

5.5. PETS IN THE WET TROPICS SURVEY REPORT

REPORT AUTHOR(S)	Sara Roberts, Team Leader Local Laws
GENERAL MANAGER	Nicholas Wellwood, General Manager Operations
DEPARTMENT	Sustainable Communities

RECOMMENDATION

1. That Council receives and notes the report.
2. That Council support the development of further educational and operational initiatives to reduce the potential impact to cassowaries and other native animals through:-
 - Responsible pet ownership; and
 - Reporting of stray dogs; and
 - Habitat protection; and
 - Traffic impacts; and
 - Preventing the feeding of native animals.

EXECUTIVE SUMMARY

Council adopted an Operational Plan initiative in the 2016-17 year to increase the Local Laws presence and undertake an education campaign in relation to dog control and cassowaries north of the Daintree River. A number of surveys were conducted to gauge the level of awareness of the impact of domestic animals on Cassowaries and their habitat, and a brochure was developed for distribution with key educational messages around Pets in the Wet Tropics.

Council staff launched the survey at the 2016 World Cassowary Day at Cape Tribulation and then undertook distribution of the survey through key businesses north of the Daintree River and in person surveying, where possible.

BACKGROUND

Previous research has indicated that the Southern Cassowary population is generally in decline and the Southern Cassowary is listed as endangered. While a number of significant threats have been identified, including the significant loss of habitat and traffic strikes, dog attacks were also identified as a threat in the Environmental Protection Agency's Recovery Plan for the Southern Cassowary, released in 2007. Whilst dog complaints in the area north of the Daintree River are relatively low, incidents of alleged dog attacks on cassowary chicks have been reported and various complaints relating to roaming dogs and the potential impact these dogs could have on cassowaries led to the development of the operational initiative.

COMMENT

The attached report (Attachment 1 – Survey Report) contains data that shows that in the follow-up survey the level of awareness of residents north of the Daintree River relating to the keeping of dogs was less than 50%, with answers ranging from 26% - 69%. The follow-up survey was conducted after the release of the supporting education material and an initial survey.

The answers with lower results related to the number of cats and dogs that can be kept in the Conservation Planning Zones in the area north of the Daintree River. However, it should be noted that when the Conservation Planning requirements for dogs and cats were introduced via the local laws in 2011, no education or advertising of the new requirements was undertaken by Cairns Regional Council.

Sixty-five percent (65%) of respondents believe that dogs are a problem in the Daintree area with irresponsible dog owners, hunting dogs and dogs from outside the Daintree area being the top contributing factors negatively impacting the area. Many residents want to see more done to encourage responsible pet ownership and better regulation of domestic dogs in the Daintree Area.

Over 90% of respondents also believe that feral pigs have an impact on cassowaries in the Daintree area and that the feeding of cassowaries was potentially harmful to the birds.

The survey reaffirmed the complexity of managing resident, tourism and business expectations in areas of significant ecological value. It is clear that more needs to be done to protect iconic species, such as the Southern Cassowary and their natural habitat. The survey results encourage a number of key actions including:-

1. Better management of domestic dogs in the Daintree area (i.e. responsible pet owners).
2. Additional resources for the management of feral pigs in the Daintree area
3. Educational programs to stop the feeding of cassowaries and highlight their significance.
4. A review of traffic slowing measures in the Daintree area.
5. A review of the appropriateness of pig-hunting in the Daintree area.

PROPOSAL

It is recommended that the contents of the report be noted and that the potential impacts identified that can impact on native animals be used in the development of further educational and operational initiatives. These initiatives will aim to reduce the potential impact to cassowaries and other native animals through:-

- Responsible pet ownership; and
- Reporting of stray dogs; and
- Habitat protection, including pest and weed management; and
- Traffic impacts; and
- Preventing the feeding of native animals.

Staff have been proactive in developing information resources and liaising with other agencies involved in the protection of the fauna in the Wet tropics area. Whilst the survey was targeted at a section of the Shire, lessons learned and resource development can be applied throughout the Shire and in particular to other developed areas that share boundaries with important habitat areas for native animals.

The information gathered is a useful reference when considering management options relating to dogs, particularly with consultation processes and the development of local laws and open spaces initiatives.

FINANCIAL/RESOURCE IMPLICATIONS

Ongoing initiatives will require resourcing as required.

RISK MANAGEMENT IMPLICATIONS

Failure to recognise the importance of native wildlife within the Shire and the potential interactions between domestic animals and fauna poses a potential reputational risk to Council.

SUSTAINABILITY IMPLICATIONS

Economic: The Wet Tropics and its natural flora and fauna are a major drawcard for visitors to the Shire, injecting significant income into the local economy. Cassowaries are an iconic species within the Wet Tropics area.

Environmental: The Southern Cassowary is considered a 'keystone species' in the Wet Tropics due to its critical role in dispersing rainforest plant seeds. Ensuring dogs are kept appropriately and not impacting on native wildlife is highly desirable.

Social: The Daintree can be an isolating place and some residents consider their dogs to be part of their family. This should be considered with any future decisions relating to dog management and conservation efforts.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2014-2019 Initiatives:

Theme 4 - Engage, Plan, Partner

4.2.2 - Provide leadership to secure beneficial social, environmental and economic outcomes for the Shire.

