

Gouldian Finch (*Erythrura gouldiae*)

Family: Passeridae (Grassfinches and Mannikins)

Class: Birds

National Status: Endangered (Nat.)

State Status: Rare or Likely to Become Extinct (WA)

Distribution:

Gouldian Finches were once common throughout the grassy woodlands of northern Australia, from the Kimberley to Cape York Peninsula. Sadly, Gouldian's have disappeared from over half their former range, and now persist in scattered and patchy populations in the Top End and northern Western Australia. Only around 2500 adults remain, making them one of Australia's most endangered birds.

Habitat:

Gouldian Finches live in tropical woodland with a grassy understorey that contains a mixture of annual (especially *Sarga* [otherwise known as *sorghum* or 'speargrass']) and perennial species. They nest in tree hollows (Northern White Gum *Eucalyptus brevifolia* in the western part of its range and Salmon Gum *E. tintinnans* in the east).



Threats:

The immense beauty of adult Gouldian Finches saw thousands of these birds captured each year for the commercial pet trade. However, trapping of finches became illegal in Australia in 1986 once it was clear that the population was declining rapidly. Surprisingly, the population has continued to crash, even though trapping has stopped. The reason for this continued decline has remained something of a scientific mystery. One potential idea is that frequent hot fires and intensive cattle grazing have caused the perennial grass seeds that Gouldian Finches eat during the wet season to become rare, causing the finches to starve.

Disease may also play a role. A parasitic air-sac mite (*Sternostoma tracheacolum*) was found to infect 62% of Gouldian Finches in one well-studied population in the NT, whereas other, similar finch species at the same site were uninfected. These mites interfere with breathing (causing heavily infected adults to 'wheeze' as if they have asthma), which could be a severe set-back for these nomadic birds.

Since less than 2500 adults remain in small, disjunct populations, the species may suffer from various genetic threats such as 'inbreeding depression' and loss of variation through the process of 'random genetic drift'.

General:

Gouldian Finches form pairs that may remain together for life. These pairs join larger flocks, which – because of the classic 'safety in numbers' theory – probably confers anti-predator benefits. Unlike most other finches, Gouldian Finches build rudimentary grass nests inside tree hollows. They prefer small holes in trees on the sides of hills. During the breeding season (January to August), the female

lays one egg per day for about five days. Both sexes then take turns at incubating the eggs. The chicks hatch from their eggs after 12 days and remain in the nest for another 21 days until they make their first flight into the outside world. The juveniles, who have much duller plumage than the adults, stay with their parents for several months after they have fledged. A healthy pair of Gouldian Finches can raise up to three broods in a season.

An intriguing feature of Gouldian Finches is that the feathers on the faces of adults can be one of three very distinct colours. About 70-80% have jet-black faces; 20-30% have scarlet faces, while gold-faced birds are very rare (1 in 3000 birds). These colours exist simply through genetic variation (similar to the way in which humans can have blue, brown or green eyes).departs from this then most of the young are females. The powerful, fearsome jaws that are usually used to snatch live prey are now used to carefully transport the tiny hatchlings to the water's edge. Individuals probably live for about 40-60 years, though they may survive for up to 100 years.