

Mission Beach
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Mission Beach Environmental Management Group is a community-based group that was formed in 1994 as part of the on-going work of the Cardwell Shire’s Future Search Workshop initiative. Its role is to advise local, State and Federal agencies on how best to achieve environmentally sensitive and responsible planning and management of the area.

MBEMG is based in the Mission Beach area, which is a very special location surrounded by the Wet Tropics World Heritage Area and the Great Barrier Reef World Heritage Area, and we aim to preserve the unique character of the area for residents and visitors to enjoy into the future.

Cassowary Issues – May 2001

Background

The Southern Cassowary (*Casuaris casuaris var. johnsoni*) is a member of the Ratite family, along with the Emu, the Ostrich, the Kiwi and two other species of Cassowary found only in Papua New Guinea. These are all bird species with primitive characteristics, large and flightless.

Our cassowary is found in rainforests from Paluma, north of Townsville, to the tip of Cape York, but its core territory is the Wet Tropics World Heritage Area. Within these forests, the cassowary is sparsely distributed, as it needs a large home range to support itself all year round on rainforest fruits. There are several ‘hot spots’ where the populations are densest, the lowland rainforests of Mission Beach being the most well known.

The Southern Cassowary is listed as Endangered at both State and Federal level, with its population estimated to be between 1,200 and 1,400.

The cassowary plays an important part in the ecology of the rainforest as it can eat the largest fruits whole, and it disperses the seeds undamaged in its droppings, well away from the parent tree. It is therefore considered to be vital for the long-term biodiversity of the forest, and as a ‘Keystone’ species its health is a good indicator of the general health and biodiversity of our tropical rainforests.

The cassowary is a very impressive bird, standing up to 1.8 metres tall and up to 85 Kg in weight.



With its brightly coloured head and its distinctive casque, it is not surprising that it has become the icon of the Wet Tropics World Heritage Area.

Habitat loss

The biggest threat to the cassowary population is the loss of its rainforest habitat to agriculture, logging and subdivision for coastal residential allotments. The birds are generally healthy and fertile and the population can quickly expand to occupy all

the suitable habitat, so any loss of habitat translates directly into loss of population.

Aerial photography done in 1992 and 1997, and groundwork done in 1998 by Andrew Small for FNQ 2010 Regional Environmental Strategy, shows that 42% of critical cassowary habitat on freehold land in the Mission Beach area was cleared in that six-year period.

In his FNQ 2010 report 'Vegetation of the Maria Creek to Hull River Coastal Area' Small writes, "*Habitat fragmentation, interrupted corridor linkages and limited remaining areas of vegetation communities of high integrity, will contribute to local and regional decline of a number of rare and threatened fauna and flora species. Some of which, such as the Southern Cassowary, are currently regarded as biodiversity showcases for the area.*"

State Legislation

Queensland's *Vegetation Management Act (2000)* came into force on January 1st, 2001 and makes the clearing of land an assessable development. Normally a development application is lodged with the local government authority, which becomes the assessment manager under the *Integrated Planning Act*. If the development is likely to impact on natural vegetation they will refer the application to Department of Natural Resources for assessment under the VMA. DNR will use their Regional Ecosystem Maps to determine if the land is of high nature conservation value.

Where these maps have not yet been produced, which includes the Wet Tropics (unlikely before the end of 2003), they will work with the mapping of Tracey and Webb (1975) to determine the conservation value of the land. However the wording of certain triggers in the IPA Schedule 8 rely on the expression "on a Regional Ecosystem Map", so the lack of these maps opens up loopholes that may allow clearing of cassowary habitat in land zoned urban, such as we have in Mission Beach.

Under the VMA (1999), which was never gazetted, the Queensland Government asked the Federal Government to provide funding so that where the refusal of a development application is made under the VMA on 'of concern' ecosystems, making the

land a non-viable commercial entity, the landholder will be compensated and the land acquired and transferred to the protected area estate. This Federal support was not forthcoming, on the grounds that land management is a State issue, and discussions are continuing. What conditions may attach to any future Federal funding is unknown.

In the meantime the VMA (2000) does not apply to 'of concern' ecosystems and endangered ecosystems do not involve compensation.

The Federal Government should be encouraged to support this legislation so that developments in 'of concern' ecosystems are assessable.

Federal Legislation

The Federal *Environmental Protection and Biodiversity Conservation Act (1999)* came into force on July 1st 2000. It makes developments that might significantly impact on endangered species' habitat assessable under the EPBC Act.

A real-life example of how this Act works in practice for the protection of cassowary habitat at Mission Beach follows.

A developer who owns land close to the beach, zoned Urban, put in a subdivision application to cut the 20 hectare block into 39 lots. The land is adjacent to a reserve that is recognised as a Cassowary Corridor in Cardwell Shire Council's Planning Scheme, and it is part of a larger block of forest separating the villages of Mission Beach and Wongaling which is recognised critical cassowary habitat.

An inspection of the land showed it to be rainforest on sand dunes, including the endangered ecosystem 'Tracey type 2b', with a very high water table, and with clear evidence of cassowaries being present.

