

BYRRILL CREEK FAUNA & FLORA SURVEY JULY 2009



J. Pearson



COMPILED BY JOANNA GARDNER
564 BYRRILL CREEK RD, UKI. NSW 2484

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I would like to thank the many people who have contributed to this survey: In particular, Helen & Annette from Tweed Valley Wildlife Carers, Rhonda from Bushland Restoration Services, Denise for her survey, Janaki & Pete for their invaluable support, and the residents of Byrriill Creek for their contributions. (The survey is still to be fully collated!)

I try to walk softly on this beautiful land that I live on. We try to keep our carbon footprint to a minimum, and all this has been done powered purely by solar panels & a mini hydro electric plant.

I ask you, in all honesty: is this area, bounded by National Parks, home of endangered & vulnerable species, not to mention all the other animals, the place to run an international car rally for a private profit making company????

Joanna Gardner

INTRODUCTION

Steve Phillips
BioLink,
Ecological Consultancy firm for Repco Rally Australia

Joanna Gardner
564 Byrrell Creek Rd
Uki NSW 2484
Email peter.symons8@bigpond.com
Phone 02 66797039

16th July, 2009

Dear Steve,

I have been a resident and landholder at Byrrell Creek for 25 years. It is a bio diverse area with high conservation riparian status. It is a wildlife corridor linking Mt Warning National Park, Wollumbin National Park, Wollumbin State Conservation Area and Mebbin National Park.

Firstly, I am concerned that during your Ecological Assessment Survey of Byrrell Creek for Repco Rally Australia that there was no community consultation, input or observations of fauna from long term residents who live in this valley, which would have provided valuable insight into your survey. I understand that Janaki Pearson contacted you by phone 2 months ago with information for your survey, but never had any confirmation that you included this within your assessment.

Secondly, the timing of your surveys in late summer and autumn could not be truly accurate nor indicative of early spring when the Repco Rally will be held. It is breeding season, and the fauna is far more active and mobile during spring. Nor does your assessment address the cumulative effect on wildlife of 5 Repco Rallies held over 10 years.

Thirdly, after reading through your report, I question the accuracy of some of your data and the conclusions that you made. Areas of particular concern include the endangered Giant Barred Frog, the endangered Spotted Quoll, vulnerable White-eared Monarch and Bush Hen, both very close to the road, and particularly Koala habitat areas.

Below are sightings from the Byrrell Creek area of Vulnerable & Endangered Species. 14 species so far are recorded.

1. Giant Barred Frog (*Mixophyes iterates*)

There have been 12 sightings of the endangered Giant Barred Frog within the Byrrell Creek area, 7 in close proximity to the road at the Hamlet, including 1 roadkill death ([See photo Appendix 2 & Appendix 1, D. Parkins Survey & Appendix 5](#)). Another sighting at the causeway of Cabbage Tree Creek (on the rally route), 5 at Pretty Gully, 2 of these near Byrrell Creek & in close proximity to Byrrell Creek Road. I understand that one of the reasons that Cadell Rd was removed from the rally route was the high incidence of the Giant Barred Frog there, & a documented study area there. Byrrell Creek shares the same water catchment area, so I would conclude, with the above sightings, that it is also a habitat for the Giant Barred Frog.

2. Spotted-tailed Quoll (*Dasyurus maculates*)

There have been 3 sightings in this area, two in the last 4 years on the Hamlet & at the back of a property on Kyogle Road, near the Byrrill Creek turnoff. During a sighting on Pretty Gully in 1995 the quoll was in the chicken pen & had killed a hen. (Appendix 5).

3. Bush Hen (*Amaurornis olivaceus*, *Gallinula livacea*)

Classified as vulnerable, 2 have been sighted on Byrrill Creek Road in 2 places: Pretty Gully Causeway 2008, and near the Hamlet, 2009 (Appendix 5).

4. The White-eared Monarch, (*Monarcha leucotis*)

Listed as vulnerable, was recorded 19 times from 2002-2004, in close proximity to the road and nesting close to the road (Appendix 1, D. Parkins Survey).

5. The Marbled Frog Mouth (*Podargus ocellatus*)

Classified as vulnerable, is relatively common to the Byrrill Creek area. During 2009 there have been almost daily sightings of resident Marbled Frog Mouths at Pretty Gully (Appendix 5). Also sighted at least 5 times between 2000 & 2001 and photographed (Appendix 1, D. Parkins Survey and photo).

6. Powerful Owl (*Ninox strenua*), Barking Owl (*Ninox connivens*) & Sooty Owl

Were recorded by D. Parkins on the Tweed Shire Council land, the latter quite close to the road (Appendix 1) also at Pretty Gully in May to June, 2009. The Sooty Owl was sighted for 1 week 21/4/01 at Pretty Gully (Appendix 5).

7. Wompoo Fruit Dove (*Ptilinopus magnificus*)

Classified as vulnerable, these birds are heard continually during spring, summer & autumn in the rainforested areas within Pretty Gully. Sightings are rarer, 20 times per year by J. Gardner. Three other residents of Pretty Gully record often hearing them, two have sighted them. At Tallowood, closer to the creek there have been some sightings (Appendix 5).

8. Stephens Banded Snake

Seven sightings in total. In December 2005 a pair mating in the ceiling in a house at Pretty Gully fell from the roof & the local snake man was called in. Three other sightings at Pretty Gully also D. Parkins (Appendix 5 & 1).

9. Glossy Black Cockatoo (*Calyptorhynchus lathami*)

Seen fairly often by 2 residents on the Hamlet whose homes are in close proximity to Casuarina Forests, also at Pretty Gully and Tallowood but rare sightings (Appendix 5).

10. Red legged Pademelon (*Thylogale stigmatica*)

The Tweed Valley Wildlife Records report a female Red Legged Pademelon (vulnerable) in the Brays Creek area in May 2006 (Appendix 3, TVWC Survey).

11. The Stuttering Frog (*Mixophyes balbus*)

Has been observed at Pretty Gully and its call recorded, although not in close proximity to the road (Appendix 5).

12. Koala (*Phascolarctos cinereus*) Habitat Areas

I note on your maps the areas near the Wollumbin State Conservation Area that are core Koala habitat areas & potential habitat. However there are many more areas along Byrrill Creek that are core habitats and corridors for Koalas. The area of Pretty Gully running down

the ridgeline north of Byrill Creek is a core habitat area (Appendix 4 Tweed Shire Ecograph Vegetation Koala Sitings). It has mixed forest of Tallowoods (Koala primary food source) and Grey Gums, Flooded Gums, Iron Barks, Blackbutts and Forest Oaks (Koala secondary food source). Residents hear Koalas frequently. P. Morrison has detailed Diary Sightings since 1995 (See Appendix 6(iii) & Appendix 5 also Appendix 11 film footage Koalas crossing road).

The land "Tallowood" of A. & R. McInerny on the southern side of Byrill Creek, is a core Koala habitat area. They have 2 resident male Koalas close to their house. Their next door neighbours also have resident Koalas (See Appendix 6(ii) Statement). Adjoining McInerny's land along Terragon ridge are the "Ranch" and "The Hamlet". Land holders in these areas consistently hear Koalas in spring & summer and sightings are common in spring. 22 multiple sightings have been recorded. 5 dead Koalas found, 3 killed by dogs, 2 by disease, drought or fire. (Appendix 5 also all Maps Appendix 9).

Koalas on the Road;

We have 6 sightings of Koalas: males, juveniles and breeding females on the road, 5 in close vicinity of Pretty Gully Causeway. GPS Lat 28° 26.53 Long 153° 14.54 Datum WGS84 (Appendix 6(i) Letter M. Bailey and Appendix 6(iv) Letter P. Symons) GPS Lat 28° 26.48 Long 153° 14.54 Datum WGS84 (Appendix 11 Video of October 2006).

It is obvious from this amount of sightings that this area is a Koala corridor linking the land on the south and north sides of Byrill Creek, using a narrow land bridge near the lagoon. Rhonda James, ecologist, supports this theory (See Appendix 8(i).)

Note that this area is not even delegated as potential habitat in your survey.

As well as the above there are another 5 recorded sightings, including females with young, near the Hamlet (See Appendix 1, D. Parkins Survey). There have been 5 Koala rescues by the Tweed Valley Wildlife Carers, one of which was on the road over the last few years (Appendix 3(iii) Friends of the Koala Data Base Records).

With all of this data, you may need to adjust your delineated areas of Koala habitat for Repco Rally and ensure they carry out your advised Koala Management Strategies.

Other Fauna

Above and beyond your report, which only addressed endangered and vulnerable Species, I would like to record that the Byrill Creek area is home to a vast and varied population of fauna (Appendix 5), the most prolific being the Red Necked and Swamp Wallabies, a horrific eight of which have been killed this last year in motor vehicle accidents, 2 had joeys, 1 of which survived. (Appendix 3 (i)TVWC Data Base Records & Appendix 7 letter from land holder). The majority of these vehicles were traveling 40-50 kmph. The Rally cars will be travelling up to 3 to 4 times this speed. Above and beyond vehicle kill, is the silent killer of stress myopathy on the macropod family. The noise & action of both the Rally & your recommended preventative measures before the race, will contribute to far more deaths of this nature, than road kill. Stress myopathy will cause death, affect breeding cycles, and go unrecorded as an overall effect of the Rally.

Riverine and Platypus Habitat:

Along the length of Byrrill Creek Road, the road is in close proximity to the creek in many areas. There are 11 river and creek crossings: 6 that are on the Rally route, one of these at Cabbage Tree Creek with a permanent flow of water over it. Nearby was one of the sightings of the endangered Giant Barred Frog. Platypus are found along the whole length of Byrrill Creek in the deep waterholes. One lagoon, near Pretty Creek Causeway, Platypus are sighted regularly, especially in spring. This particular Platypus habitat is on a narrow slippery corner and could easily be a potential car crash site, polluting the water quality. We have Platypus film of this area: (Appendix 11 DVD Footage & Appendix 9(v) Map).

High Conservation Riparian Area:

I have focused primarily on fauna in my survey, as time is of the essence, fauna is much more easily identified by local residents, and I feel that the most impact of the Repco Rally will be on the wildlife that lives in our valley.

However I note that in ecological consultant, Rob Kooyman's Survey in 2000 of Wollumbin State Forest, now National Park & Conservation Area, and bordering on to this area, that 3 species were Schedule 1, 6 species were Schedule 2, and another 17 species classified in the ROTAP of varying classifications. (Appendix 8 (v).)

As a general overview of the area, the Tweed Catchment Stressed Rivers Assessment Report 1999 identified the Byrrill Creek subcatchment area as the highest conservation value riparian area within the Tweed because of its high proportion of riparian vegetation cover and high percentage of diversity of wet flora species and Schedule 1 & 2 wet fauna species (Appendix 8(i), (ii) & (iii).)

Byrrill Creek has been part of a Northern Rivers Catchment Management Authority Riparian Rehabilitation Scheme for the last 2 years which was funded by the Australian and NSW Government through the Natural Heritage Trust (Appendix 8(ii) and (iii).)