COUNCIL'S ROLE

Council can play a number of different roles in certain circumstances and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

Regulator Meeting the responsibilities associated with regulating activities through legislation or local law.

CONSULTATION

Internal: Open Spaces

External: Terrain NRM, Wet Tropics Management Authority, Department of National Parks Sport & Racing

COMMUNITY ENGAGEMENT

Council staff launched the survey at the 2016 World Cassowary Day at Cape Tribulation and then undertook distribution of the survey through key businesses north of the Daintree River and in person door to door, where possible. The survey was promoted through Council's Facebook and web pages.

ATTACHMENTS

1. Cassowary Survey Report Sept 2017 **[5.5.1]**

SURVEY REPORT

A snapshot into the impact of domestic and native animals on the Wet Tropics fauna and the protection of the Southern Cassowary

A survey delivered to residents and businesses north of the Daintree River in February 2017.

20 September 2017

DOUGLAS SHIRE
COUNCIL

*Improving Environmental Performance
Ngaral Kulji Bubungu - Eastern Kuku Yalanji
Pulmpa dakit jarral-a-kaling - Yirrganydji*

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Survey Report

Executive Summary

The area north of the Daintree River contains land of extremely high biodiversity value and is where two World Heritage areas meet – the Wet Tropics World Heritage Area and the Great Barrier Reef World Heritage Area. It is also home to the endangered Wet Tropics Southern Cassowary (*Casuarius casuarius johnsonii*).

Council undertook a survey to collect information from residents and local businesses located north of the Daintree River to gather information on the impact of native and domestic animals on the Southern Cassowary and their habitats. The survey was launched on 24 September 2016 at World Cassowary Day. This was followed up by a second survey facilitated by a consultant to gauge the level of resident knowledge about the impact of domestic dogs on the natural environment and specific laws applicable to areas north of the Daintree River.

There are 710 registered people on the electoral role in the following localities north of the Daintree River: Bloomfield, Cape Tribulation, Cow Bay, Degarra, Diwan, Forest Creek, Kimberley and Thornton Beach (correct on 24 August 2017). The survey was completed by 57 residents and/or local businesses; the results therefore represent the views of 8% of the target population.

Almost all residents/local businesses (56 respondents) who completed the survey believe that feral pigs have an impact on cassowaries in the Daintree area and it was widely reported that more needs to be done to better control feral pig numbers. 34 residents and/or local businesses who completed the survey believe that dogs are a problem in the Daintree area. Irresponsible dog owners, hunting dogs and dogs from outside the Daintree area were said to be among the top contributing factors negatively impacting the area. Other reported threats to cassowaries highlighted by the survey include: the feeding of cassowaries by tourism operators and speeding vehicles.

Council has a number of initiatives which aim to protect and restore the Wet Tropics bioregion and endangered species. This includes Council's Planning Scheme, Local Laws and various revegetation, disaster recovery and pest management programs. Details of which are included in the report.

Introduction

The area north of the Daintree River contains land of extremely high biodiversity value and is home to the endangered Wet Tropics Southern Cassowary (*Casuarius casuarius johnsonii*). Council undertook a survey to collect information from residents and local businesses located north of the Daintree River to gather information on the impact of feral and domestic animals on local fauna, and specifically their impact on cassowaries and their habitats.

Background

Settlement Areas North of the Daintree River

The settlement areas north of the Daintree River are located in the northern half of the Douglas Shire on land located predominantly to the north and east of the Daintree River. It includes the localities of Bloomfield, Cape Tribulation, Cow Bay, Degarra, Diwan, Forest Creek, Kimberley and Thornton Beach. The area contains land of extremely high biodiversity value and is where two World Heritage areas meet – the Wet Tropics World Heritage Area and the Great Barrier Reef World Heritage Area. The Daintree River – Bloomfield River local plan, contained in the Proposed Douglas Shire Planning Scheme recognises the significant value of the land and aims to ensure the areas within the local plan are appropriately managed to protect biological diversity, water catchment quality, ecological functioning, beach protection and coastal management, scenic amenity, and historical and cultural values. The local plan is divided into six precincts which include a conservation precinct and low impact residential, commercial, community, rural and tourism areas.

Wet Tropics Bioregion and World Heritage Area

The Wet Tropics bioregion has some of the oldest continuously surviving tropical rainforests on earth [Wet Tropics Management Authority 2016a]. Despite comprising a small proportion of Australia (0.26%), the bioregion supports the highest biodiversity of any region. Over 2,800 plant species from 221 families are found in the bioregion, with more than 700 species (25%) being endemic to the area [Wet Tropics Management Authority 2016b]. In 1988 a large proportion of the bioregion was inscribed on the World Heritage List due to its outstanding universal value [UNESCO 2017]. Despite the area's significance, long term monitoring indicates that the biodiversity of the Wet Tropics is declining, with many species already reduced in both distribution area and population size. The endangered southern cassowary is of particular concern.