The Town Planner responded to the developer with a series of questions regarding the height of the land and the water table.

As the land is zoned Urban, there is no requirement for public notification of a subdivision application. The first time the public would know a subdivision had been approved would be when the bulldozers move in to clear the block. In this instance, however, the Town Planner advised the local Progress Association of the application and his response to it.

Environmental Management Group then wrote to Environment Australia saying that this development appeared to trigger the EPBC Act, and asking for an intervention. EA responded that it could not intervene without a referral, and that third party referrals are not allowed. However they said that they would write to the developer and the Council, pointing out their responsibilities under the Act.

This means that if the developer feels that his development might have a significant impact on the habitat of the endangered cassowary, he should refer his development to EA. If, on the other hand, he feels it won't have an impact, he won't refer it, and EA is powerless to intervene. You can guess what most developers would do under the circumstances.

This EA advice appears to conflict with EPBC Section 70 and 71, where it seems the Minister may request the developer submit a referral, or a Commonwealth agency may refer.

Section 69 says a State Government administering agency *may* make a referral, however DNR says it is unclear whether they *will* make a referral.

Actually the developer asked Council to put his development application on hold, and that request was granted, so there has been no clear outcome to the assessment process as yet.

It is essential that if the EPBC Act is to be of any use in protecting cassowary habitat, which must surely have been its intention, the Act must be amended to allow third party referrals.

Cassowary Habitat Acquisitions

The State Government has the right to approach any landholder and offer to buy his land for conservation purposes on agreeable terms.

The *Nature Conservation Act (1992)* gives the State Government the right to stop damage being inflicted on land considered to be of high nature conservation value. This is achieved by the issuing of an Interim Conservation Order. If this means that the property becomes un-commercial, the Government is obliged to acquire the land at an agreed price, or as determined by the Planning and Environment Court. Lack of

funds for such actions means this process has limited application.

Appendix 1 is a joint media release by both State and Federal Ministers, announcing a jointly funded set of acquisitions of freehold land for National Parks. The State Government used their Coastal Acquisition Fund and the Federal Government used Natural Heritage Trust funding.

While these acquisitions are very welcome, the funding sources seem to be ad hoc. This has the long-term disadvantage that planning a comprehensive program of acquisitions becomes difficult. **What is needed is a joint fund labelled, say, "Cassowary Habitat Acquisitions Program" with a five-year budget agreed by all, so that strategic planning can occur.**

Considerable areas of cassowary habitat are to be found on Unallocated State Land (formerly called Vacant Crown Land), and Reserves. The management of these areas is the responsibility of Department of Natural Resources and sometimes Local Authorities as Trustees. Unfortunately neither of these agencies have the necessary expertise to look after this special kind of habitat. The expert management agency is Queensland Parks and Wildlife Service, and so these areas should be transferred to National Parks.

These transfers of land would involve a corresponding transfer of 'notional' money between Departments. One would think that this notional money would be made available to facilitate the transfer of land to the agency with the appropriate management skills, but this does not seem to have been the case.

The State Government should make a commitment to facilitating the transfer of cassowary habitat from USL and Reserve tenures to National Parks. The same applies to critical habitat of the endangered Mahogany Glider. Federal Government could play a part here by helping with the funding of staff to process the necessary paperwork.

The State Government has recently announced that it intends to transfer native forests and timber reserves in the Wet Tropics World Heritage Area to the protected area estate. This program is to be welcomed as it will provide permanent protection and expert management for these areas.

Federal Government could support this process by means of funding channelled through the Wet Tropics Management Authority.

Feral Pigs

Feral pigs are a serious pest throughout the Wet Tropics World Heritage Area, and they have a significant impact on the cassowary as they compete for the same fallen fruits in the forest, and are believed to destroy cassowary eggs in the nest.

Feral pigs also destroy the nests of turtles that leave the relative safety of the GBR WHA to lay their eggs in the dunes.

Department of Natural Resources administers the Community Based Feral Pig Trapping Program, which is funded to the tune of \$189,000 primarily by WTMA, DNR and NHT. The Annual Report 1999-2000 records 1,544 feral pigs were destroyed that year, bringing the total to 10,600 since 1993. This is a tiny fraction of the pig population in the World Heritage Area.

The NHT funding is targeted at studies on the commercial cost-effectiveness of operating the program at increasing levels of funding. This seems to be a pointless exercise as it is clear that the trapping program could be increased ten-fold without any chance of running out of pigs.

There are concerns that pig traps are not designed to eliminate the possibility of catching cassowaries and other non-target species in the traps, and work on this should be funded as a priority.

The best practice at the moment is to use a heavy trigger bar for the trap door, which will only be dislodged by a pig rooting underneath it. However some trappers use hair-triggers to increase the chance of a catch – to the detriment of the cassowary. As the trappers are only paid a nominal fee for their services, and operate on their own, ensuring that trappers use only best practice is problematic.

Federal Government should recognise that this issue is a very important one from the World Heritage and endangered species point of view, and provide funding through WTMA for a substantial increase in trapping effort, as well as on-going research into best trapping equipment and practices.

