



ON A MISSION FOR CASSOWARIES

How casso-wary are you? Most people are aware that the Southern Cassowary lives in the Wet Tropics of Queensland and that Mission Beach is supposed to be THE place to see them. That's about it.

By Helen K. Larson
and Liz Gallie

There are probably between 1200 and 1500 Cassowaries left in the wild in Australia—less than the number of pandas still living wild in China (about 1600 wild pandas were found in 2004). Mission Beach supposedly has the highest concentration of Cassowaries in Australia, and the habitat in the area is in one of the few continuous coast to highland rainforest corridors in the Wet Tropics. The Wet Tropics World Heritage Area provides protection for about 900,000 ha of habitat, however, Mission Beach, like much of eastern Australia, is changing rapidly under the pressures of coastal development. The Mission Beach section of the World Heritage Area is largely surrounded by farmland, and is becoming increasingly fragmented by roads and development

Photos by Liz Gallie

Rainforest plant diversity may well depend on the presence of this Johnny Applesseed of the rainforest.

At present, 40 per cent of the available Cassowary habitat in the Mission Beach area is found on land with relatively low levels of protection. There is also little habitat connectivity. Intensified conservation effort is essential. Key factors that are hampering effective habitat conservation and restoration include the quite different goals of local, state and federal agencies

and insufficient resources for responsible organisations and authorities to take action, such as implementation of the Cassowary Recovery Plan. In addition to these drawbacks are the diversity of aspirations of various community groups, individuals, businesses and industries; gaps and loopholes in institutional arrangements (such as development exemptions under the Integrated Planning Act 1997) and a noticeable lack of coordination and collaboration between institutions.

Since 1992 there have been more than 20 strategies, management and recovery plans and countless scientific studies—mainly concentrated at Mission Beach—aimed at keeping Cassowary populations intact. One estimate published in 1992 had 63 Cassowaries living in the Mission Beach area, with another estimate of 110. In 2007 however, the best estimate was 50 adults. During the creation of all these plans and strategies, more than 60 adult Cassowaries have been killed by speeding cars and probably the same number have been killed by dogs.

So none of the strategies (theoretically in place since 1992) have been terribly effective in mitigating the destruction of Cassowaries. During the time that this story was written, two adult Cassowaries were killed on the road by cars. It is rather alarming to realise that in the Mission Beach area at least, the Cassowary, listed by the Queensland Government as Endangered, by the Commonwealth Government's Environment Protection and Biodiversity Conservation (EPBC) Act 1999 as Endangered and by the International Union for the Conservation of Nature (IUCN) as Vulnerable, is in danger of becoming an icon of the Wet Tropics in name only.

So why should we worry about these birds? What is so significant about the Southern Cassowary anyway?

In the first place, Cassowaries are ancient birds. They are palaeognaths, a group of birds that first evolved 66-56 million years ago (the Palaeocene). The name palaeognath refers to a particular arrangement of the bones of the palate. Palaeognathous birds also include emus, rheas, kiwis, moas, elephantbirds and the tinamous, which put the Cassowary among an elite group of very large birds that have somehow survived the attentions of humans.

Cassowaries are especially significant, in that they are recognised as a keystone species in the rainforests of the Wet Tropics. Keystone species have an impact on their community far greater than would be expected based on their relative abundance. As the birds are fruit-eaters and are very large in size, each Cassowary needs an extensive home range—from 5-15 square kilometres

Top left: The Southern Cassowary may be the second heaviest bird on the planet, but this affords it little protection from becoming road kill.

Map: Between 1995-2010, 60 Cassowaries were killed by cars. The size of the dot denotes the number of birds killed at each location.

for each bird. Cassowaries spread the seeds of over 100 species of rainforest trees via their droppings over many kilometres. Many of these seeds are poisonous to other animals, but the Cassowary can ingest them safely. So rainforest plant diversity may well depend on the presence of this Johnny Appleseed of the rainforest.

The traditional owners of the Mission Beach area, the Djiru people, have a significant affinity with the rainforest as a source of food, shelter and as the foundation of their sense of identity as 'rainforest people'. Integral to this relationship is the Gunday (Cassowary) which is important to the health of rainforest and the wellbeing of the Djiru.

Cassowaries also have a significant economic value in their extensive use in advertising as a tourist icon for the Wet Tropics. Images of Cassowaries appear on websites, billboards, glossy brochures and postcards—but we need to ask how much goes back to the Cassowaries? For example, the tourism turnover in 2005 for Cardwell Shire (which includes Mission Beach) was nearly \$200 million. The tourism market covers four main segments, which include people seeking adventure (rafters etc), unspoilt nature (hikers and birdwatchers), camping (grey nomads) and backpackers (international). So for at least a quarter of this market, Cassowaries are one of the drawcards for their visit. If they were apportioned their fair share of that \$50 million of tourist income, every one of the 50 Cassowaries living around Mission Beach becomes an extremely valuable bird. Imagine the outcry if somebody knocked down and killed a million-dollar racehorse straying onto the road and didn't stop to see if it was all right?

So what can we do to ensure that Cassowaries and their habitat persist in Mission Beach and elsewhere? The state government needs to develop a Cassowary Conservation Plan, as has been done for the Koala in south-eastern Queensland. This kind of plan is legally binding and is embedded into the State Planning Scheme from the top down. Such a plan requires governments to put money towards protecting Cassowary habitat by buying up freehold land, incentives to landholders to protect habitat on private land and preventing landowners from clearing their properties if this means destroying Cassowary habitat.

A program is needed to raise funds (both public and private) for voluntary acquisition of private land to protect Cassowary habitat, and this should be done as much as possible with joint management with Djiru people. An appropriate council rate relief scheme for qualified landholders could be set up.

In the meantime, people who visit or live in the area just need to make sure they slow down when driving through Cassowary 'hot spots' and keep their dogs restricted to a fenced yard and exercised on a lead. We suggest that you record and photograph any Cassowaries you see around Mission Beach from a safe distance, and send as much information as possible and precise location details to C4, the Community for Coastal and Cassowary Conservation at c4@cassowaryconservation.asn.au

Mission Beach is special for many reasons, but having the largest area of intact lowland rainforest south of the Daintree occupied by the greatest density of Cassowaries in the entire country, is one good reason to feel very privileged to live here. Long may it be so.

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Room to move

In 2008, a development at Mission Beach was halted by Federal Environment Minister Peter Garrett, on the grounds that it was unacceptable under the EPBC Act, in that it would have adversely impacted on the endangered Southern Cassowary. Further residential subdivisions that will destroy or fragment crucial Cassowary habitat are awaiting approval both at Mission Beach and the Daintree. The Rainforest Information Centre is running a campaign urging the Federal Government to buy back remaining undeveloped properties to ensure the future of the Cassowary.

For more information go to www.savethecassowary.org.au



Top: As with Emus, male Cassowaries take on the responsibility of incubating eggs and rearing chicks. A father Cassowary is spied here with two young.

Bottom: Forest manager, tourism drawcard—but are we doing enough to protect the Southern Cassowary?