Southern Cassowary

The Southern Cassowary (*Casuarius casuarius johnsonii*) is a large flightless bird found in north Queensland rainforests and associated vegetation mosaics. The cassowary is an iconic symbol of the Wet Tropics and is considered a 'keystone species', due to its critical role in dispersing rainforest plant seeds. Queensland's Wet Tropics cassowary population is in decline and has been listed as 'Endangered' under the Queensland Nature Conservation Act 1992 [EPA 2017]. In 2007 the Environmental Protection Agency (EPA) released a Recovery Plan for the Southern Cassowary [EPA 2007] which identified eight main threats to the Wet Tropics cassowary population, these are:

1. *Habitat loss from clearing: more than 80 per cent of coastal lowland habitat has gone.*

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2. *Habitat fragmentation: much of remaining habitat is fragmented, isolating groups and disrupting movement.*
3. *Habitat degradation: through invasion of weeds such as pond apple, and changed fire regimes.*
4. *Roads and traffic: cassowaries are killed by vehicles on roads.*
5. *Dog attacks: urban development brings more domestic dogs.*
6. *Hand feeding: brings cassowaries closer to vehicle traffic and dogs.*
7. *Diseases: aspergillosis, avian tuberculosis and parasites.*
8. *Natural catastrophic events: cyclones.*

Existing Council Protection Initiatives

Council has a number of initiatives which aim to protect and restore the Wet Tropics bioregion and endangered species. This includes Council's Planning Scheme, Local Laws and various revegetation, disaster recovery and pest management programs.

1. Habitat Clearing and Fragmentation Management

Council is mindful of its responsibility in safeguarding and protecting the natural environment. The existing and Proposed Douglas Shire Planning Scheme reflect this by regulating the clearing of native vegetation and development in the Douglas Shire. It is more stringent in Conservation Planning Areas, particularly with regards to development proposals. Council also works within the Wet Tropics Management Authority's (WTMA) protection frameworks which aim to protect, conserve and rehabilitate Wet Tropic bioregion areas. In addition, Council has a number of revegetation initiatives across the shire. In 2016/17 Council's nursery planted, sold or distributed 16,777 native plants as part of revegetation programs, educational initiatives and sales to local community groups and businesses.

2. Roads and Traffic Management

Council has deployed a number of speed bumps north of the Daintree River to slow traffic down in key areas, particularly in known cassowary crossing areas.

3. Invasive Plants (Weed) Management

Weeds can disrupt ecosystems, compete with and replace native plants, reduce food and shelter for native species, change fire regimes and create soil erosion. The number of known weed species in the Wet Tropics region has grown rapidly over the past 50 years to over 500 species [WTMA 2017]. Council's Douglas Shire Biosecurity Plan 2017 identifies a number of invasive plants found in the Shire and prioritises actions to reduce their impact. Council currently runs a number of programs targeting invasive plants which include: the siam weed eradication program, hiptage eradication program and the miconia species eradication program. In appropriate areas Council minimises the use of pesticides on invasive plants by utilising steam weeding processes.

4. Feral Animal Management

Feral pigs are highly destructive animals; they damage and destroy native vegetation, compete with native species for food and spread weeds, pathogens and parasites. Over the past 12 years Council's feral pig trapping program has removed more than 6,000 destructive feral pigs from the Wet Tropics. Council has allocated additional funds to the program in 2017/18 which will fund a trial of enhanced

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pest management technology which utilises motion activated sensors, camera technology and remote trapping gates.

5. Domestic Animal Management

Without appropriate management domestic animals, in particular dogs can be highly destructive to the natural environment. In order to ensure the protection and ecological integrity of land and native species the Douglas Shire Local Laws under Subordinate Local Law No. 2 (Animal Management) provides regulation of the keeping and control of animals within the Douglas Shire. This includes minimum standards for the keeping of animals, including enclosures and the control of animals in public places.

6. Disaster Management

Council has an active disaster management philosophy which embraces mitigation, prevention, preparedness, response and recovery strategies. Council's Local Disaster Management Plan 2016 (Douglas Shire Council 2016) identifies the requirement to work with stakeholders, including National Parks and Wildlife Service (NPWS) to take necessary steps to restore the natural environment after a disaster event.

7. Educational Campaigns

Council supports a number of environmental awareness programs including World Cassowary Day. This is an annual event about celebrating and showcasing the Southern Cassowary and the conservation efforts of individuals and groups working to protect the species and their habitats. Other environmental initiatives which Council actively supports include: Plastic Free Douglas, Clean Up Australia Day and various local community group and school beach clean up and educational events. In addition, Council has prepared and distributed a 'Pets in the Wet Tropics' educational brochure about how to protect pets and be a responsible pet owner in the Wet Tropics (**See Attachment 1**).

Cassowary Survey

On 24 September 2016 at World Cassowary Day, Council distributed a survey to collect information on the impact of native and feral animals on cassowaries and their native habitat. This was followed up with a face-to-face survey and an online version targeting residents and businesses north of the Daintree River. A second survey facilitated by a consultant (The 20/20 Group) took place to gauge the level of resident knowledge about the impact of domestic animals on the natural environment and laws applicable to the keeping of domestic animals in the Douglas Shire.

