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## Malleefowl *Leipoa ocellata* (Gould, 1840)



Photo: Christine Groom/DEC

### Size

550-610 mm in length

### Weight

1.5-2.5 (2.0) kg

### Subspecies

None recognised

### Description

Malleefowl are large ground dwelling birds that rarely fly unless alarmed. They have robust, powerful legs and the wings are short, broad and rounded at the tip. A crest extends from the front of the crown to the nape and is raised when the bird is alarmed. The upper body is boldly barred, fringed and streaked grey, white, black and rufous. The breast and belly are cream-white. Face mid-grey with white line under eye. Bill slate grey. Malleefowl are well camouflaged in their mallee habitat.

### Other Common Names

Gnow, Mallee Chook, Mallee Hen

### Distribution

Historically, the Malleefowl was found in mallee regions of southern Australia including, south-west New South Wales, north-west and central-west Victoria, most of South Australia, southern Northern Territory and south-west Western Australia, from approximately the 26<sup>th</sup> parallel of latitude southwards.

Today it can still be found in most of these areas but appears to be extinct in the Northern Territory, northern South Australia, and far south-west in Western Australia. Its remaining range is highly fragmented, extending across southern Australia, from coastal Western Australia through South Australia and north-western Victoria to central New South Wales. In Western Australia, Malleefowl occur in Dryandra State Forest, Fitzgerald River National Park, Kalbarri National Park, and Cape Arid National Park, and have been reintroduced into Francois Peron National Park, Shark Bay. They have also been reported from many reserves and private property within and around the Wheat belt.

For further information regarding the distribution of this species please refer to [www.naturemap.dec.wa.gov.au](http://www.naturemap.dec.wa.gov.au)

### Habitat

Malleefowl are largely confined to arid and semi-arid woodland that is dominated by mallee eucalypts on sandy soils, with less than 430 mm of rainfall annually. They may also be found in Mulga, *Acacia aneura*, and other sclerophyllous associations. In Western Australia Malleefowl may also be found in coastal heath where shrubs produce sufficient leaf litter for use in nest mounds.

### Behaviour

Malleefowl build distinctive nests which comprise a large mound of soil covering a central core of leaf litter. These nest mounds range in diameter but on average span more than 5 m and may be up to 1 m high. A Malleefowl pair will often use the same nest site each season rather than build a new one. Nest preparation occurs in autumn and the male will tend the nest through summer until temperatures begin to fall. The female helps with the nest initially but spends most of her time looking for food to meet the metabolic demands of egg production.

Malleefowl are generally monogamous and once breeding begins pair for life. Breeding Malleefowl tend to be sedentary, as they nest

and roost in the same area year after year. While breeding, males do not stray far from the nest but at other times birds may range over several square kilometres. Home-ranges do not appear to be defended, although in the vicinity of its nest the male is vigorously aggressive toward other Malleefowl except its mate. Radio-tracking studies have shown that over the course of a year the birds may range over one to several square kilometres and that home-ranges overlap considerably. With any sign of a threat from the air, Malleefowl will usually find cover and remain motionless. The same is generally true for terrestrial predators, as young will often rely solely on their camouflage to escape detection. Malleefowl will take to flight only as a last resort even though they are capable of strong flight.

## Diet

Malleefowl are opportunistic feeders and will eat whatever food sources are locally or seasonally abundant. They are omnivorous and their diet may include foliage, fruits, flower buds and seeds of a diverse range of plants as well as invertebrates, and their products such as sugary lerps, tubers and fungi. Although it will drink if water is available, it normally lives without it.

## Breeding

Established pairs generally breed annually. Eggs are laid from September to January 4-8 days apart and the average clutch size is 16 (range: 5-33). The decomposing organic matter with which the birds fill the nest incubates the eggs for 62-64 days. About 80% of all eggs hatch provided they are not saturated by rain or raided by foxes.

Chicks hatch buried beneath soil up to one metre deep. Their struggle to the surface is unaided and may take up to 15 hours. Malleefowl chicks receive no parental care and within an hour of leaving the nest can run and feed independently. Mortality among chicks is high, with 80% falling prey or dying from metabolic stress brought on by exposure or starvation within about ten days. Malleefowl chicks are capable of dispersing quite widely after emerging from the nest but some have been reported to stay within the vicinity for up to 10 days.

Malleefowl reach maturity at two, work a nest at three, and breed at four years of age. The lifespan of the Malleefowl is unknown but studies have not recorded an individual breeding beyond 12 years.

## Threatening processes

Clearing of habitat for agriculture, increased fire frequency, competition with exotic herbivores (sheep, rabbits, cattle, goats) and kangaroos, predation by foxes and cats, inbreeding as a result of fragmentation and possibly hunting for food in marginal populations, all are having significant impacts on population numbers. Habitat clearing in agricultural areas increases the risks of local extinction.

Last updated 8 February 2012, for further enquiries please contact [fauna@dec.wa.gov.au](mailto:fauna@dec.wa.gov.au)

## Conservation status

Western Australian Wildlife Conservation Act 1950

Schedule 1 – Fauna that is rare or is likely to become extinct  
(Threatened ranked as Vulnerable)

Environment Protection and Biodiversity Conservation Act 1999

Vulnerable

IUCN Red List of Threatened Species

Near Threatened (Version 3.1)

## Management

A national recovery plan has been written for this species (see Benschmeh, 2000). Management objectives from this plan include:

- Reduce grazing pressure
- Reduce predation.
- Reduce fire threats.
- Reduce isolation of fragmented populations
- Promote malleefowl-friendly agricultural practices
- Reduce habitat loss.
- Reduce road loss (i.e. road kills)

## Other interesting facts

- Malleefowl were regularly hunted by European Australians during the nineteenth and early twentieth centuries for food.
- Each egg the female lays weighs 10% of the female's body weight.
- Within 24-hours of hatching from the eggs, young can fly because, unlike their downy body, their wings are well feathered.

## Selected references

Benschmeh, J. (2000). National Recovery Plan for Malleefowl. Environment Australia.

Blyth J., Burbidge A., Brown A. and Hooper K. (1996). Working Together. *Landscape* 11(3): 36.

Garnett S. (1992). The Action Plan for Australian Birds. Australian National Parks and Wildlife Service.

Priddel D., and Wheeler, R. (1995). The Biology and Management of the Malleefowl in NSW. NSW National Parks and Wildlife Service. Hurstville, NSW.

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

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