In 2009/10 Byrrill Creek will be part of the Northern Rivers Catchment Management Authority project, to enhance landscape connectivity, through strategic habitat corridors, using revegetation & rehabilitation of existing native vegetation. The majority of landholders with riparian zones along Byrrill Creek will be participating. (See Appendix 8 (iv).)

In conclusion I would ask that you reassess the Byrrill Creek Route, utilising the information I have provided above, and if possible recommend to the Repco Rally Organisers, that the Byrrill Creek area be taken off the route of the Rally.

At the very least, to recommend to Repco Rally Organisers, that there be adequate safeguards on all creek crossings, vehicle crash safety barriers at the Platypus lagoon habitat area, warning signs, including wallaby habitat, and that core Koala habitat measures be implemented along the sections I have shown to be a corridor and habitat areas.

I would appreciate a reply as soon as possible,

Yours sincerely,
Joanna Gardner

APPENDIX 1: D. Parkins, Byrrill Creek Survey 2000-2004

1/07/2009

Re: Byrrill Ck Flora and Fauna Surveys

To whom it may Concern,

I am writing in response to a request for more information concerning records of rare and endangered flora and fauna in Byrrill Ck. As one who is qualified in Natural Resource Management, I have been a voluntary contributor to the NSW Atlas of Wildlife Database since December 2000 and have also conducted a number of surveys in and around Byrrill Creek including riparian and water quality assessments.

To date, I have submitted well over 640 Fauna records to the database as well as a number of submissions concerning plant species. These include a number of rare and endangered species which may be impacted upon due to their close proximity to the road and creek. Increased traffic, oil leaks and exhaust pollution are of concern in this regard as is the disturbance or removal of creek/roadside riparian vegetation. I also have concerns with the accuracy of some independent ecological assessments which assign a low or medium threat in regard to some of the endangered species.

Some points in question:

- *Mixophyes iteratus* (Giant Barred Frog)
- *Monarcha leucotis* (White-eared Monarch)
- Hollow bearing Trees

Mixophyes iteratus

Some reports based on Atlas of wildlife data assume this endangered species was recorded in and directly beside the water but this is not the case. As the person who submitted these reports to the database, the frogs in question were observed on the road near to the creek a number of times between 2002 – 2006. This includes both adult and immature specimens and in one instance, a recorded death due to roadkill in Feb 2004.

Monarcha leucotis

Has been recorded over 19 times in trees right beside Byrrill Ck Rd. This includes both individuals, breeding pairs and nest sites. Breeding cycles are from about Sept – Feb and there are some concerns in relation to the effects of roadside exhaust pollution and noise levels on breeding pairs and their ability to successfully rear hatchlings. Another concern is damage to their habitat and nesting sites through roadside accidents and human activities along the side of the road.

Hollow Bearing Trees

A recent assessment made for Repco Rally Australia http://rallyaustralia.com/wp-content/uploads/1853%201%20Final_RRA_Tweed_Report%20final%202.pdf (pg 21) has indicated that only one hollow bearing tree was recorded during their survey within proximity to Byrrill Ck Rd. This data is not indicative of a thorough or comprehensive assessment and may be misconstrued as being accurate. There are in fact a number of hollow bearing trees along a 7-10km stretch of road and a number of endangered owls have already been recorded within their vicinity including the Barking Owl, Marbled Frogmouth and the Powerful Owl.

It is my belief that some of these concerns have not been adequately assessed or addressed in relation to other data covering a period of a number of years, therefore I'd like to submit a list of rare and endangered species I have recorded for the Atlas of Wildlife database for your consideration.

Yours sincerely

D. Parkin (Dip. Nat Res Mgt . Acc. Chem Apps)

Email: dhanishta7@gmail.com

Common Name	Dates	Habitat Type	# of Individuals	Notes
Giant Barred Frog	Jan 03 Oct 03 Feb 04	RD GR EW + RD	1 Adult 1 Immature Adult 3 Adults – 1 roadkill	Photographed Roadkill occurred on Byrrill Ck Rd
White-Eared Monarch	Nov 02 Aug 03 Sept 03 Oct 03 Nov 03 Dec 03 Jan 04 Mar 04 Apr 04	IT IT IT + EW +RD IT + EW IT IT IT IT IT	1 Male Adult 1 Adult 2 Adults 1M/1FM 2 Adults 1 Adult 1 1 1 1	Breeding/Nesting Recorded 10 times during Sept. Nesting beside Rd
Marbled Frogmouth	Dec 00 Feb 01 Apr 01 Jun 01 Aug 01	IT EW IT IT IT	1 Male 1 1 1 1	Photographed
Bush Hen	Jan 04 Feb 04	GR + UG EW + UG	1 7 – 2 Adults/5 Chicks	
Stephens Banded Snake	Feb 04	GR	1	
Powerful Owl	May 01	FL	1	
Glossy black Cockatoo	Feb 04	IT	2	Feeding in casuarina trees
Richmond Birdwing Butterfly	Sep 03 Nov 03	LS BU	1 1	
Koala *	Between Mar 01 – Nov 03	IT + MC + GR UC	5+	Not less than 5 Individuals were Recorded during this time including mothers with infants.
Barking Owl	Jul 08	IT + AC		

Notes: IT – In trees, GR – Ground, MC – Mid canopy, FL – Flying within canopy, UG – Undergrowth, LS – Low shrubs, BU – In Building, EW – Edge of Water, RD – On Road * Dates too numerous to list here.

APPENDIX 2

BYRRILL CREEK PHOTOS

Giant Barred Frog (*Mixophyes iterates*) Endangered
Filmed on the road Jan, 2003



Marbled Frogmouth, male (*Podargus ocellatus*) Vulnerable
Filmed next to road Dec 2000



APPENDIX 3 (i)

TWEED VALLEY WILDLIFE CARERS DATABASE 2006-2009

CallDate	AnimalSpecies	LifePhase	Sex	LocationFound	InjuryDesc	CauseDesc
13/12/06	Kookaburra	B	U	Brays Creek	Nothing apparent	Fallen
6/1/07	Black-faced Cuckoo-shrike	B	U	Brays Creek	Nothing apparent	Fallen
18/6/07	Butcherbird	A	U	Brays Creek	Nothing apparent	Unknown
18/3/08	Green Tree Snake			Brays Creek		
8/10/08	Magpie	J	U	Brays Creek	Undernourished/ dehydrated	Fallen
8/10/08	Magpie	J	U	Brays Creek	Undernourished/ dehydrated	Fallen
29/10/08	Butcherbird	B	U	Brays Creek	Nothing apparent	Fallen
22/3/07	Swamp Wallaby	U	U	Byrill Creek	Body injury	Motor Vehicle
23/3/07	Koala	A	M	Byrill Creek	Eye injury	Disease
25/5/07	Crimson Rosella	A	U	Byrill Creek	Tail injury	Unknown
26/5/07	Crimson Rosella	U	U	Byrill Creek	Concussed/stunned	Motor Vehicle
18/7/07	Black Flying-fox	U	U	Byrill Creek	Unknown	Unknown
18/7/07	Black Flying Fox	U	U	Byrill Creek	Unknown	Unknown
29/4/08	Goulds Long-eared Bat	A	M	Byrill Creek	Wing injury	Unknown
5/5/08	Marbled Frogmouth	A	U	Byrill Creek	Wing injury	Unknown
13/5/08	Figbird	U	U	Byrill Creek	Unknown	Cat Attack
15/7/06	Tawny Frogmouth	A	U	Byrill Creek	Eye injury	Motor Vehicle
13/10/06	Red-necked Wallaby	B	M	Byrill Creek	Nothing apparent	Motor Vehicle
10/7/08	Red-necked Wallaby	A	F	Byrill Creek	Forelimb injury	Entanglement
10/7/08	Red-necked Wallaby	B	F	Byrill Creek	Nothing apparent	Entanglement
10/7/08	Red-necked Wallaby	J	U	Byrill Creek	Nothing apparent	Entanglement
12/8/08	Northern Brown Bandicoot	A	U	Byrill Creek	Nothing apparent	Trapped
29/8/08	Koala	A	U	Byrill Creek	Nothing apparent	Unknown
11/9/08	Koala	U	U	Byrill Creek	Eye injury	Disease
9/11/08	Tawny Frogmouth	J	U	Byrill Creek	Nothing apparent	Fledging/ learning to fly
10/11/08	Brush Turkey	B	U	Byrill Creek	Nothing apparent	Natural causes Congenital
3/2/09	Crested Pigeon	U	U	Byrill Creek	Leg - birds	Motor vehicle
7/2/09	White-throated Nightjar	A	U	Byrill Creek	Wing injury	Motor vehicle
22/2/09	Wallaby	A	U	Byrill Creek	Body injury	Motor vehicle
28/2/09	White-throated Needletail Swif	A	U	Byrill Creek	Wing injury	Motor vehicle
2/3/09	Swamp Wallaby	U	U	Byrill Creek	Body injury	Motor Vehicle
12/4/09	Swamp Wallaby	B	F	Byrill Creek	Nothing apparent	Motor vehicle
5/5/09	Bandicoot	U	U	Byrill Creek	Hindlimb injury	Unknown
24/8/06	Carpet Python	A	U	Terragon	Neck injury	Motor Vehicle
1/12/06	Oriole	B	U	Terragon	Nothing apparent	Fallen
16/1/08	Carpet Python	A	U	Terragon	Nothing apparent	Unsuitable Environment
14/1/09	Flying-fox	U	U	Terragon	Hindlimb injury	Unknown
23/2/09	Pheasant Coucal	B	U	Terragon	Nothing apparent	Dog attack

B=Baby
J=Juvenile
A=Adult
U=Unknown

APPENDIX 3 (ii)