1. Survey One: World Cassowary Day September 2016

Survey Methodology

The survey was launched at World Cassowary Day on 24 September 2016. Council officers manning the World Cassowary Day Council information booth facilitated the 33 question survey (**See Attachment 2**) face-to-face. An online version of the survey was launched at the same time, where respondents could follow a link advertised on Council's website and Facebook page. In addition, Council officers went door-to-door to 300 residential and business premises north of the Daintree River between 2-21 February 2017. Surveys were also left in drop boxes at designated local

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businesses and advertised on posters in a variety of locations, including the local newspaper. The educational brochure, 'Pets in the Wet Tropics' was also distributed throughout February 2017.

Sample Characteristics

A total of 57 surveys were completed either face-to-face, in hard copy or via Council's online version. The majority of respondents were local residents and businesses. There are 710 registered people on the electoral roll in the following localities north of the Daintree River: Bloomfield, Cape Tribulation, Cow Bay, Degarra, Diwan, Forest Creek, Kimberley and Thornton Beach (correct on 24 August 2017). The results therefore represent the views of 8% of the target population.

Survey Results

Face-to-face, hard copies and online survey results were combined and the results were as follows:

Impact of Dogs on Wildlife:

Whilst 50 of the respondents think that dogs can have an impact on cassowaries, only 15 of respondents have seen dogs chasing cassowaries in the Daintree Area. When asked whether they had seen dogs chasing other wildlife in the Daintree Area 27 respondents said they had. These dogs were mostly resident dogs (39%), non-resident dogs (23%) and abandoned dogs (28%).

Wandering Dogs and Reporting Them:

38 respondents said that they have problems with wandering dogs in the Daintree Area, 58% of these dogs were said to be resident dogs. However, only 15 respondents said they report wandering dogs to Council. Of those who said they didn't report wandering dogs, the top three answers were: 'don't expect anything will be achieved' (28%); 'report it to the owner of the dog' (26%); or 'don't want to create issues with the neighbours' (12%). The majority of respondents (44 residents/local businesses) were aware that they could report wandering dogs to Council.

Domestic Dogs in the Daintree Area:

37 respondents held the view that dogs are a problem in the Daintree Area. The top three contributing factors respondents chose were: 'irresponsible owners', 'hunting dogs' and 'dogs from outside the Daintree Area'. Only 2 respondents said dogs have no impact on cassowaries in the Daintree Area.

Other Key Threats on Cassowaries in the Daintree Area:

Almost all respondents (56 residents/local businesses) believed pigs have an impact on cassowaries in the Daintree area (minimal, moderate or major impact) and 53 respondents believed speeding cars can have an impact. The majority of respondents (52 residents/local businesses) were aware that feeding cassowaries is more harmful than helpful. When asked whether they had seen any feral animals in the Daintree Area, 98% said they had seen pigs, 40% had seen feral dogs, 35% had seen feral cats and other responses included cane toads, dingoes and goats.

When asked to rank feral pigs, cats, dogs or other animals as those which contribute most to environmental damage, respondents overwhelmingly said feral pigs were the most damaging in the Daintree Area, this was followed by feral dogs, cats, cane toads and non-native birds. The open ended question asking respondents to explain their rankings, this included responses such as:

- *'Pig numbers out of control'*

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- *'Pigs actually attack the cassowary chicks and kill them'*
- *'Dogs kill cassowaries'*
- *'Cats kill lots of native birds and reptiles'*
- *'Cane toads are everywhere'*

67% of respondents said they regularly, occasionally or rarely see domestic or feral cats in the Daintree area.

Council Trapping Program

When asked whether respondents would be willing to let Council set traps on their property targeting feral animals such as pigs, cats or dogs 45 respondents said they would be willing. The majority of respondents (49 respondents) were aware of Council's feral pig trapping program.

Cassowary Protection Initiatives

The final question asked respondents an open question about how cassowaries can be better protected in the Daintree Area. The majority of respondents (91%) answered this question, responses related to:

- **Dogs - Domestic:** answers relating to domestic dogs ranged from encouraging responsible pet ownership and better regulation of domestic dogs, to banning larger breeds and complete dog bans north of the river.
 - Encourage responsible pet ownership – *'Allow dog ownership only if dogs are kept in an enclosed fenced area... providing an off leash area north of the Daintree could work with responsible owners'*
 - Better regulation – *'Enforce current one dog per owner limit – no enforcement now'. 'Set up dog ranger patrols if there is a wandering dog problem'. 'Get rid of problem dogs'.*
 - Banning larger breeds – *'Ban large domestic dogs north of the river'*
 - Complete dog ban – *'Get rid of all dogs. Ban all dogs from entering National park areas'.*

Some respondents however had concerns about the tactics mentioned above, this included *'blanket banning of certain breeds won't work'*. Whilst others were concerned responsible pet owners would be penalised for the few who did the wrong thing, *'The majority of dog owners here are very responsible and very aware of the impact dogs can have'*.