Road deaths

Cassowaries are not very good at crossing roads. They seem unable to visualise more than a second into the future, and so cannot understand the imminent arrival of fast traffic. Also, when startled, they behave erratically, making things difficult for drivers to know what to do to avoid a collision. As a result, numerous cassowaries are killed on roads, and the two roads in to Mission Beach have the worst record for casualties.

Department of Main Roads is aware of the problem and has been working on a management plan to cater for the cassowaries. The El Arish-Mission Beach Road and the village of Mission Beach are in the Johnstone Shire and the Far Northern District of DMR. The Tully-Mission Beach Road and the villages of Wongaling and South Mission Beach are in Cardwell Shire and the Northern District of DMR. Plans for implementing cassowary-friendly solutions on the two roads are therefore not in step.

The Tully-Mission Beach Road is a very fast road with wide roadside verges, giving good visibility of birds likely to cross the road. However this good visibility is only of value if motorists are going to slow down when they see cassowaries, and this is sadly not the case for a large proportion of motorists. The critical management issue is therefore the introduction of a speed limit on the road where it passes through the World Heritage Area.

In response to a public display and questionnaire held by DMR last October, 76% of responses agreed with a speed limit, and the most popular limit was 75 Kph, which was the slowest offered. So it is disappointing that DMR (Northern) have not yet published what they intend to do about speed limits.

Other management issues under consideration are: the use of white lines, signage and 'rumble strips' to focus drivers' attention on cassowary crossing points; a pull-over area with an information sign explaining the need for special care when driving through the World Heritage Area; and taking advantage of natural topography to direct cassowaries to cross under the road through culverts. MBEMG would recommend that all of these strategies be adopted.

WTMA has been involved in these discussions and the Federal Government could encourage special recognition of World Heritage values by providing funds to help implement the management plan as a priority action.

Dogs

The cassowary has feet that are armed with three very large claws, and a male cassowary is very defensive of its chicks, so a single dog would probably come off worse from an encounter with a cassowary. However packs of dogs are a different matter. There is very little hard evidence to support the argument that dog attacks are a major cause of cassowary deaths, but cassowaries will avoid areas where dogs are common and

this will effectively reduce their available habitat.

Pig hunting with guns and dogs is some peoples' idea of fun, including some Cardwell Shire Councillors. Again, there is very little evidence to show that this contributes to cassowary deaths, but is likely that attack dogs would attack a cassowary if they came across one during a chase, and their presence in cassowary habitat would tend to drive the birds away.

The Federal Government should maintain its refusal to allow hunters with guns and dogs into the Wet Tropics World Heritage Area.

Dave Kimble, for MBEMG

Appendix 1

Environment, Dean Wells

08/04/01

CASSOWARY BENEFITS FROM COASTAL COLLABORATION

JOINT STATEMENT

More than 1000 hectares of coastal Queensland habitat vital to the survival of the endangered southern cassowary has been protected through a partnership between the State and Federal governments.

Queensland Environment Minister Dean Wells and Federal Environment Minister Senator Robert Hill today announced the purchase of several important blocks of coastal land on the ranges near Innisfail in Tropical North Queensland.

Mr Wells said the Environmental Protection Agency had purchased the four blocks in conjunction with the Wet Tropics Management Authority and the Federal Government.

He said the EPA had contributed half the money for the purchases with funding for the three smaller blocks provided through the \$6.25 million Coastal Acquisition Fund, which was established in 1998 to acquire sensitive coastal land.

The Federal Government also contributed 50 percent of the purchases, through its Natural Heritage Trust.

"The Environmental Protection Agency has purchased these properties because they provide a vital link in the coastal ranges that form part of an important cassowary corridor," Mr Wells said.

"This area has been named the Cassowary Coast because of the significance of the cassowary to the regional tourism industry.

"The long-term goal is to establish a coastal wildlife corridor extending about 300km from Cairns to Ingham."

The latest acquisitions comprise three blocks totalling 13.5 hectares adjoining the World Heritage-listed Moresby Range National Park, east of Innisfail.

A fourth property - at Bramston Beach north of Innisfail and known locally as Wyvuri Swamp - totals about 1050 hectares and will be added to the Graham Range section of the Russell River National Park. The foothills section of this purchase is within the Wet Tropics World Heritage Area.

Sen Hill said the cassowary population living in the coastal strip between Cairns and Ingham was one of the most important in the region.

"This population is also the one most threatened by continued clearing of the rainforest," he said.

"The cassowary plays a unique role in the rainforest's ecology. Many of the tree species in the rainforest depend on cassowaries to spread their seeds.

"This solitary bird plays a crucial role in maintaining the diversity of the rainforest plant species in the Wet Tropics World Heritage Area."

During the last 25 years a rapid decline in the cassowary population has resulted in the bird being officially listed as an endangered species with only an estimated 1200 to 1400 individuals remaining.

About 40 percent of the cassowary's critical habitat has been cleared in areas to the south of Cairns during the last seven years and 62 cassowaries have been killed, the majority by vehicle impact, between 1986 to 1999 in the same area.

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