TWEED VALLEY WILDLIFE CARERS DATABASE 2003 - 2006

CallDate	AnimalSpecies	AnimalLifePhase	AnimalSex	LocationFound
30-Apr-06	Australian Grebe	Juvenile	U	Brays Creek
17-Sep-05	Black Flying-fox	Adult	M	Brays Creek
07-Nov-04	Cattle Egret	Unknown	U	Brays Creek
18-Jul-03	Echidna	Juvenile	U	Brays Creek
21-Feb-03	Kookaburra	Juvenile	U	Brays Creek
30-Dec-05	Magpie Lark	Baby	U	Brays Creek
30-Dec-05	Magpie Lark	Baby	U	Brays Creek
21-Jan-05	Purple Swamp Hen	Juvenile	U	Brays Creek
30-May-06	Red-legged Pademelon	Adult	F	Brays Creek
14-Mar-04	Brown Tree Snake	Adult	U	Byrrill Creek
28-Dec-05	Brown Tree Snake	Unknown	U	Byrrill Creek
08-Dec-04	Carpet Python	Adult	U	Byrrill Creek
25-Nov-05	Eastern Brown Snake	Adult	U	Byrrill Creek
28-May-05	Finch	Unknown	U	Byrrill Creek
24-Aug-05	Koala	Adult	M	Byrrill Creek
27-Aug-05	Koala	Juvenile	M	Byrrill Creek
08-Feb-04	Marbled Frogmouth	Adult	U	Byrrill Creek
11-Apr-04	Mountain Brushtail Possum	Juvenile	F	Byrrill Creek
02-Nov-04	Mountain Brushtail Possum	Baby	F	Byrrill Creek
04-Nov-03	Red-necked Pademelon	Adult	U	Byrrill Creek
23-Oct-03	Sugar Glider	Baby	F	Byrrill Creek
12-Sep-05	Swamp Wallaby	Baby	F	Byrrill Creek
10-Apr-06	Swamp Wallaby	Adult	F	Byrrill Creek
10-Apr-06	Swamp Wallaby	Baby	U	Byrrill Creek
15-Jun-06	Tawny Frogmouth	Adult	U	Byrrill Creek
17-Jul-04	Koala	Adult	M	Mebbin
22-Jun-04	Mountain Brushtail Possum	Baby	U	Mebbin
02-Jun-05	Red-necked Pademelon	Baby	U	Mebbin
02-Jun-05	Red-necked Pademelon	Adult	F	Mebbin
28-Sep-05	Carpet Python	Adult	M	Teragon
28-Sep-05	Carpet Python	Adult	F	Teragon
28-Sep-05	Carpet Python	Adult	M	Teragon
24-Jun-06	Carpet Python	Adult	U	Teragon
06-Mar-06	Koala	Adult	M	Teragon
25-May-05	Kookaburra	Adult	U	Teragon
06-Jan-06	Olive-backed Oriole	Baby	U	Teragon
29-Nov-03	Swamp Wallaby	Adult	U	Teragon

APPENDIX 3 (iii) Letter from President Tweed Valley Wildlife Carers



Tweed Valley Wildlife Carers Inc

PO Box 898 Murwillumbah NSW 2484 • 02 6672 4789 • wildlife@twvc.org

Tuesday, 7 July 2009

To Whom It May Concern

Tweed Valley Wildlife Carers Inc rescues, rehabilitates and releases injured, ill and orphaned wildlife throughout the Tweed Shire.

Approximately 4,000 calls are received each year by the group, with over 2,000 animals actually going into care with TVWC members. Unfortunately, the rest are usually so injured or debilitated that they are humanely euthanased on their rescue.

A large percentage of the calls we receive are in the more populated areas of the Tweed, ie Tweed Heads, Banora Point, Kingscliff and Murwillumbah, where there is greater likelihood of human impact. However, there are some areas that, because they abound in wildlife, figure disproportionately in our statistics.

The Byrrill Creek area is one such area that is sparsely populated but from which we receive more calls than we would hope. In the last few years, I personally have been involved in the rescue of five koalas in this region, as well as several macropods, including pademelons and swamp wallabies; and a range of bird and reptile species. Currently, in fact, in my household, a white-throated nightjar and two carpet pythons from Byrrill Creek Road are being held in rehabilitation.

We are very fortunate in the Tweed to have areas such as Byrrill Creek, where most residents are aware and concerned about the environment and the wildlife therein. That so many animals come to our attention from this region, given that most animal injuries and deaths from human impact go unrecorded, is disturbing and can only attest to the importance of this area to our maintaining the diversity of wildlife in the Tweed.

Helen Joakim
President

APPENDIX 3 (iv) Friends of the Koala, Byrill Creek Data 2007-2009



Data for koalas from Byrill Creek and surrounding areas 2006—2009

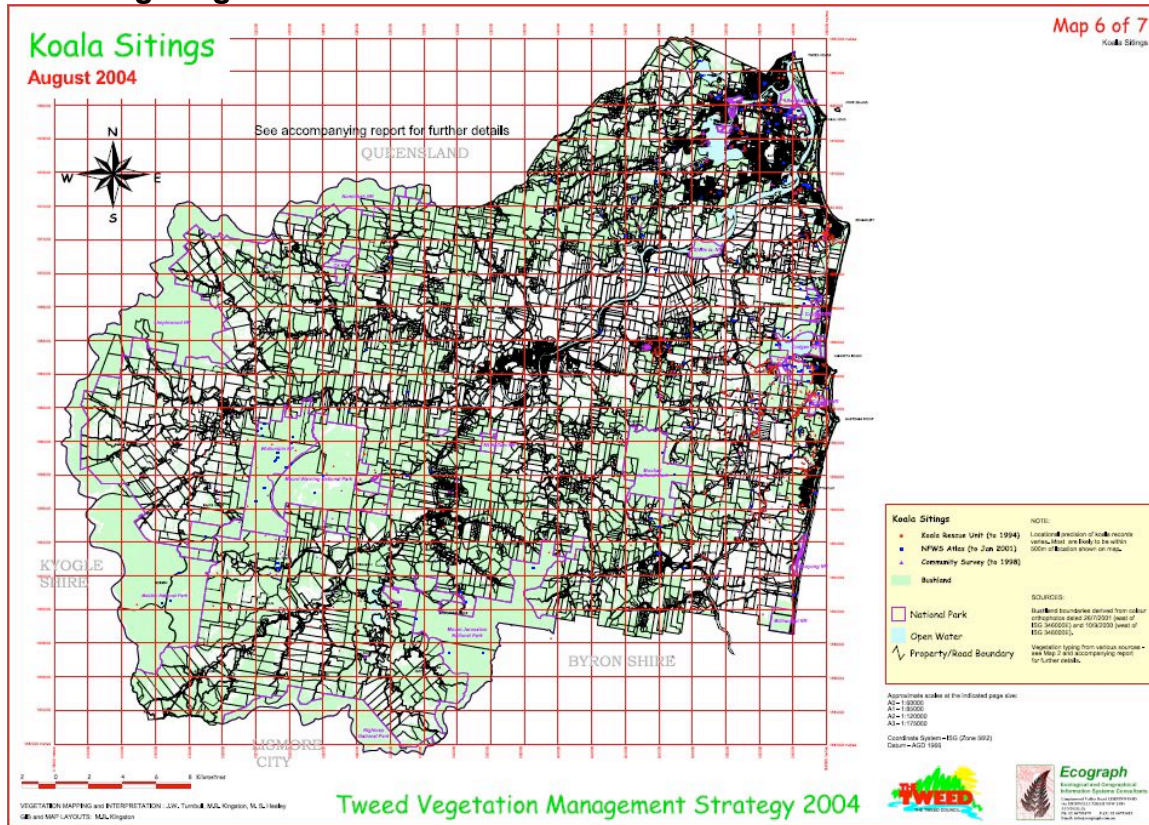
Date of rescue	Date of fate	Location	Address	Ill health simplified	Sex	Fate
29-Aug-08	29-Aug-08	Byrill Crk	Lot 704 Byrill Crk Road	Healthy		Advice only
20-Aug-07	22-Aug-07	Byrill Crk	10 Byrill Crk Rd	Diseased	F	Euthanased
21-Nov-07	22-Nov-07	Byrill Crk	778 Byrill Creek Rd	Diseased	F	Euthanased
23-Mar-07	09-May-07	Byrill Crk	Byrill Crk Rd	Diseased	M	Released

Licensed under Sections 120, 132c and 137 of the NSW National Parks and Wildlife Act 1974 to Rehabilitate and Release Sick, Injured and Orphaned Koalas. Licence No. 30066. ASNA (61) 322 819 T1, CFM 11640

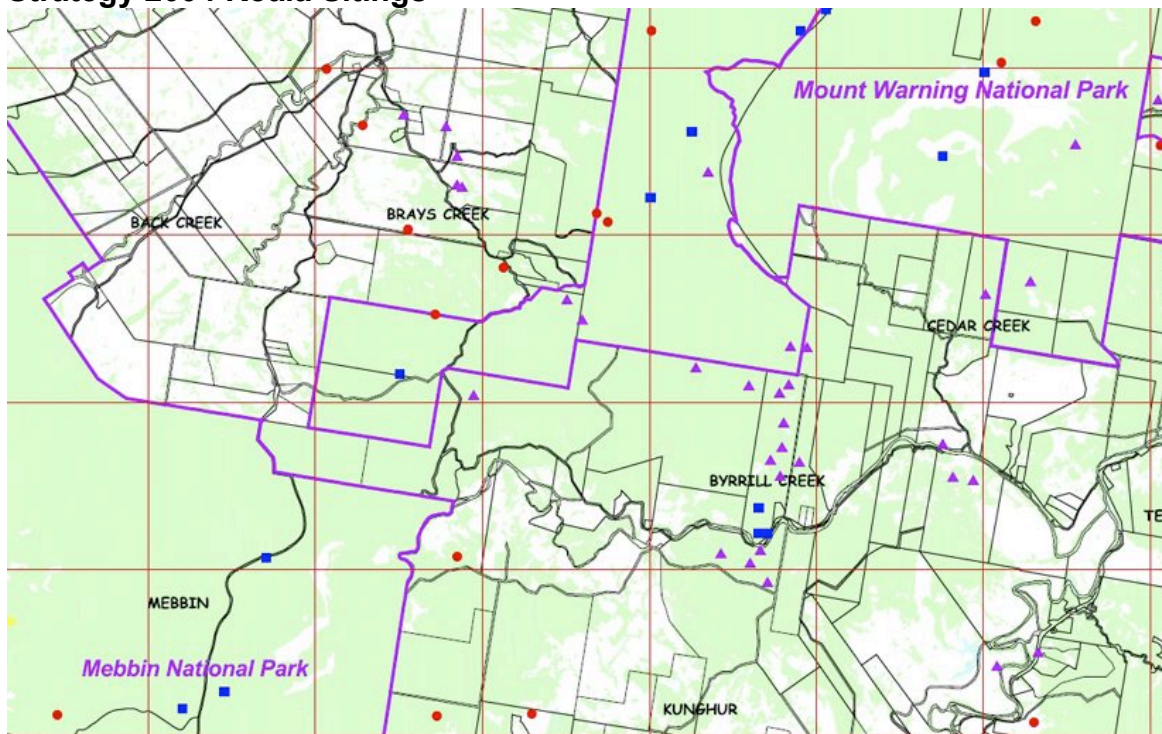
Koala Rescue and Information
6622 1233

PO Box 5034
East Lismore NSW 2480
info@friendsofthekoala.org
www.friendsofthekoala.org

APPENDIX 4 (i) Map: Tweed Shire Vegetation Management Strategy 2004 Koala Sightings



APPENDIX 4 (ii) Map: Byrrill/Mebbin area Tweed Shire Vegetation Management Strategy 2004 Koala Sightings



APPENDIX 5 (i) Byrrill & Terragon Fauna Survey, July 2009

25 Surveys were handed out & 18 have been returned so far. I have read through all of them, collated all Threatened & Vulnerable Species (EPBC & State Acts). Collating all the data is a time consuming task and still ongoing. See Master for statistics collated so far.