- **Dogs - Pig Hunting:** the majority of respondents who mentioned pig hunting dogs were of the opinion that more needed to be done to regulate, restrict or ban pig hunting in the Daintree. Several respondents said that pig dogs should be prevented from boarding the Daintree Ferry.
 - Regulate - *'Monitoring and prevention of large dogs on the ferry'*
 - Restrict - *'Do not let hunting dogs over the ferry unless they have a permit and use GPS tracking systems on their dogs'.*
 - Ban - *'The introduction of by-laws prohibiting recreational pig hunting in a heritage area'*

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- **Dogs – Wild/Dingoes:** Three respondents mentioned dingoes [wild dogs] as being of key concern in the area.
 - *'Dingoes can have a major impact on animals in the area'*
 - *'Dingoes are a big problem'*
- **Cats - Domestic:** The keeping of cats is currently banned in Conservation Areas in the Douglas Shire. All respondents who mentioned cats in this question wanted either restricted ownership or complete bans.
 - *'Do not let cats anywhere in this area (north of the river)'*
 - *'Ban domestic animals in ALL national parks & cassowary sensitive areas'*
- **Feral Pigs:** respondents ranked feral pigs as the number one animal contributing most to environmental damage (Question 26). All respondents who mentioned feral pigs as a key concern called for more action to reduce the numbers, ideas on how to do this included:
 - *A 'bounty on killing pigs'*
 - *'Pig baiting with contraceptives instead of toxins'*

Two respondents also mentioned that pig trapping was problematic, due to *'cassowaries also getting caught in the traps'*.

- **Tourism and Education:** Two respondents mentioned that a number of tourism industry vehicles are feeding cassowaries and that education was required to stop this practice.
 - *'Tour bus drivers are feeding cassowaries'*.
 - *'Removal of food source on sides of the road. Education to bus drivers not to feed'*.
 - *'Better educational signage at the ferry and on the north side of river reminding drivers to respect the wildlife'*.
- **Traffic Management Measures:** The majority of responses relating to traffic management measures said more needed to be done to slow traffic down, ideas included:
 - *Speed limits – 'Enforcement of speed limits'*
 - *Signage – 'More signs with more information'*
 - *Speed humps – 'More speed humps in appropriate areas'*
 - *Speed cameras – 'Install multiple speed cameras throughout the area'. 'Ask police to install speed camera[s]'*.
 - *Wildlife crossings – 'Create wildlife crossings (for all wildlife use) in key areas near busy roads'*.
- **Cassowary Research/Breeding Facility:** Two respondents mentioned the need for a cassowary research or breeding facility.
 - *'Funding for a cassowary research facility i.e. tag and release, monitoring behaviour in the wild. Education and information resource centre. And ultimately a rehabilitation facility for injured cassowaries 'specifically based over the river'*
 - *'Active breeding program [for cassowaries]'*

2. Follow Up Survey: 7-12 June 2017

Survey Methodology

Consultancy group, The 20/20 Group surveyed residents who lived north of the Daintree River. The survey consisted of six questions (**See Appendix 3**) and involved a combination of face-to-face and telephone interviews. The face-to-face surveys took place at the Daintree ferry crossing and at the local 'Friday Fish and Chip night' at the Crossroads Cafe. The six survey questions were designed to determine whether residents were aware of the Cassowary Survey and if so had gained and/or retained knowledge from undertaking the survey or from reading the distributed 'Pets in the Wet Tropics' brochure.

Sample Characteristics

A total of 35 surveys were completed by residents either face-to-face or by telephone. The 35 respondents were residents in one of the following areas: Cow Bay, Diwan, Cape Tribulation or Cooper Creek. The length of time residents had lived in the area varied from one year up to 39 years.

Survey Results

Number of Dogs Allowed Per Property

When asked how many dogs are allowed per property north of the Alexandra Range, only 34% correctly said one dog. 63% of respondents either did not know or thought residents were allowed two dogs per property.

Number of Cats

When asked whether residents north of the Alexandra Range could have a pet cat, only 26% of respondents answered correctly, choosing 'No'. 43% of respondents thought pet cats were allowed, whilst 31% were unsure. Six respondents who thought cats were allowed or were not sure said cats should not be allowed in the Daintree Area. One respondent who thought cats were allowed said they believed they had to be registered and restrained.

Stray Dogs

When asked about what they would do if they saw a stray dog, the most common response (46%) was to ring the Council. One person said if the dog was friendly, they would tie it up on their premises and alert Council Officers. The second most common response (23%) from respondents was to actively look for the owner, responses included:

- *'I'd take the dog home and put up notice boards advertising a dog had been found'*
- *'I'd take a photo of the dog and display it on social media'*
- *'I'd ask neighbours or ring friends'*
- *'I'd tie the dog up outside IGA [the local supermarket] and hope that someone would claim it'*
- *'I'd take the dog home, but wouldn't tell Council'*

11% said they would do nothing if they saw a stray dog, whilst 9% said they would simply chase it away. 9% of respondents said they would shoot a stray dog, although one respondent confessed

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that they did not own a gun. Interestingly, one respondent said that everyone looks after local dogs and if there are any dogs loose then they must belong to people not living in the area.

Off-Leash Areas

When asked about 'off-leash' areas for dogs, 69% of respondents correctly said there were none, however some respondents further commented by saying:

- *'No, but locals use Cow Bay Beach'*
- *'Not officially, but locals have an understanding/agreement for 'off leash' at Myall and Coconut beaches'*

Respondents who believed there were 'off-leash' areas for dogs named one or more of the following locations: Cow Bay Beach, Myall Beach and Coconut Beach, Cape Kimberley and South Noah.

Recall of 'Pets in the Wet Tropics' Information Brochure

When asked if they recalled seeing any printed material about pets in the Wet Tropics, 51% of respondents said they did.

