

Threatened species of the Northern Territory

Gouldian finch

Erythrura gouldiae

Conservation status

Australia: Endangered

Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable

Territory Parks and Wildlife Conservation Act 1976



Credit: S. Murphy

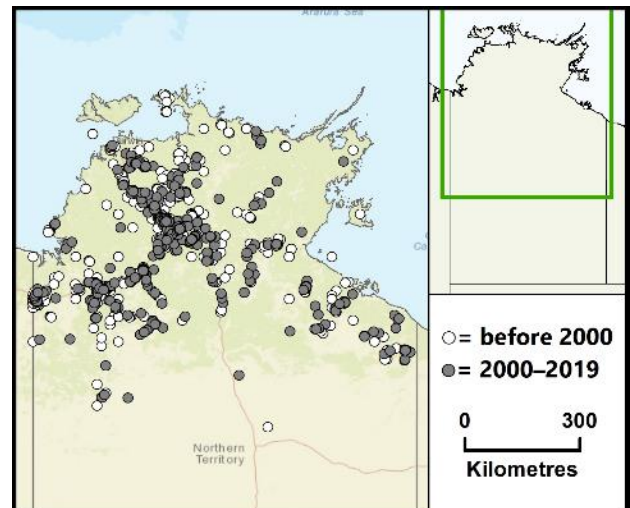
Description

The Gouldian Finch is an unmistakable small bird. Adults have a purple breast, yellow belly, green back and wings, bright blue rump and a black tail with finely elongated streamers. Three colour morphs exist, which differ in the colour of the facial mask: black-faced individuals are the most common, followed by red-faced individuals, while the yellow-faced morph is very rare. Males are considerably more brightly coloured than females, and juveniles are entirely dull green.

Distribution

The Gouldian Finch was formerly distributed throughout the tropical savannas of northern Australia. However, it is now restricted to isolated areas, mostly within the Northern Territory (NT) and the Kimberley. The decline in its range has been most pronounced in the easternmost parts of its distribution¹. The locality with the most known individuals is in the Yinberrie Hills, about 40 km north of Katherine.

NT conservation reserves where reported:
Caranbirini Conservation Reserve,
Judbarra/Gregory National Park (NP), Kakadu NP,
Limmen NP and Nitmiluk NP.



Caption: Known localities of the Gouldian Finch in the NT (nrmmaps.nt.gov.au)

Ecology and life-history

Gouldian Finches occupy two different regions of the landscape on an annual cycle². Towards the end of the wet season and throughout the dry season, between February and October, they occupy wooded hills with hollow-bearing Snappy Gums *Eucalyptus brevifolia* and *E. leucophloia* or Salmon Gums *E. tintinans*. Hollows in these trees are used for nesting. During this period, they forage on the ground, feeding on shed seeds (mostly *Sorghum* spp.), and find water at small rocky waterholes. In the wet season, Gouldian

Finches move from the hills into lowland drainages to feed on seeds of a variety of perennial grasses—including Cockatoo Grass *Alloteropsis semialata*, Golden Beard Grass *Chrysopogon fallax* and Soft Spinifex *Triodia pungens*—that begin to set seed in mid-December³.

Average clutch size is five eggs, but usually only one or two young fledge per clutch, and a pair may raise several clutches within a year⁴. Gouldian Finches are short-lived: generation length is estimated to be 2.7 years⁵.

Threatening processes

The marked decline in the range of the Gouldian Finch is most likely due to reduced food availability caused by pastoralism and altered fire regimes, both of which influence the composition of vegetation communities. Large-scale fires late in the dry season reduce the amount of seed, particularly from species the Gouldian Finch relies upon early in the wet season⁶⁻⁷. Frequent fires can also reduce the availability of tree hollows that are suitable for breeding. The parasitic mite *Sternostoma tracheacolum* and illegal trapping for the aviculture trade have also been implicated in the decline of the species.

Conservation objectives and management

A national recovery plan for the Gouldian Finch was prepared in 2006⁸. Management priorities for the species are to: i) maintain long-term monitoring in the late-dry season at selected sites across the range; ii) improve fire management by reducing the extent of late-dry-season fires and protecting wet-season foraging habitat; and iii) educate landholders about threats to the species and suitable management practices, including fire management, grazing management and feral herbivore control.

References

¹ Franklin, D.C., Whitehead, P.J., Pardon, G., Matthews, J., McMahon, P., McIntyre, D., 2005. Geographic patterns and correlates of the decline of granivorous birds in northern Australia. *Wildl. Res.* 32, 399–408.

² Dostine, P.L., Johnson, G.C., Franklin, D.C., Zhang, Y., Hempel, C., 2001. Seasonal use of savanna landscapes by the Gouldian Finch, *Erythrura gouldiae*, in the Yinberrie Hills area, Northern Territory. *Wildl. Res.* 28, 445–458.

³ Dostine, P.L., Franklin, D.C., 2002. A comparison of the diet of three finch species in the Yinberrie Hills area, Northern Territory. *Emu* 102, 159–164.

⁴ Tidemann, S.C., Lawson, C., Elvish, R., Boyden, J., Elvish, J. 1999. Breeding biology of the Gouldian Finch *Erythrura gouldiae*, an endangered finch of northern Australia. *Emu* 99, 191–199.

⁵ Garnett, S.T., Szabo, J.K., Dutson, G., 2011. The action plan for Australian Birds 2010. CSIRO Publishing/Birds Australia, Melbourne.

⁶ Garnett, S.T., Crowley, G.M., 1994. Wet-season feeding by four species of granivorous birds in the Northern Territory. *Australian Bird-watcher* 15, 306–309.

⁷ Woinarski, J.C.Z., Williams, R.J., Price, O., Rankmore, B., 2005. Landscapes without boundaries: wildlife and their environments in northern Australia. *Wildl. Res.* 32, 377–388.

⁸ O'Malley, C., 2006. National Recovery Plan for the Gouldian Finch (*Erythrura gouldiae*). WWF-Australia, Sydney and Parks and Wildlife NT, Department of Natural Resources, Environment and the Arts, NT Government, Palmerston.