FAUNA SURVEYED INCLUDES ALL OF THE BELOW

OTHER	MAMMALS & MONOTREMES	BIRDS
Land Mullet Eastern Water Dragon Frill neck Lizard Eastern Long necked Turtle Green Tree Frog Red eyed Green Tree Frog Great Barred Frog Cane toad	Bandicoot Dingo Echidna Black Mt Brush tail Possum Common Brush tail Possum Ring tail Possum Sugar Glider Pygmy Possum Red Necked Pademelon Red Necked Wallaby Swamp Wallaby Eastern Grey Kangaroo Little Red Flying Fox Microbat Platypus	Alberts Lyrebird (T) Australian Figbird Australian Owllet-Nightjar Blue Winged Kookaburra Brown Cuckoo Dove Brush Turkey Bush Hen (T) Butcherbird Crimson Rosella Dollarbird Emerald Dove Finch Glossy Black Cockatoo (T) King Parrot Laughing Kookaburra Magpie Musk Lorikeet Nightjar Noisy Friarbird Noisy Myna Pacific Baza Pied Butcherbird Pied Currawong Powerful Owl (T) Rainbow Lorikeet Red-browed Firetail Red-rumped Parrot Satin Bowerbird Sooty Owl (T) Spangled Drongo Square-tailed Kite (T) Striped Honeyeater

OTHER Land Mullet Eastern Water Dragon Frill neck Lizard Eastern Long necked Turtle Green Tree Frog Red eyed Green Tree Frog Great Barred Frog Cane toad	SNAKES Eastern Brown Snake Eastern Small eyed Snake Brown Tree Snake Green Tree Snake Death Adder Rough Scale Snake Red Bellied Black Blue Bellied Black Carpet Python Bandy Bandy Snake Yellow face Whip Snake Golden Crown Snake	
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APPENDIX 5 (ii)

THREATENED SPECIES LIST

SPECIES	Sighted: Number Indications: Road Number G= Ground T=Tree RD=road W=water A= Air PG=Pretty Gully	Evidence Eg: sounds, tree scratches droppings, burrowing, hunting etc	HOW OFTEN eg Specific Date or Once=x1 Twice=x2 What season? Resident=R Monthly=M Yearly=YR	Withi n last 5 years	Before 2004	Alive	Injure d	Road kill where	Killed by other means
Spotted Tail Quoll	3 x G 1PG & 1m 1KyogleRd		V rare x 1 for all	2					
Black-headed Flying Fox (T)	9 T & A		Season=6 Daily=3	9	7	Small flocks		1	
Koala (V)	22+ 6 RD (5 at PG Ck) 14 T	All surveys had heard them thru year	Resident at 3 homes 2, 1xYr 15 Spring Summer	12	12	14	7	2 Kyogle rd	5 3=Dogs 2=Disease
Giant Barred Frog(T)	12: 7 GR1W at Hamlet 5 PGul: 2GR, 2 PG Ck, 1G 1 GR Cabb Tree Ck		Rarely Summer/ spring	9	2	11		1 Hamlet	

Marbled Frogmouth	15 + 5 x T D.Park	4x heard	2x Res PG Daily	Yes		Yes			
Barking Owl	2: 1 x T, D. Park 1xT PG	2 heard	March 2009 26/6/2007	2		Yes			
Powerful Owl	2: 1 x T D. Park 1xT PG	2 heard	3/8/03 & March 2009	2	1	Yes			
Sooty Owl	5: 5x TR PG	23/6/07 heard	23/4/09, 17/11/03, 3/3/02, 8/9/02 21/4/01 1 week,nest	2		Yes			
Stephens Banded Snake (not Bandy Bandy)	7: 3xT PG, 2xG Ham 1 DP, 2 x house roof PG		1994 PG 2/3/99 PG 27/3/03 PG 2/04 Ham 2mating rf Dec 2005	3	4	Yes			
Loveridges Frog	1 PG near house photo		26/2/09			Yes			
Glossy Black Cockatoo	2 group Ham	4	1x res group Seas 1xRare	2		Yes			
White eared Monarch	10 Hamlet D.Park Nest near rd		Nov 02-Apr 04			Yes			
Wompoo Fruit Dove	20+Common on PG	8 heard	4x PG 6/5/04 20+ Sp,Sum,Aut	24	24	Yes			
Bush Hen	4: groups2-4 3xPG 1xHam		2006-2009	4		Yes			

APPENDIX 6 (i) Malcolm Bailey Letter

M J Bailey
Kalang
506 Byrill Creek Road
Uki NSW 2484

3rd July 2009

I have lived at 506 Byrill Creek road since 1994 and my property is situated where the fresh spring waters of Pretty Creek and Byrill Creek join and is located approximately 100 metres from the creek area known as the lagoon and the causeway on Byrill Creek road across the small creek known as Pretty Creek.

Every year since moving here we have heard the Koala mating call or as I call it the mating grunt in the spring time through to late summer, which I understand is the call of male koalas stating their territory and calling for a mate, immediately across the creek from my house and surrounding the lagoon area and the adjoining properties, in particular around the pretty creek causeway located on Byrill Creek road as this is where the creek is at its narrowest point.

This area provides a natural wildlife corridor for the animals to cross the creek from the southern north facing hills to the northern side of the creek so they can access the vast and many Koala food trees situated near here and gain access to the community protected land and onto the National Park surrounding us.

It is clear that this is a wildlife corridor.

In fact, whilst on several morning walks to visit the platypus in the lagoon, just last year during the late winter to early spring season, I have seen up close at least two Koalas and one carrying the baby Joey on its back in this corridor.

GPS Lat 28° 26.53 Long 153° 14.54 Datum WGS84

This female koala was near the road and I assisted the koala it by encouraging this mother carrying its Joey to get off the road as soon as possible to avoid any conflict with the present sparse traffic flow.

During my 15 years here, I only visit the lagoon perhaps once a month to witness the platypus and have seen these koalas using this corridor along the creek known as Pretty Creek during the past two years.

Signed

M J Bailey.

APPENDIX 6 (ii) Koala Research, Andrew McInerny

BYRRILL CREEK FAUNA SURVEY JULY 2009

Statement from Andrew McInerny of "Tallowood" 665 Byrrill Creek Rd 11th July

Our land is on the southern side of Byrrill Creek & I consider it a main koala habitat. Tree species are predominantly Grey Gum and Iron bark with Blackbutt, Flooded Gum, and Tallowood to a lesser extent. Closer to the creek are Sydney Blue Gums. We have 2 resident male koalas, sometimes seen in the Ironbark near our garage. We hear Koalas constantly, in fact just last night, however sightings are rarer. During mating time we hear the females as well. We found a dead immature koala on the ground further up the ridge 18 months ago. Prior to 2004, we sighted a female on the ground. We have also seen trees, within the last 5 years, with scratch markings on them.

Andrew McInerny & Robyn McInerny Hoopmann

APPENDIX 6 (iii) Prudence Morrison, Pretty Gully Diary Records 1995-2009

KOALA SIGHTINGS DIARY RECORDS 1995-2009

Prudence Morrison, Lot 11, 564 Byrrill Creek Road, Uki NSW 2484

1995

- 28/1/95 Koalas seen in trees west side of house
- 9/2/95 Male Koala calling
- 15/2/95 Koala sighted on ground moving tree
- 11/3/95 Same Koala still here (remained near house for another week)
- 13/6/95 Male Koala (calling)

1996

- 27/9/96 Koala seen in tree
- 3/10/96 Koala seen in tree
- 17/10/96 Male and Female Koala seen in trees near the house
- 28/10/96 Koalas seen in trees

1997

- 22/1/97 Koala seen in tree
- 28/8/97 Female Koala and baby seen in tree west of house
- 30/9/97 Lots of Koalas seen and heard in trees near the house
- 13/11/97 Male Koala (calling)
- 6/12/07 Koala seen in tree

1998

- 3/1/98 Male Koala (calling)
- 14/9/98 Koala seen in tree
- 27/9/98 Koala seen near house in tree
- 12/10/98 Koalas heard calling
- 17/10/98 Koalas heard calling near house

1999

- 18/6/99 Koalas seen and heard all week near the house
- 7/8/99 Koala calling male
- 4/9/99 Koala seen in tree
- 7/9/99 Koala seen in tree
- 18/11/99-27/11/99 Koalas seen and heard Male and Female till
- 29/11/99 Saw Koalas mating in gum in orchard
- 1/12/99 Saw Koalas mating in trees behind the house

2000

I Cannot find my diary for 2000

2001

- 21/2/2001 Dead female Koala found under tree behind the house (Sth) in area where they have been sighted mating in past years.
- 22/3/01 Male Koala call.
- 3/4/01 Koala seen in tree
- 5/5/01 Very large Koala in tree west of house
- 14/6/01 Koala seen in tree
- 19/7/01 Koala seen in tree
- 7/9/01 Koala seen in tree
- 19/9/01 Koala seen in tree

29/9/01 Koala seen in tree
 11/10/01 Two Koalas seen in the same tree
 14/10/01 Koala seen in tree
 21/10/01 Koala seen in tree
 3/11/01 Koala seen in tree
 6/11/01 Koala seen in tree
 10/11/01 Koala seen in tree
 18/11/01 Male and Female Koalas seen and heard in trees west of house
2002
 30/5/02 Female Koala heard calling
 20/7/02 Koala seen in tree
 17/8/02 Koala seen in tree
 21/8/02 Koala seen in tree
 9/9/02 Koala seen in tree
 18/9/02 Koala seen in tree
 24/9/02 Koala seen in tree
 29/9/02 Koala seen in tree
 4/10/02 Koala seen in tree
 15/11/02 Three Koalas seen in the trees north of the house
 9/12/02 Koala seen drinking rain water dripping from the bark of tree west of house during rain. Pretty Creek had stopped running on the 7/12/02 so very dry here.
2003
 2/1/03 Koala seen in tree
 5/1/03 Koala seen in tree
 13/103 Koala seen in tree
 3/2/03 Koala seen in tree
 2/4/03 Koala seen in tree
 15/7/03 Male and female Koala seen and heard calling for three days here
 1/8/03 Male Koala calling
 4/8/03 Two Koalas seen in trees
 14/8/03 Koala seen in tree
 30/8/03 Koala seen in tree
 10/9/03 Koala seen in tree
 18/11/03 Koala seen in tree
2004 **No detailed notes taken but koalas heard sporadically through out the year.**
2005 **Dingo sightings recorded through out the year, koalas heard sporadically, & few Koala sightings**
 4/4/05 Dingo seen near house
 3/5/05 Dingo seen near house
 18/6/05 Dingo seen near house
 27/9/05 Dingo near house.
 28/ 9 05 Koala in tree west of house
 26/11/05 Dingo seen near house
 17/12/05 2 Dingoes seen at house
 Dingo pack in the area baited after contacting National Parks Services for help, as a dead koala found 100 meters from our house had bite wounds.etc.