Responses included:

- *'Yes I've seen it on Facebook and on the Cow Bay Forum Chat Group'*
- *'Yes on the notice board'*
- *'Yes, I did the Council survey but forgot to hand it in'*
- *'I heard about the survey, but I couldn't complete it online because I don't have internet.'*

Although not asked by the interviewer, four respondents mentioned feral pigs:

- *'I've seen more pigs than dogs'*
- *'Feral pigs are the biggest problem and Council's management of pigs is not serious. Dogs are not the problem'*

Key Insights

Whilst the majority of residents who completed the survey thought dogs were a problem in the Daintree area, they also thought feral animals, the feeding of cassowaries and speeding cars had a negative impact on cassowaries. Despite this, the overall level of awareness of domestic animal management was fairly low, particularly around the number of dogs and cats allowed on properties in the Conservation Area.

Impact of Dogs on Cassowaries

37 of the 57 residents/local businesses who completed the survey believe that dogs are a problem in the Daintree area. Irresponsible dog owners, hunting dogs and dogs from outside the Daintree area were the top contributing factors negatively impacting the area. Many residents want to see more done to encourage responsible pet ownership and better regulation of domestic dogs in the Daintree Area. Pig hunting dogs are of particular concern to many residents, with many calling for better regulation (e.g. GIS tracking), restriction (e.g. permits) or a complete ban in the Daintree area (e.g. preventing pig dogs on the Daintree Ferry).

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Impact of Feral Animals on Cassowaries

Almost all residents (96%) who completed the survey believe that feral pigs have an impact on cassowaries in the Daintree area and it was widely reported that more needs to be done to better control feral pig numbers in the Daintree area.

Impact of Feeding Cassowaries

Almost all residents (91%) who completed the survey were aware that feeding cassowaries is more harmful than helpful. In addition, it was reported that a number of tourism industry vehicles are feeding cassowaries and more needs to be done to prevent this practice from occurring.

Impact of Vehicles on Cassowaries

The majority of residents (93%) who completed the survey believe that speeding cars can have an impact on cassowaries in the Daintree area and many wanted to see more being done to slow traffic down. Respondents said this could be done by enforcing speed limits (e.g. speed cameras), additional speed humps in appropriate areas or better educational signage.

General Level of Awareness

The follow up survey suggests that the level of awareness of residents north of the Daintree River with regards to domestic animal management was less than 50%. Just over half the respondents (51%) recalled seeing the 'Pets in the Wet Tropics' brochure, however less than half answered the knowledge questions correctly; with the exception of the 'off-leash' areas question where 69% of respondents correctly said there were no off leash areas in the Daintree.

Topics	Number of Respondents Answering Correctly
Dogs allowed per property	34% correct
Cats allowed per property	26% correct
Response to a stray dog	46% correct
Off-leash areas	69% correct
Recall of 'Pets in the Wet Tropics' Brochure	51% recalled seeing the information

Conclusions

The survey reaffirmed the complexity of managing resident, tourism and business expectations in areas of significant ecological value. The Wet Tropics bioregion has some of the oldest continuously surviving tropical rainforests on earth and its beauty and remoteness are some of the many reasons why residents choose to live in the area. It is clear that more needs to be done to protect iconic species, such as the Southern Cassowary and their natural habitat. The survey results encourage six key actions, which are:

1. Better management of domestic dogs in the Daintree area (i.e. responsible pet owners).
2. Additional resources for the management of feral pigs in the Daintree area
3. Educational programs to stop the feeding of cassowaries and highlight their significance.
4. A review of traffic slowing measures in the Daintree area.
5. A review of the appropriateness of pig-hunting in the Daintree area.

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6. An investigation into the feasibility of opening a cassowary research and/or breeding facility north of the Daintree River.

Council can play a variety of roles with regards to new initiatives, these can include: advocate, agent, asset-owner, facilitator, fully-responsible, information provider, part-funder and/or regulator. It is anticipated that other bodies, such as the State Government and the Wet Tropics Management Authority also have a key role to play to assist with the protection of the iconic Southern Cassowary and their habitat.

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Appendix 1: Pets in the Wet Tropics Brochure

Protecting your pets protects the wet Tropics

ENTERTAINING YOUR PETS!
Walk your dog daily in different and exciting places. Provide your dog with toys and treats to entertain it while you're away.
Did you know? The only off-leash area in the Douglas Shire is at the southern end of Four Mile Beach.
National Parks is no place for your pets. Leave them at home if you're going to venture into a National Park.

NEVER DUMP OR RELEASE YOUR PETS INTO THE WILDI!
By dumping or releasing your pets into the wild they can become feral, and cause many problems for the environment, may struggle to survive and suffer unnecessarily. Take the time to find a loving home for your pet.

HOW TO REPORT!
WHAT TO REPORT?
Have you seen a dog wandering around without a leash or a dog without an owner? Let us know! If you can catch it, hold onto it and Council can come and get it.
Have you seen any animals being harassed by dogs or cats? Report it! Have you seen any other feral animals such as cats and pigs? Report it!
If you don't report it, Council doesn't know and cannot do anything about it! Help us help the environment.
Your details are kept confidential!

