

Saving the Southern Cassowary

By Ruby Marti, Year 10

North Queensland is home to many natural and ancient wonders of the world ranging from the Great Barrier reef to the rainforests spread across the state's north. However, every year, 450,000 hectares of native bushland is cleared in Queensland **(1)** alone, endangering the population of Southern cassowaries **(2)**. Originally the habitat of the Southern cassowary was dense with native Queensland vegetation with no fragmentation between the different habitats **(3)**. However, now, as shown below (Figure 1) there are only a few scarce habitats (red), all separated by roads and buildings, making it deadly for a cassowary to move from one habitat to another due to traffic and feral animals. The purpose of this report is to prove that the current Queensland native vegetation clearing movement is the largest threat to the Southern cassowary.

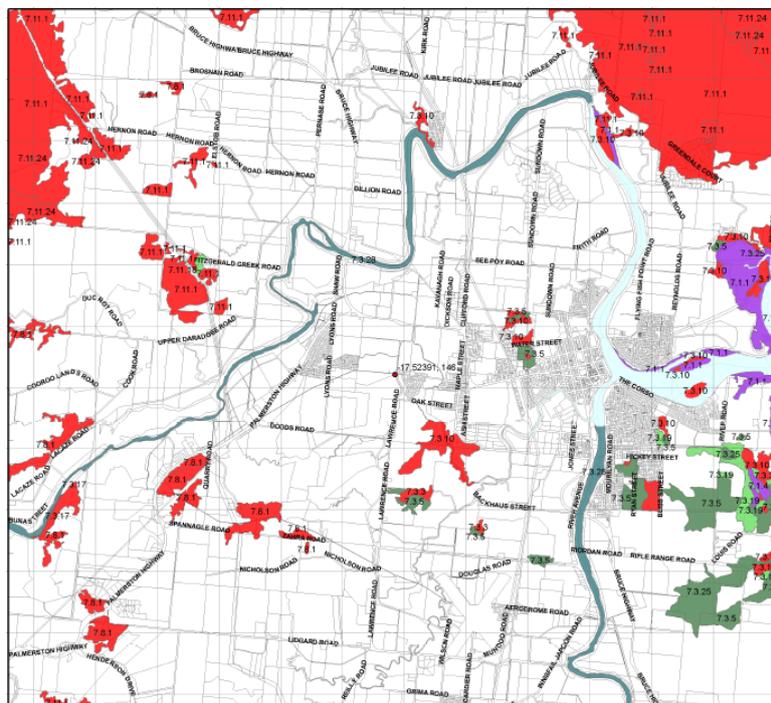


Figure 1: Cairns Cassowary habitat map

The Southern cassowary is alarmingly threatened by the following threats **(4)**:

Primary Threatening Processes	Secondary Threatening Processes
<ul style="list-style-type: none"> • habitat clearing • habitat fragmentation • population fragmentation • genetic drift • stability of preferred breeding areas • natural catastrophic events e.g. cyclones 	<ul style="list-style-type: none"> • roads and vehicle traffic • domestic and feral animals • diseases e.g. Aspergillosis, avian tuberculosis, parasites • reduced access to drinking water • habituation with humans

Table 1: Cassowary threats

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Many people believe that because Australia is a large country with a small population, unlimited and unrestricted land clearing won't cause harm or hurt. Well, an estimated 13 major Australian species are becoming extinct fast, vastly due to the major impulse land clearing over 450,000 hectares every year. But, as all politicians do, blames have been shared and many have said that the major threat to the cassowary is roads. Of which is true, with car accidents causing a large amount of cassowary deaths (5) however it is a direct result from the impact of land clearing. After all, roads weren't already built when the Englishmen settled. To add, habitat fragmentation, population fragmentation, car accidents, dog attacks and stability of preferred breeding areas are all caused by land clearing.

The following image (Figure 2) compares the Southern Cassowary's native environment (yellow) with land cleared (red).

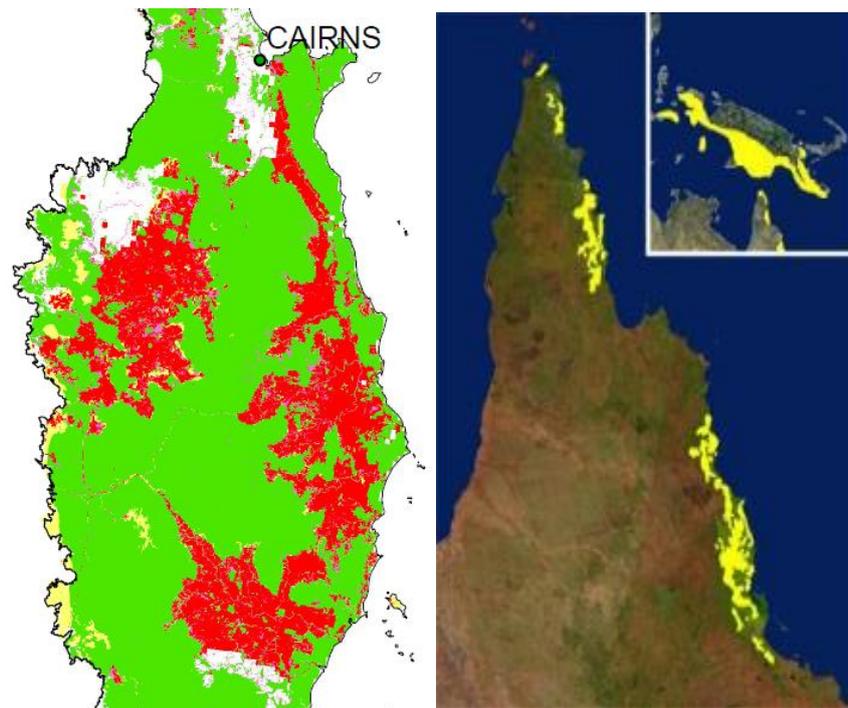


Figure 2: Cassowary habitat vs Land Cleared.