2006 **Dingoes still in the area and few Koala sightings.**
13/1/06 Dingo in garden (note all sightings 2005-2006 are near to the full moon)
1/2/2006 Koala seen near house
12/4/06 Dingoes seen near the house
25/10/06 Koala grunting 10.30pm
2007
6/9/07 Dead Koala found on our driveway badly infected ear
27/9/07 Koalas seen and heard near house
2008
18/6/08 Koala seen near house
21/6/08 Koala heard male
12/9/08 Koala with wet bottom (Chlamydia) photo and film
25/10/08 Koala grunting
2009
10/7/09 Koala male grunting
11/7/09 Male and Female Koala heard close to the house 11pm.

Due to full time studying in 2006 and then full time shift work from 2007 to 2009 the diary was not as diligently kept as it had been in previous years.

Prudence Morrison

APPENDIX 6 (iv) Peter Symons Koalas on Road letter

564 Byrrill Ck Rd

UKI 2484

02 66797039

On the 21st October 2006 at 11am I was traveling down Byrrill Creek road from the Kyogle Road end when on approaching Pretty Creek causeway I noticed a Koala sitting in the middle of the causeway. I pulled the car up 40 metres from the causeway and turned off the engine. There is little traffic at this time of day on this part of the road. I had a camera on the seat next to me but as I slowly opened the door with the camera in hand the koala sprightly began running to and fro from one side of the road to the other leaving the road and heading towards the creek. The resulting video is 7 seconds long. GPS datum WGS84 Lat 28° 26.48 Long 153° 14.54 The Koala disappeared into the undergrowth as there are no large trees nearby and I chose not to follow it. This causeway marks the passage of Pretty Creek which goes under the road.

A year earlier I saw a koala sitting high in a tree that was growing alongside Pretty Creek about 200 metres upstream of the causeway. Local residents such as myself have seen koalas in trees along the ridges above Pretty Creek over many years. Locals sincerely believe that seasonally, koalas travel from these ridges down along Pretty Creek and move across Byrrill Creek on a land bridge which in dry seasons gives them easy access to the ridges to the South. At present in this wet year the land bridge has a channel 2 metres wide running through it.

Yours Sincerely

Peter Symons

14/07/09

APPENDIX 6 (v)

Koala Rescue on Byrrell Creek Road: Lea Brockhurst

On the 22nd March 2007 I was driving home along Byrrell Creek Road in the evening and came across a koala on the road. (GPS datum WGS84 Lat 28° 26.61 S Long 153° 13.76 E) I stopped to watch, because to me it was a wonderful thing to see, having previously stopped to watch Koalas occasionally crossing Byrrell Creek road and Pretty Gully road. After a few minutes I realised that the little fella was behaving a little unusually, he was standing on the edge of the gravel reaching for the trunk of a gum that was about three feet out of reach, he tried for a while, and looked to me as though he was stressed. My headlights showed that he had a milky look in his eyes. A couple in another car came along and I asked them to watch the Koala for a moment and I went back along the road to get a friend who had a possum cage.

We loaded the koala into the cage by guiding him into it with a blanket. I then drove up to my house, and on the way home I picked branches from young gum trees, which he ate a large amount of overnight.

I phoned the Tweed Valley Wildlife Carers, ([See Appendix 3 TVWC Data base 2006-2009](#)) and the next morning met them at the King Street Veterinary Clinic in Murwillumbah. The vet checked the Koala and he went with Sue Johnson (TVW Carer) to Burringbar where he was cared for. He was partially blinded and quite undernourished. The Koala, an adult male, named Bing, was sent to the Australia Wildlife Hospital at Beerwah for a health assessment on the 6th April, was treated with antibiotics for Conjunctivitis and Chlamidia and nursed back to health by Sue. Bing was reassessed at the Australia Wildlife Hospital on the 4th May.

After a 6 1/2 week stay with the TVW Carers, I was contacted and we released Bing the Koala, with ear tag, on the 9th May, very close to where he was found, on the high side of Byrrell Creek road, west of number 665, approx 7 km from Kyogle road. By this time he was stronger and healthy & Sue doubted whether he would have survived if I hadn't found him on the road. See the photos below of Bing, the Koala's release.

Lea Brockhurst
Lot 72, Byrrell Creek Rd

(Additional information from Sue Johnson, Tweed Valley Wildlife Carers).



**APPENDIX 7 : Byrrill Creek Wallaby Population & Vehicle Road Kill letter
Shirley Ross**

Shirley Ross
Byrrill Creek Rd
Terragon
10th July, 2009

To whom it may concern,

My observations are, at the beginning of Byrrill Creek Road, along the first straight stretch and around the first bend, that there are many wallabies who use this area to cross from one side to another, probably for water, and they often get hit by cars.

Over the last couple of years the wallaby population has tripled in this small area of Byrrill Creek. Mothers with joeys are seen grazing every day in our paddocks, on our neighbour's land, and crossing the road.

In the last 6 months there have been at least 4 deaths, and in the last year, 8 to 10 deaths. A neighbour further up the road swerved, hit a wallaby and then hit the embankment. Cars, especially P. Platers, tend to speed on this section of the road, as it is so straight.

A mother wallaby was killed recently, and the baby joey was found alive next to her, with our Kelpie guarding the joey. We took the joey to the Wild Life Carers, but it died as it was too young. My husband found this quite distressing.

I feel there needs to be some sort of signage, indicating to the public, the large amount of wallabies, and other wildlife, such as bandicoots and echidnas, which use Byrrill Creek road.

Yours Faithfully,

Mrs Shirley Ross

APPENDIX 8 (i) Byrrill Creek Vegetation & Koala Lettter Rhonda James, Ecologist



BUSHLAND RESTORATION SERVICES PTY LTD

1628 Reserve Creek Road Cudgera Creek 2489

Email goorambil2@bigpond.com

Phone / Fax 02 66761284

ABN 44 105 030 573

12th July 2009

Byrrill Creek subcatchment

(1) Conservation value of Byrrill Creek riparian zone (BRS an EnviTE 2006).

The Byrrill Creek Riparian Rehabilitation Plan (BRS and EnviTE 2006) detailed the high conservation value of the Byrrill Creek riparian zone (Section 2.1.1). Full references are provided in the document.

A summary is provided below.

The riparian area within the Byrrill Creek sub catchment was identified as being in the best ecological condition with the highest diversity and the highest conservation value within the Tweed Shire.

Byrrill Creek had the highest conservation value riparian areas in the study area (Tweed Shire).

Byrrill Creek has a very high predicted diversity of Schedule 1 and 2 (TSC Act 1995) wet fauna species, very high diversity of wet flora species and large stretches of waterways with minimal disturbance.

Byrrill Creek has high ecological status and high ecological sensitivity.

(2) Koala sightings and habitat in vicinity of Byrrill Creek Road

The Tweed Vegetation Management Strategy (2004) included mapping of Koala sightings from 1996 to 2004. Two of the sources were records I had collated from a shire wide community survey and Koala records from the wildlife "care" group. The records are generally located in areas of eucalypt dominated forest on the upper and lower slopes both north and south of Byrrill Creek Road. The results of recent surveys include presence of primary Koala food trees Tallowwood (*Eucalyptus microcorys*) and Grey Gum (*Eucalyptus propinqua*) and evidence of the use of trees by Koalas. Koalas have been observed and photographed recently by residents moving across Byrrill Creek Road from north to south. It is likely that Koalas move between the northern and southern forest areas across Byrrill Creek Road.

For further information phone Rhonda James 0409244294.



Rhonda James
Restoration Ecologist
BB MEnvMan

APPENDIX 8 (ii) R. James: Conservation of Iconic Species Within Priority Areas in the Tweed: Byrrill



Conservation of iconic species within priority areas and corridors in Tweed Shire

Landholders are needed to help save threatened species within identified areas of Tweed Shire including Duroby-Carool and Byrrill Creek subcatchments and corridors linking the coast and hinterland National Parks.

Some of the area's iconic and less well-known threatened species are the focus of two new biodiversity conservation projects in the Tweed Shire, which are funded by the Northern Rivers Catchment Management Authority. At least 49 of the many species of flora and fauna found in the subcatchments and corridors are listed as threatened, and their long-term survival is in the hands of private landholders. Species in the highly modified and less well-served lowlands and floodplains are particularly at risk.

Most species are rainforest-dependent or associated with rainforest habitat and many have close links to the ancient Gondwanan flora and fauna that covered much of the Australian continent 30 million years ago.

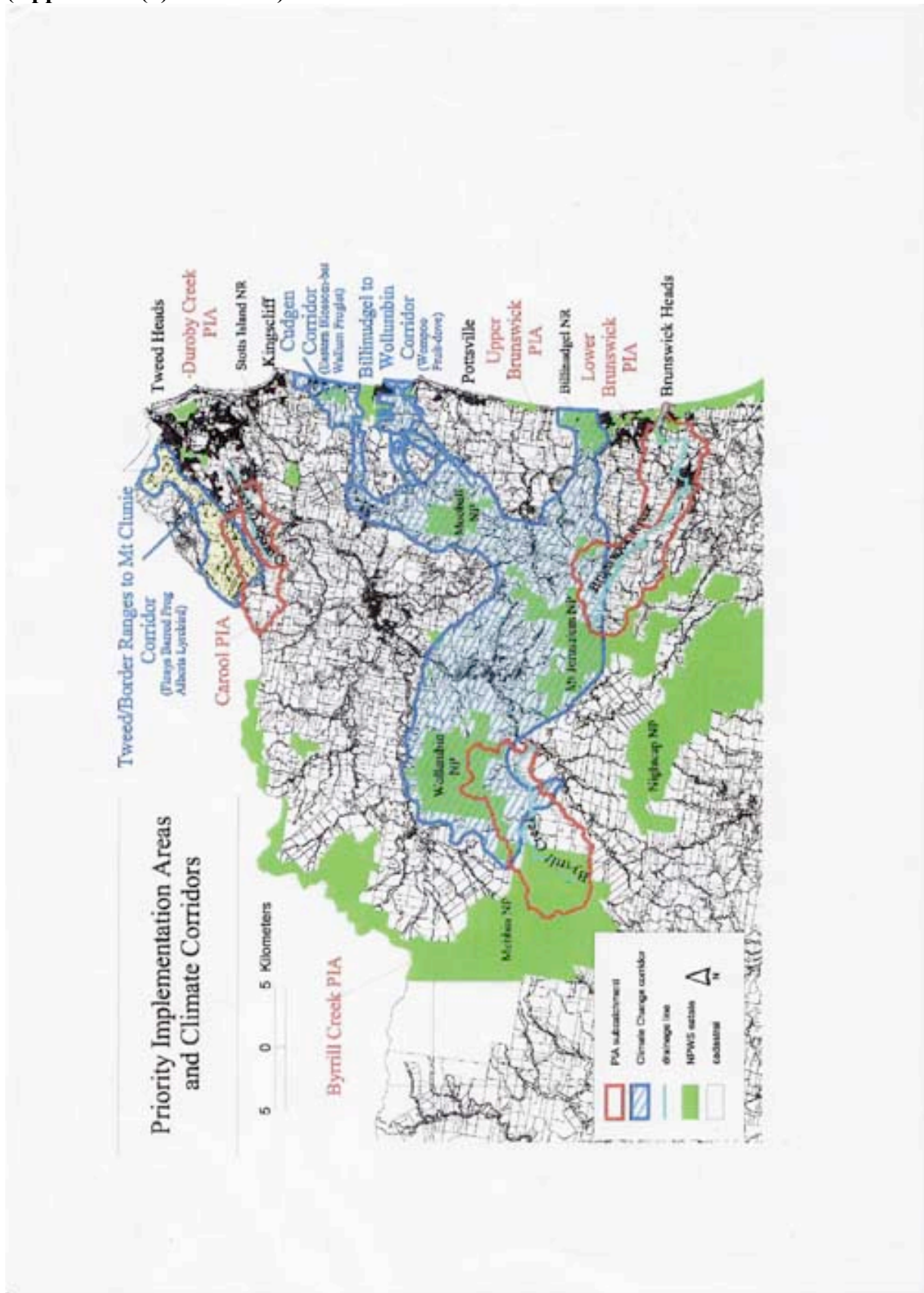
The rainforest fruit-doves, Alberts Lyrebird, Koala and Grey-headed Flying-fox are familiar to many residents while the Giant Barred Frog, Stephen's Banded Snake, Marbled Frogmouth and White-eared Monarch are less well-known. All have restricted and often fragmented habitats and face threats from introduced plants and animals and the many obstacles that human activities place in their paths.