You can contact:
Douglas Shire Council
64-06 Front St, Mossman QLD 4873
www.douglas.qld.gov.au
e: enquiries@douglas.qld.gov.au
t: 07 4099 9444

DOUGLAS SHIRE COUNCIL

Did you know?
No cats and only 1 dog are allowed per property north of the Alexandra Range Conservation Planning Area.



PETS ARE PART OF THE FAMILY!

RESPONSIBLE PET OWNERSHIP IS:

- Providing adequate food and water, shelter and bedding, stimulus and a suitable living space.
- Providing regular exercise and picking up after your dog.
- Ensuring pets are de-sexed and dogs and cats are micro-chipped.
- Keeping your pet up to date for vaccination and worming.
- Keeping your dog registered with Council annually, and ensuring your dog wears its Council identification tag and cat's collars have bells and ID tags, with phone numbers.
- Keeping your cats inside so they don't have the opportunity to kill the local wildlife and making sure your cats are inside every night!
- Providing an appropriately sized property for the animal you wish to keep and providing an adequate enclosure to contain your dog or cat on your property.
- Not allowing your pets to wander. Walking them on a lead ensures your pet is under effective control.
- Ensuring your pet doesn't create a nuisance to neighbours, other community members or native animals.
- Understanding that you are responsible for anything your pet does!

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KEEP AN EYE ON YOUR PETS!
During different times of the year you need to keep an eye on your pets for different reasons.

DESEX YOUR PETS
Doing this is a very important part of pet ownership!
For starters it's cheaper to register your dog! Douglas Shire Council offers significant discount on registration for de-sexed dogs. If you don't de-sex your pet you could have the trouble of an unplanned pregnancy. Dogs and cats are also at greater risk of developing some types of cancers when they are not de-sexed and are allowed to breed. Shelters are full of dogs and cats that people don't want, couldn't have any more or weren't what they expected so the animals have been surrendered or dumped. The majority of these animals do not find a loving home and large numbers are euthanised.
Did you know you could also be lumped with a large fine for allowing your dog or cat to breed without an approval? Whether you sell or giveaway these animals you can be fined \$609.00.
When a female comes into heat, she will go searching for a male and vice versa. They will find ways to escape and break in to get to each other. Locking your animal up is not an effective way to prevent pregnancy. The only way to ensure you don't have a pregnant animal on your hands is to de-sex your pet.
For more information about the benefits of de-sexing your pets visit National De-sexing Network (NDN) website, www.ndn.org.au

TRAINING YOUR PETS
Teaching your dog basic manners, socialising, providing enough enrichment and exercise will prevent your puppy from developing stress related behaviors such as inappropriate barking, destructive chewing and aggressive displays. Training your puppy will ensure it knows who is boss, it'll come back when called, sit, stay and allow you to have more control.

FENCING YOUR DOG IN IS NOT ALWAYS THE ANSWER!
Having dog proof fencing around every property is not necessarily the answer. If everyone in the wet tropics area has fencing around their property, cassowaries and other animals cannot move around freely. Other native animals may get stuck in fencing or trapped on one side and more likely to be injured or attacked.
However, Council's local laws require an appropriate enclosure to be maintained to ensure that your pets do not wander. With this in mind, you may need to create a smaller fenced off area or enclosure and consider keeping your animals indoors at night time.
Another alternative is invisible fences; a collar is worn by the dog, if your dog wanders too far from the home base the collar makes a noise, if the dog continues it'll give the dog a mild zap. By training the dog where the boundaries are it will learn where to go safely.

YOUR DOG MUST STAY ON YOUR PROPERTY AND MUST BE WALKED ON A LEAD

Native animals: Can be harmed, harassed and killed by domesticated pets. Ensure you keep your dog on a lead at all times unless in a designated off leash area. Cassowaries can be killed by dogs, there have been many documented cases. Cassowaries are moving around a great deal during April - May as it is their courting time and are more likely to come in contact with dogs. Breeding generally occurs between May-October and dogs can easily disturb males off eggs or separate and kill young chicks. Male cassowaries can have chicks with them year round. Be aware that dogs can kill cassowaries and other wildlife!

Ticks: Paralysis tick season is generally during the dry season. These ticks can be detrimental to your pets. Prevention is better than cure. You can simply give your pet a medicated monthly treatment to help keep it safe.

Cane toads: Cane toads secrete a toxin that can make your pets and native animals very sick. If your dog is frothing at the mouth it could have come into contact with a cane toad. Seek urgent veterinarian attention if you suspect cane toad poisoning.

Snakes: You need to protect your pets from being eaten or injured and like all animals, snakes need to eat and your pet is no exception to the menu. Generally snakes are more active during the early evening to late morning. So if you keep your pets inside you are less likely to have problems.

Pigs: Pigs can be a problem for wildlife but they can also injure your pets. Big male boars with tusks can inflict large wounds or even kill your pets.

Did you know?
Feeding cassowaries and other native animals is more harmful than helpful
As cassowaries develop familiarity with people they become more vulnerable to dog attacks and car strikes.

Appendix 2: Survey One Questions



If you are interested in partaking in the cassowary survey please complete and return it to the collection boxes which are located at the Cow Bay Hotel and the Cape Tribulation IGA Xpress.

