen singularly, in pairs or small flocks feeding on the ground or in vegetation. Flocks of up to 30 birds are sometimes found at food sources. Flocks in orchards are mostly comprised of birds that are only a few months old.

Numbers of red-capped parrots are highest in late summer and autumn due to the addition of young birds that have recently left the nest. Food shortages, together with a large number of young, can result in fruit damage at this time of the year.

## Damage

Red-capped parrots damage apples (particularly red and yellow varieties) between January and June in the south-west. The damage is usually low (less than five per cent) but it occasionally becomes severe. Damage levels vary from area to area. Most of the damage is caused by birds that are only a few months of age. Damage occurs when the parrots chew into the fruit for the seeds and can be identified by missing seeds and fragments of fruit pulp on the ground beneath the trees.

Other types of cultivated fruits are also damaged by red-capped parrots, including pears, stone fruit and citrus. Young red-capped parrots damage protea flower crops, mainly between May and September.

## Status and damage reduction

The red-capped parrot is a declared pest of agriculture under the provisions of the *Agriculture and Related Resources Protection Act 1976*, administered by the Western Australian Department of Agriculture and Food. This declaration allows for the approval and implementation of a management program in various areas of the state.

As a native species, the red-capped parrot is protected under the provisions of the *Wildlife Conservation Act 1950*, administered by the Department of Environment and Conservation (DEC). Under this Act red-capped parrots can be shot on private land in accordance with an open season notice without the need to obtain a damage licence from DEC. The area covered by the notice comprises the municipal districts of Armadale, Bridgetown-Greenbushes, Capel, Donnybrook-Balingup, Harvey, Kalamunda, Manjimup, Mundaring, Murray, Plantagenet and Serpentine-Jarrahdale. In these areas red-capped parrot populations are secure and damage to agriculture is likely to be a continual problem.

Outside the open season area, a damage licence must be obtained from DEC prior to shooting. For more information, contact the DEC and refer to Fauna note no. 9. Destruction of birds to reduce

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damage. DEC, Western Australia.

Destruction should be viewed as a last resort after all other control options have been attempted. For other management options see the notes listed under further reading. A strategy comprising a number of techniques will probably be needed to reduce damage caused by red-capped parrots.

## Further Reading

- Fauna note no. 9. Destruction of birds to reduce damage. DEC, Western Australia.
- Fauna note no. 18. Options for parrot control. DEC, Western Australia.
- Fauna note no. 22. Australian ringneck. DEC, Western Australia.
- Fauna note no. 24. Western rosella. DEC, Western Australia.

## References

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- Mawson, P.R. and Long, J.L. (1995) Changes in the status and distribution of four species of parrot in the south of Western Australia during 1970-90. *Pac. Cons. Biol.* 2 (2): 191-199.
- Massam, M.C. (1990) Protea yields are reduced by native birds in south-west Western Australia. Agriculture Protection Board Unpublished Report.
- Long, J.L. (1989) Breeding biology of four species of parrots in the south of Western Australia. *Tech. Series No. 6.* Agriculture Protection Board, South Perth.
- Long, J.L. (1985) Damage to cultivated fruits by parrots in the south of Western Australia. *Aust. Wildl. Res.* 12: 75-80.
- Long, J.L. (1984) The diets of three species of parrots in the south of Western Australia. *Aust. Wildl. Res.* 11:357-371.

## Further Information

Contact your local DEC office.

See the department's website for the latest information:

[www.dec.wa.gov.au](http://www.dec.wa.gov.au)

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