Forests of the Duroby-Carool catchment are home to the only NSW occurrence of the Shiny-leaved Ebony and important wild populations of Crystal Creek Walnut, Durobby and Yellow Satinheart. The Koala is found throughout the catchment and coastal corridors. The upper Byrrill Creek reaches still support a population of the Giant Barred Frog and Marbled Frogmouths survive in rainforest gullies. The rare Onion Cedar and Small-leaved Tamarind are found at Cedar Creek in the Byrrill subcatchment.

Shrinking stands of old trees are destined to slowly die without the links to surrounding vegetation so critical for regeneration. Even large populations of plants and animals in apparently healthy habitat need expansion, corridor connections and weed management.

Landcare activities have made progress and will be boosted by this strategic, coordinated approach to conserving threatened species across the landscape, including on both private and public lands. Landholders interested in helping in threatened species recovery are invited to contact Barbara Stewart of Landmark Ecological Services on 0266 806889 (landmark@landmarkonline.com.au) for more information or Rhonda James of Bushland Restoration Services on 0266 761284 (goorambli2@bigpond.com).

(Appendix 8 (ii) continued)



APPENDIX 8 (iii) Byrrill Creek 2006 Riparian Rehabilitation Plan Executive Summary



Byrrill Creek 2006 Riparian Rehabilitation Plan

Executive Summary

The Byrrill Creek Riparian Rehabilitation Plan has been prepared as part of the *Byrrill Creek Bank Stabilisation and Riparian Enhancement Planning Project*. The Northern Rivers Catchment Management Authority contracted Environmental Training and Employment Inc. (EnviTE NSW) and Bushland Restoration Services (BRS) to manage the project, which received Australian and NSW Government funding through the Natural Heritage Trust.

The Byrrill Creek subcatchment, located in the upper reaches of the Tweed River catchment, includes Byrrill Creek and its tributaries Cedar Creek, Cabbage Creek and Kunghurloo Creek. The area has significant environmental, landscape, scientific, social and cultural values. Much of the area adjoins National Park and State Conservation Area.

Recent reports have documented the high conservation significance of the area. A large proportion of the subcatchment is vegetated with high diversity of flora and fauna species. The area has the highest priority within the Upper Tweed for riparian restoration works due to high conservation ecosystem values, high recovery potential streams and contribution to town water supply.

Weed invasion is the greatest threat to the vegetation communities in the Byrrill Creek subcatchment. Small-leaved Privet, Camphor Laurel and Cat's Claw Creeper are the most significant weeds in the area. The creekbank and bed condition is generally good. Water quality testing has shown that Byrrill Creek is among sites with the highest water quality in the Tweed catchment.

The Byrrill Creek Riparian Rehabilitation Plan consists of a master document and twenty seven individual Property Action Plans prepared in partnership with each participating landholder in the Byrrill Creek subcatchment. This document provides an overview of the project including background information, riparian vegetation description, a summary of plan outcomes, prioritisation, costings and rehabilitation strategy.

Individual Property Action Plans detail the results of site assessments undertaken on participating properties. The assessment included compilation of weed and native species lists, classification of the vegetation communities in the riparian zone, creek and bank condition, management issues, photopoints and ranking for conservation significance and rehabilitation potential. Individual Property Action Plans detail planned restoration works. A works program provides estimated costs and timeframes for implementation of restoration activities.

Successful riparian rehabilitation is dependant on community involvement, understanding and ownership of the plan and its subsequent implementation. The community has been informed and extensively involved in this project. Thirty nine landowners were contacted to participate in the riparian rehabilitation project. Four landowners did not have frontage to Byrrill Creek, six did not reply after two letters and a phone call, three owners have declined to participate in the project and twenty six indicated they would like more information or would like to participate in the project.

Participating landowners represent 74% of the total landowners who have frontage to Byrrill Creek, Cedar Creek, Kunghurloo Creek and Cabbage Tree Creek. A total of 19.37km (73%) of both banks of these creeks is included in the individual plans.

The preparation of the plan has increased landholder and community awareness and understanding of the ecological value of Byrrill Creek subcatchment. The implementation of the Byrrill Creek Riparian Rehabilitation Plan, in partnership with landholders, will result in improved management, protection and rehabilitation of riparian areas in the subcatchment.

2.1.1 Conservation Significance

The Byrrill Creek subcatchment includes Byrrill Creek, Cedar Creek (and tributaries), Cabbage Tree Creek and Kunghurloo Creek. Adjoining National Parks and the State Conservation Area which are part of the upper area of the subcatchment are not included in this study. The values of vegetation communities and habitat in the Byrrill Creek subcatchment are enhanced by proximity to these reserved areas.

The Byrrill Creek subcatchment has significant environmental, landscape, scientific, social and cultural values. Many of the people who live in the Byrrill Creek subcatchment have been attracted by natural environmental qualities. Recent reports have documented the high conservation significance of the Byrrill Creek Subcatchment. A brief outline of the findings of these reports is provided below.

The Tweed Catchment Stressed Rivers Assessment Report (August 1999) identified

- the high conservation value of Byrrill Creek subcatchment based on the:
- very high proportion of the subcatchment vegetated (83%),
- very high predicted diversity of Schedule 1 and 2 wet fauna species,
- very high diversity of wet flora species,
- large stretches of waterways with minimal disturbance, and
- large areas of Department of Environment and Conservation (DEC) estate (10%) and State forest (40%). Note that State Forests have now been included in the DEC estate.

Future risk considerations included:

- Byrrill Creek potential future Town Water Supply for future augmentation,
- exotic vine infestation of streamside vegetation, and
- infestation of Camphor Laurel and Privet.

The *River StylesTM* in the Tweed & Brunswick Catchments, North Coast NSW (Lampert et al., 1999) report mapped the distribution of river styles in the Tweed and Brunswick catchments. Byrrill Creek is defined as a gorge river style characterised by a bedrock confined and floored channel with no floodplain development. The gorge along Byrrill Creek is of moderate gradient. The confined nature of this river style means that high stream powers can be generated. This stream is capable of moving large gravel during even more moderate flow events. The more resistant rocks of the central Mount Warning complex are the primary control on the presence of this section of the gorge.

The *River StylesTM* (1999) report outlined the conservation goal for Byrrill Creek as being to maintain the integrity of river structure, vegetation associations and ecological values. The ecological values of Byrrill Creek would be enhanced by weed management and native vegetation restoration in the riparian area. The report noted that identification and stabilisation of suspended sediment sources (e.g. roads, cleared slopes) will reduce water turbidity. The *River StylesTM* report also indicated that this subcatchment has a high recovery potential.

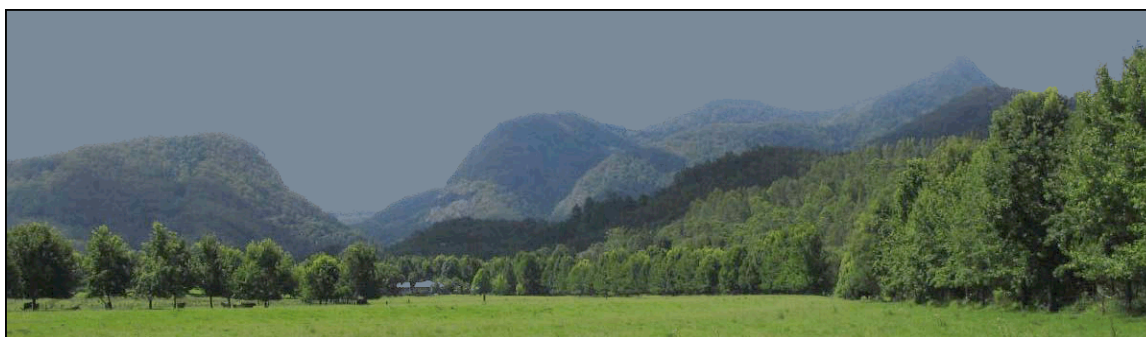
The Restoration Prioritisation of High Conservation Value Riparian Lands of the Upper and Mid Tweed River - A Preliminary Survey Using A Rapid Assessment *Approach* report was prepared for Tweed Landcare Inc. by Ecosu Environmental Consultants (2003). The aim of the project was to prioritise High Conservation Value (HCV) riparian remnant sites for restoration works in six target sub-catchments of the Upper and Mid Tweed River.

Byrrill Creek had the highest conservation value riparian areas in the study area. HCV sites were determined from

the *Draft Tweed Vegetation Management Strategy* (2004). It is likely that additional HCV sites occur in the subcatchment.

Byrrill Creek subcatchment was found to be in the best ecological condition with the highest diversity and the highest conservation value. Byrrill Creek sub-catchment is largely located within the inner ring dyke system of the extinct Mount Warning volcano. The steep terrain has resulted in less clearing of the original vegetation than in other areas. Some areas, including the upper catchment of Cedar Creek, are in near pristine condition with very significant HCV vegetation and presence of Threatened Species.

Weed invasion is the greatest threat to the vegetation communities in the Byrrill Creek subcatchment. Small-leaved Privet, Camphor Laurel and Cat's Claw Creeper are the most significant weeds in the area. The riverbank and bed condition is generally good along Byrrill Creek.



2.1.2 Value of Riparian Vegetation

Riparian land is any land that adjoins or directly influences a body of water. It includes the land alongside small creeks and rivers, including the river bank itself and gullies and dips which sometimes run with water. Riparian land provides a link between land and water ecosystems. It plays an important role in the lifecycle of many native animals and plants. Vegetation along Byrrill Creek is habitat for flora and fauna, including threatened species.