If you would prefer you can also complete the survey online follow the links through the Douglas Shire Council website.

<https://douglas.qld.gov.au/curious-cassowary-keen-cassowary-survey-preserve-threatened-species/>

Can you please complete the survey by 17 February 2017.



Cassowary Survey For Residents of Daintree Area

Douglas Shire Council is conducting surveys in the Daintree Area (defined for the purposes of the survey as between the Daintree and Bloomfield Rivers), to capture resident views on cassowaries and identify matters for possible action and collate data in relation to the impact of feral and domestic animals on cassowaries and their habitats. Any information would be greatly appreciated.

Are you aware that the Daintree Area is home to cassowary habitats?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you have a dog?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you have a cat?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Did you know pets are not allowed to wander i.e. they need to remain on the property in an appropriate sized enclosure or on an adequately fenced yard to prevent wandering?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Did you know there are no off-leash areas in the Daintree Area and that all dogs must be on a leash at all times in public places?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Would you like there to be leash free areas in the Daintree Area?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Are you aware of the State and Local legislation on keeping of animals?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you know the impacts that dogs and cats can have on wildlife?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you think dogs can impact on cassowaries?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you see dogs chasing cassowaries in the Daintree Area?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you see dogs chasing other wildlife in the Daintree Area?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If yes to above questions, do you think these dogs were mostly - [You can tick more than one]				
Resident dogs	<input type="checkbox"/>	Non-resident dogs	<input type="checkbox"/>	Abandoned dogs
	<input type="checkbox"/>		<input type="checkbox"/>	Don't know
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Do you have problems with wandering dogs in the Daintree Area?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If yes, do you think these dogs were mostly -				
Resident dogs	<input type="checkbox"/>	Non-resident dogs	<input type="checkbox"/>	Abandoned dogs
	<input type="checkbox"/>		<input type="checkbox"/>	Don't know
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
If you see resident dogs chasing wildlife or wandering, would you see the same ones				
Regularly	<input type="checkbox"/>	Occasionally	<input type="checkbox"/>	Rarely
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Do you report wandering dogs?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If no, is it because: [You can tick more than one]				
You don't expect anything will be achieved	<input type="checkbox"/>	You report it to the owner of the dog	<input type="checkbox"/>	You don't want to create issues with the neighbours
	<input type="checkbox"/>		<input type="checkbox"/>	
	<input type="checkbox"/>		<input type="checkbox"/>	Council is too far away and the dogs wander off
	<input type="checkbox"/>		<input type="checkbox"/>	Other
	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Do you know how to report wandering dogs?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

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Do you hold a view that dogs are a problem in the Daintree Area?				Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	
If yes, what do you feel could be the contributing factors? <small>[You can tick more than one]</small>								
Irresponsible owners	Hunting dogs	Dogs from out of town	Feral or abandon dogs	Local resident dogs				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
What impact do you think dogs can have on cassowaries in the Daintree Area?								
No impact	Minimal impact	Moderate impact	Major impact					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
What impact do you think pigs can have on cassowaries in the Daintree Area?								
No impact	Minimal impact	Moderate impact	Major impact					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
What impact do you think speeding cars can have on cassowaries in the Daintree Area?								
No impact	Minimal impact	Moderate impact	Major impact					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Did you know feeding cassowaries is more harmful then helpful?					Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Have you seen any feral animals such as those listed below in the Daintree Area? <small>[You can tick more than one]</small>								
Pigs	Cats	Dogs	Other	_____				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Which feral animals do you believe contributes the most to environmental damage? <small>[Rank highest (1) to lowest (4)]</small>								
Pigs	Cats	Dogs	Other	_____				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<i>(Optional question - Reason for ranking?):</i>								
How often would you see cats in the Daintree Area?								
Regularly	Occasionally	Rarely	Never					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
If you regularly find feral animal such as pigs, cats or dogs on your property would you allow Council to set traps on your property?					Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Are you aware of the Councils pig trapping program?					Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Do you have any views on how we can protect cassowaries better in the Daintree Area?								
Any extra information or comments you would like to add?								

Douglas Shire Council – Information Privacy Statement

The collection of your information is authorised under the Local Government Act 2009. You are providing personal information which will be used for the purpose of delivering services and carrying out Council business. Your personal information is handled in accordance with the Information Privacy Act 2009 and will be accessed by persons who have been authorised to do so. Your information will not be given to any other person or agency unless you have given Council permission or the disclosure is required by law.

Appendix 3: Follow Up Survey Questions

Survey Two was completed face-to-face or via telephone by consultancy group, The 20/20 Group.

Hello, I am from The 20/20 Group and I'm doing a survey about pets in the Wet Tropics. Would you mind answering a few questions? It will take less than two minutes.

1. Can you tell me how many dogs are allowed per property north of the Alexandra Range?
2. Are residents living north of the Alexandra Range allowed to have a pet cat?
3. If you saw a dog wandering in your area without a leash or collar and don't know where it belongs or who the owner is, what, if anything would you do?

4. Are there are 'off-leash' areas for dogs in your area?

If respondent says YES, ask them to tell you where they are?

5. Over the past six months, do you recall seeing any printed information (could be a leaflet or poster) about keeping pets in this part of the Daintree?
6. Final question, can you tell me how long you have lived in this area?