

Protecting habitat of the endangered Golden-shouldered parrot from feral pig impacts



Conservation Partners were established in 2019 to develop and implement a threat abatement program to protect the endangered Golden-shouldered Parrot (*Psephotellus chrysopterygius*) on Cape York Peninsula, Queensland. This species, once distributed across most of Cape York Peninsula, is now restricted to a total area of 3,000km². Work is being undertaken to protect Golden-shouldered Parrot populations on Artemis Station, a 125,000 ha working cattle station that is located midway between Coen and Laura. The majority of Golden-shouldered Parrots on the property are located within a 10 km radius of the homestead, reflecting the presence of suitable habitat.

Impacts to the Golden-shouldered parrot

Golden-shouldered Parrots inhabit open grasslands and tropical savannah woodlands. High levels of predation by feral cats and birds (including the Pied Butcherbird) threaten Golden-shouldered Parrot populations due to an increase in tree and shrub density because of changing fire regimes and grazing. Golden-shouldered Parrots, which often feed on the ground, cannot see these predators in time to escape. The habitat and food sources of the Golden-shouldered Parrot are being impacted by woody tree species and grazing animals, including feral pigs, cattle and wallabies.

Cockatoo Grass (Alloteropsis semialata), a perennial species, is a very important early wet season food source for the Golden-shouldered Parrot as it produces large, nutritious seeds. However, feral pigs and Agile Wallabies also seek out Cockatoo grass, finding them irresistible, with many plants dug up by these animals. These parrots seek fallen seeds on the ground as well as eat them directly from the flowering seed head using their feet to hold on to grass stems. Through their rubbing activities, feral pigs also damage the termite mounds that Golden-shouldered Parrots use for nesting sites.



Damage caused by feral pigs. Photo credit: Patrick Webster

Work being done by the Artemis Nature Fund

Conservation Partners were a successful recipient of a Saving Native Species (Priority Grant) grant, a program funded by the Commonwealth Department of Climate Change, Energy, the Environment and Water, to protect, manage and restore Australia's threatened species and important natural places.

The funding awarded to Conservation Partners is being used to increase the population size of Golden-shouldered Parrots on Artemis Station. Feral pig management and monitoring activities are being undertaken to reduce their impacts on Golden-shouldered Parrot habitat.

Due to the high abundance of quality feed available in the environment, best practice management methods need to be strategically timed. Control efforts must be conducted at the end of the dry season when food resources for pigs become scarce. During good wet seasons, pigs do not go to free feeding stations or consume poison baits.

HOGGONE bait has recently been used with some success although its use is season-dependent. It has been found to be suitable once the country has dried out and pigs can no longer access vegetation or underground material (August to September on Artemis station). The duration of the prefeeding period and when to switch to placebo baits differs between different mobs. Some mobs come onto prefeed and the placebos much faster than others. HOGGONE bait stations are monitored with camera traps to estimate mob size and bait uptake. It has been found to be effective and, as it is used in the bait box, it has a reduced risk of secondary uptake and poisoning compared with 1080. In this project, HOGGONE baiting will be supplemented with trapping.

Exclusion fencing is also being erected around termite mounds to protect nesting sites of the Golden-shouldered Parrot from predators and grazing animals. Electric fencing has recently been installed around areas where perennial grasses are reseeding to exclude feral pigs, cattle and wallabies and to protect this food source for the Golden-shouldered Parrot. This fencing consists of three wires, with the lowest two wires aiming to exclude feral pigs and wallabies and the higher wire for cattle. Each wire is connected to a separate energiser to mitigate risks of the lower wire being shorted by growing grasses, which occurs rapidly during the wet season. To date, this has been a very successful strategy. It is hoped to be applied across larger areas to enable the important perennial grasses to recover.

Through the combined effects of habitat restoration and feral pig management, a greater proportion of juvenile Golden-shouldered Parrots are expected to be recruited into the adult population.

To find out more, click here.