Appropriate management of riparian land can contribute to decreased erosion, improved water quality and healthy ecosystems (Price & Lovett, 2002). Riparian vegetation plays a critical role in ensuring the ecological integrity of adjacent streams. Good management of riparian land can decrease the amount of soil, nutrients and some pollutants moving from upslope into the stream. By trapping soil and nutrients, water quality is improved.

Riparian vegetation protects banks from surface erosion by rain, water flow or stock. Plant roots help stabilise streambanks and protect against erosion. Healthy riparian vegetation contains a range of species providing diversity and structure. Native grasses and reeds, and shrubs with flexible stems and branches are often found on the lowest parts of the bank. Further up the bank are shrubs and small trees and at the top there may be large trees with a shrub understorey.

Byrrill Creek Riparian Rehabilitation Plan

Bushland Restoration Services (BRS) & Environmental Training and Employment Inc. EnvITE NSW 12

APPENDIX 8 (iv) Northern Rivers Catchment Management Authority Corridor Connection Plan 2009 Byrill

NRCMA – Key Corridor Connections and PAS Implementation Pilot Projects.

Contractors: Bushland Restoration Services P/L
Landmark Ecological Services P/L

Tweed/Cobaki corridor and Duroby and Byrill Creek subcatchments (PAS)

PAS Implementation Pilot Project

Project Description

The objective of the project is to develop a strategic process and work collaboratively with stakeholders particularly NRCMA and DECC to implement actions that meet the needs of threatened species and abate key threatening processes. The key outcome is a planning process and development of an Implementation Plan that provides best outcomes for cross-tenure management of threatened biota and flora & fauna habitat.

The project seeks to prioritise threatened biota recovery opportunities in the following target Priority Implementation Areas; Byrill Creek, Upper & Lower Brunswick River, and Bilambil & Duroby Creek sub-catchments. In addition to the Implementation Plan a key output of the project is the preparation of a Report that identifies the delivery and consultation mechanisms required for PAS and Regional Recovery Plan implementation.

The project will integrate its outcomes with a component part of the NRCMA Key Corridor Connections project, specifically in the Tweed/Cobaki corridor and the coastal section of the Billinudgel corridor.

Key Corridor Connections

Project Description

This project seeks to enhance landscape connectivity through consolidation and completion of linkages in strategic corridor habitat mapped as corridors Tweed/Cobaki and Coastal Corridor using revegetation and rehabilitation of existing native vegetation. Consideration will also be given to the habitat requirements of reference species of fauna, previous and current projects and known landholder contacts in the corridor.

The purpose of this project is to make a significant contribution to improving connectivity in strategic corridor habitat through a combination of revegetation to infill and bridge gaps and rehabilitation of existing native vegetation to improve condition and habitat quality. This requires effective engagement with landholders in strategic corridor habitat along with the development of a strategic plan outlining how potential connectivity will be achieved across the strategic corridor habitat.

Assistance will be provided to individual land managers and interested groups to develop and implement site action plans to improve connectivity. Implementation of those plans will be achieved through conservation agreements with landholders and

the provision of funds or on ground resources to revegetate, protect and manage native vegetation in strategic corridor habitat – leading to improved connectivity of habitat within the landscape.

In addition, a strategic plan identifying ongoing works including a map outlining how potential connectivity will be achieved across the strategic corridor habitat will be prepared. This contract is being delivered in collaboration with the PAS Implementation Pilot Project.

APPENDIX 8 (v) R. Kooyman Wollumbin State Forest Threatened Flora Species 2000

NB • Means actually sighted by observation Byrnie Crk.

APPENDIX 8 (v) R. Kooyman Wollumbin State Forest Threatened Flora Species 2000

Threatened Species

Wollumbin SF: Th Sp Known Robert Kooyman June 00

SPECIES	COMMON NAME	Th Spp Act Cons Status	ROTAP
FLORA			
Bosistoa transversa	yellow satinheart, bonewood	Sch 2	3Vci
Dendrocnide moroides	Gympie stinger	Sch 1	E
Endiandra hayesii	rusty rose walnut	Sch 2	3VC-
Floydia praealta	ball nut	Sch 2	3VC-
Macadamia tetraphylla	macadamia	Sch 2	2VC-
Ochrosia moorei	southern ochrosia	Sch 1	2ECi
Sarcochilus fitzgeraldii	ravine orchid	Sch 2	3VC-
Senna acclinis	a native senna	Sch 1	3RC-
Syzygium moorei	coolamon	Sch 2	2Vci
Acronychia baeuerlenii	baeuerlen's acronychia		3RC-
Archidendron muellerianum	veiny lacebark		3RCa
Argophyllum nullumense	silver leaf		3RCa
Aristolochia deitantha var laheyana	aristolochia		2RC+
Brunoniella spiciflora	first collection NSW in Wollum		SIG
Cupaniopsis newmanii	long leaved tuckeroo		2RC-
Millettia australis (recollect)	a native wisteria		3RC+
Trichosanthes subvelutina	silky cucumber		3RC-

APPENDIX 9(i) National Parks & Wildlife Atlas: Byrrell Creek Koalas



APPENDIX 9 (ii) National Parks & Wildlife Atlas: Byrrell Creek Giant Barred Frog

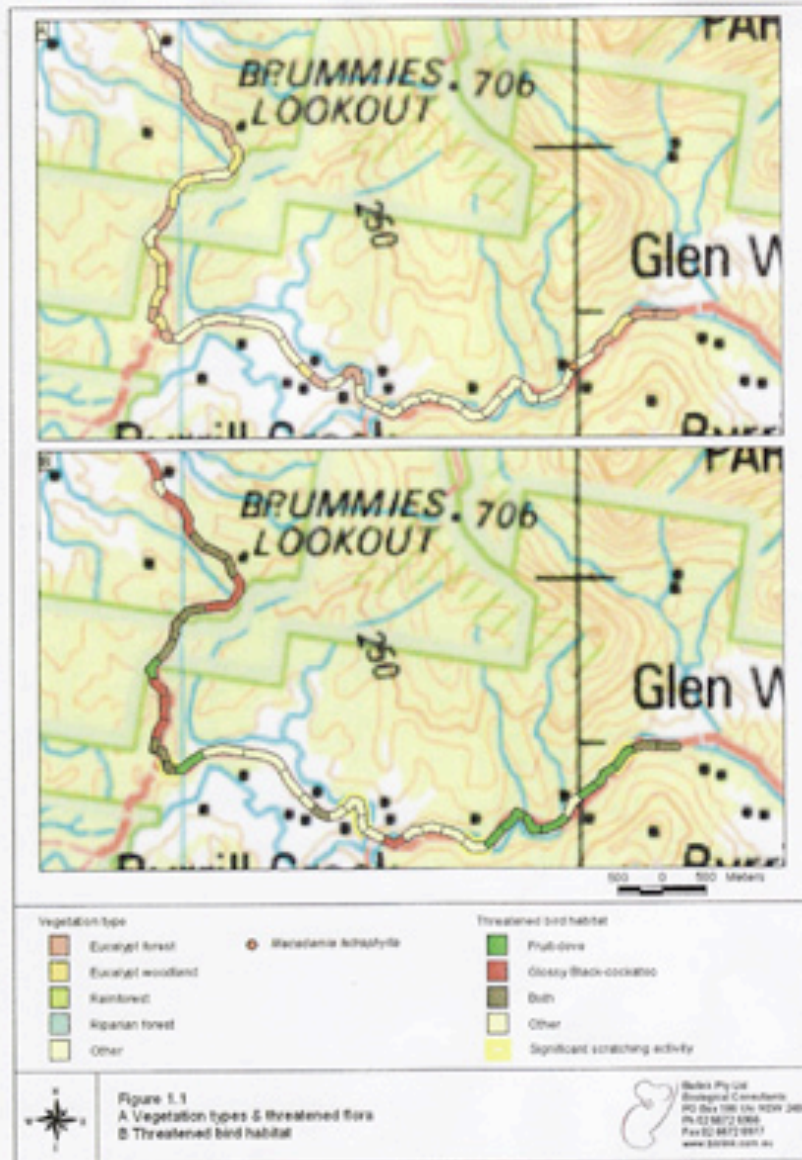


APPENDIX 9 (iii) Biolink Vegetation Types & Threatened Flora & Bird Habitat

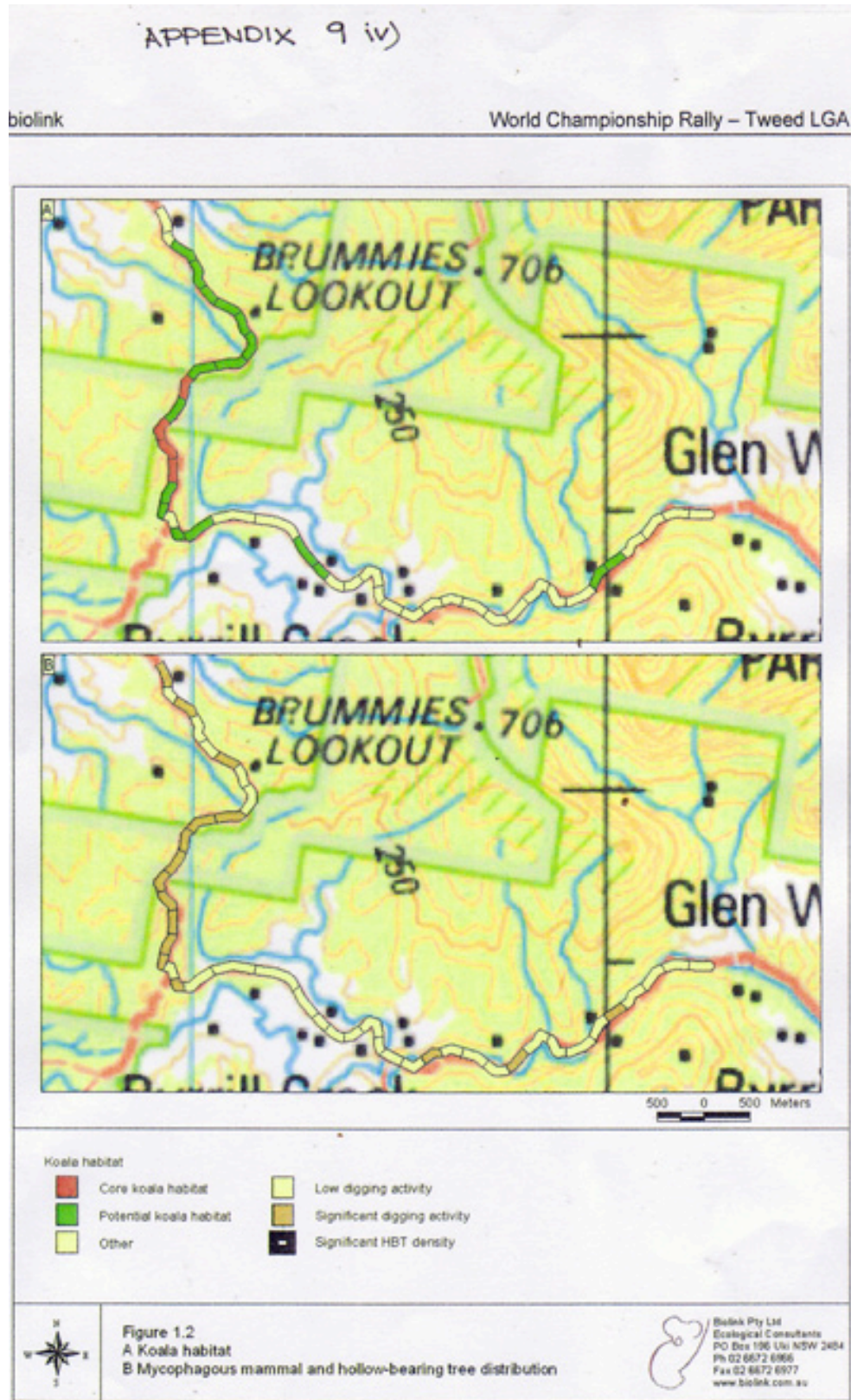
APPENDIX 9 (iii)