As you can see, the predicted habitat of the Southern Cassowary (right) is highly dense and populated in the Cairns to Mission Beach vicinity. On the left, the red indicates the land already cleared and the green not cleared. If you look closely at the habitat (yellow) on the left and compare it with the patches of red on the right, you'll notice that both areas are at fairly similar habitats. This is highly alarming and although the image on the left displays a lot of green, the patches of cleared land and roads fragment this environment, making it virtually uninhabitable. To add salt to the wound, the increasing rates of land clearance every year will gradually strip the green environment and soon patches of green will be as hard to come by as honest politicians.

With this inhumane 450,000 hectares of native flora being destroyed every year, it is not hard to believe that the Indigenous owners of land have begun to protest and fight for their land (6). This will almost certainly affect the social wellbeing of Australia with riots and protests guaranteed if the trend continues. The political wellbeing of this country will soon largely depend on the environment, as many campaigns will start to revolve around what will be done for the environment. Finally, this impact of land clearing will no longer depict Australia in the tourism light as the 'land of reef,

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rainforest and desert' (7). In fact, soon Australia will be no different to concrete jungles across the world, resulting in drop of economy and global tourism status.

At the outset of this assignment, I emailed several environmental foundations such as:

- Rainforest Rescue (8)
- Queensland Government (9)
- Australia Zoo (10)
- Cairns Tropical Zoo (11)
- World Wildlife Fund (12)

All of the above responded to my email with a strong passion for the preservation of the Southern Cassowary and a plea for the government to stop clearing excess hectares of land. So, the positive stakeholders for the preservation of the Southern Cassowary and native flora are any environmental organisation that is against the annual clearing of land in cassowary habitat. The negative stakeholders are those who promote the annual land clearing such as the Land clearance division of the Queensland Government.

To conclude, this very disappointing and tragic change to native cassowary environment will continue the way it is unless something is done to stop it (13). I have devised two strategies that may lessen the effects of land clearing on Southern cassowaries. The first strategy, a breeding program to help sustain and repopulate the species in Australia, through breeding sites and programs across the state. The second, a national plea to end the direction in which Australian land clearing is headed, possibly sustaining the population of Southern cassowary as well as a variety of other species threatened by habitation clearing. However, in this quality of environment, breeding will be difficult, as shown on the image below (Figure 3).

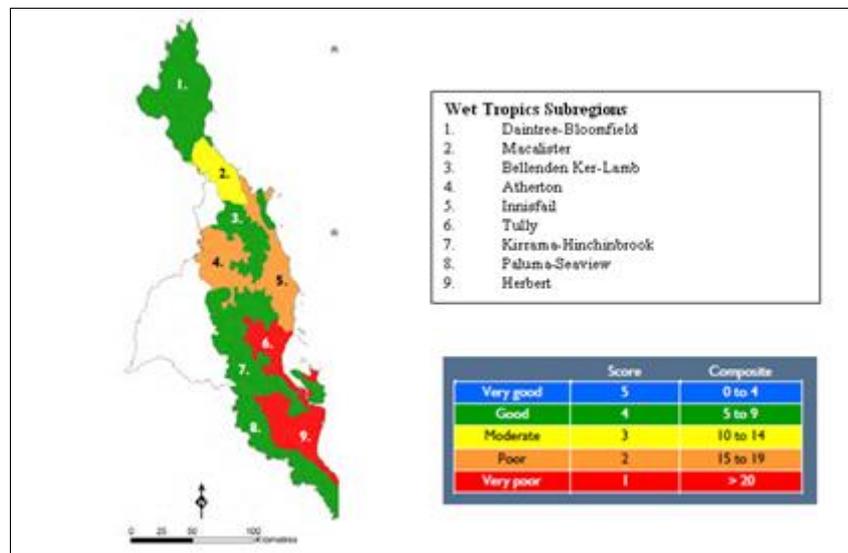


Figure 3: Quality of Native vegetation condition.

On the other hand, this strategy would not consequent in a major social or political backlash, but it would cost a fair amount of money. The second strategy may result in a major political backlash if the plea is successful and may not do anything in order to relinquish the population of Southern cassowary. So, I recommend that the most successful strategy to tackle Southern Cassowary

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endangerment would be to plea to the government to cut clearing rates by at least 35% to then sustain cassowary environment and set a suitable platform to further breeding programs and centres, resulting in social and environmental progress.

Bibliography

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- (2) <http://www.environment.gov.au/resource/southern-cassowary>
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