biolink

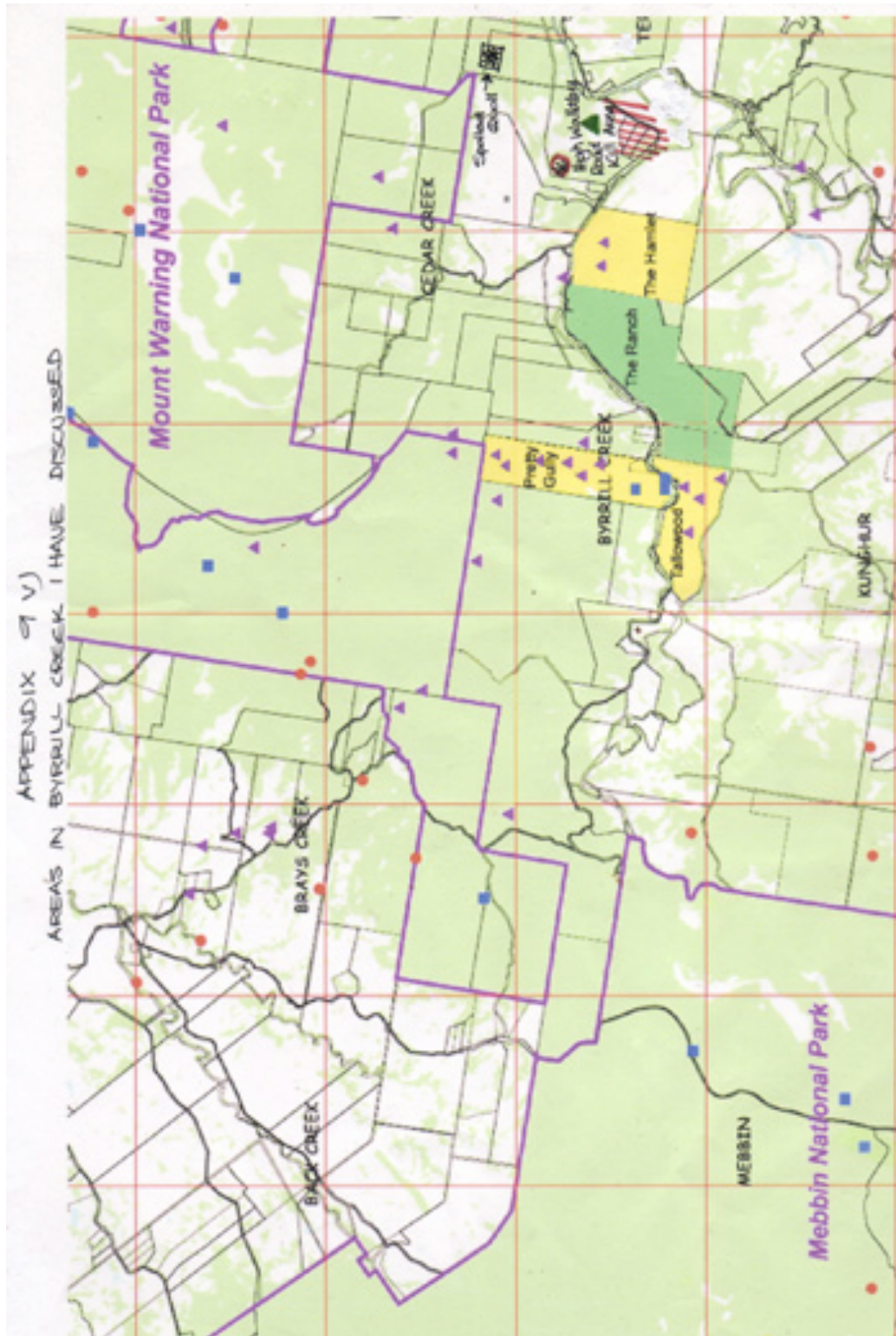
World Championship Rally – Tweed LGA



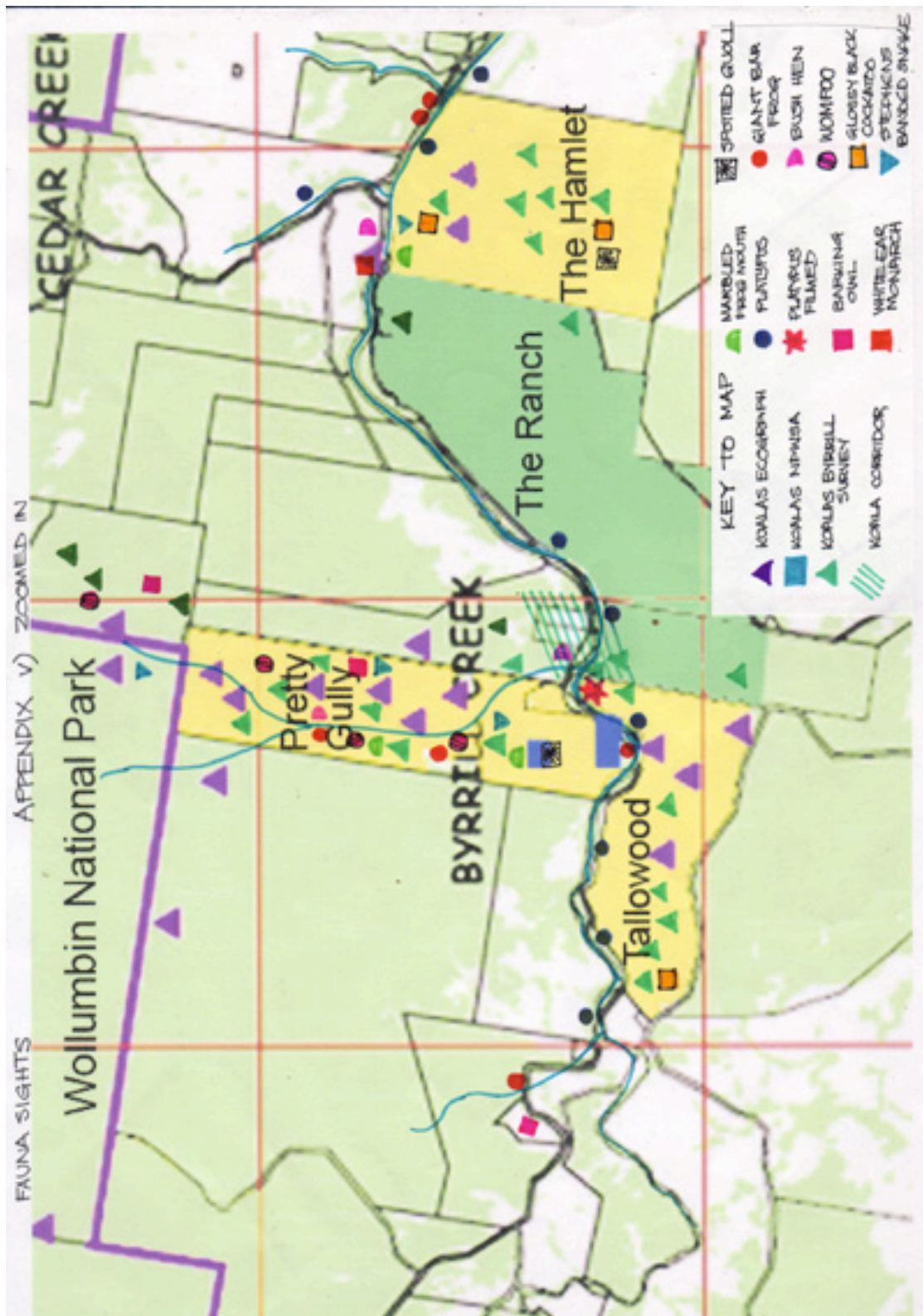
APPENDIX 9 (iv) Biolink Koala Habitat: Core & Potential



APPENDIX 9 (v) Byrrill Creek Area 2009: Sitings of Endangered, Vulnerable and other Fauna



APPENDIX 9 (vi) – Byrriil Creek Area 2009: Sitings of Endangered, Vulnerable and other Fauna (same as previous map but zoomed in)



APPENDIX 9 (vii) Map: Repco Rally Route



APPENDIX 10 Letter to Gary Connelly, Repco Rally Australia

To G. Connelly
Manager
Repco Rally Australia

Joanna Gardner
564 Byrrill Creek Rd
Uki NSW 2484
Email peter.symons8@bigpond.com
Phone 02 66797039

15th July, 2009

Dear Mr Connelly, Mr Upson, and Organisers of Repco Rally Australia,

I have been a resident and landholder at Byrrill Creek for 25 years. It is a bio diverse area with high conservation riparian status. It is a wild life corridor linking Mt Warning National Park, Wollumbin National Park, Wollumbin State Conservation Area and Mebbin National Park. Byrrill Creek has a high incidence of Endangered & Vulnerable Species.

I have compiled a Byrrill Creek Fauna and Flora Survey. It is a 40 page document and needs to be examined in detail.

I have found some of Steve Phillips assessments do not concur with mine. A reassessment of Byrrill Creek area needs to be carried out.

The Byrrill Creek area is not a suitable site for a high speed car rally and I request, on behalf of the residents here, that this area be removed from the Rally route.

I would appreciate a reply to this submission as soon as possible.

Yours Sincerely,

Joanna Gardner

APPENDIX 11 DVD Footage in Byrrell Creek

The following DVDs are available on request:-

- i) Koala crossing Byrrell Creek Rd: 21/10/2006
- ii) Koalas mating, Pretty Gully: 1/12/1999
- iii) Platypus in Byrrell Lagoon: Spring 2002

Alternately, the following URL contains footage in Byrrell Creek of a koala crossing the road and highlights of platypus in Byrrell Lagoon:-

<http://www.youtube.com/watch?v=-Sw18zvU5yU>