



PO BOX 557,
BEAUDESERT
Queensland 4285
www.laca.org.au

14 March 2011
Development Assessment Team
Urban Land Development Authority
Development Number: DEV2010/095
GPO Box 2202
Brisbane Qld 4001.

Dear Sir,

Please find attached a submission by the Logan and Albert Conservation Association for **DEV2010/095 for Reconfiguring a Lot and Plan of Development and Material Change of Use (1 Lot into 151 Lots) for houses (142 Dwellings) and Multiple Residential (16 Dwellings) on land at Pub Lane, Sentinel Drive and Cunningham Drive, Greenbank. Part of Lot 9968 on SP 163061 Parish of Perry, county of Stanley.**

The Logan and Albert Conservation Association would like to lodge its **formal objection** to the development application of DA DEV 2010/095 Part of Lot 9968 on SP 163061. Our reasons for this objection are outlined in our submission.

The Logan and Albert Conservation Association (LACA) is a volunteer run community group that has been operating in the Logan and Albert area for over 20 years. Its membership extends over the Logan City Council and Scenic Rim Regional Council areas. LACA has conducted wildlife workshops in the area of Greenbank, the Logan City Council and Scenic Rim Regional Council areas. LACA organizes information evenings and attends public events like the Greenbank Show to engage with the community. As part of LACA's previous community engagement, we have collected community sightings of fauna in the local area over a period of time. LACA has followed the SEQRP and Planning Scheme changes since 2004.

No early release like Teviot Downs should be announced or approved without the appropriate background studies being conducted or without the community having the opportunity to review any proposed development in their local area in the light of what is planned for Greater Flagstone UDA. The ULDA Greater Flagstone consultation has not begun, yet it will have a very significant impact across the Greenbank-New Beith –North Maclean-Flagstone area. Regardless of this, the community is being denied the right to be able to view this information before the completion of the DA process which is undemocratic and unacceptable.

1

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

The deficiencies in the environmental assessment and biodiversity assessment reports for this proposed development does not indicate „best practice“ environmental outcomes that the ULDA is promising to achieve for the Greater Flagstone area.

Yours sincerely

Anne Page (BA Hons Dip Ed M Env Mgt)
President
Logan & Albert Conservation Association
PO BOX 557 BEAUDESERT
QLD 4285
www.laca.org.au

Since its inception in 1989, LACA has worked with our community, council, industry, and government to develop understanding, commitment and actions for more sustainable living.

LACA aims...

- *To play an active role in the protection and enhancement of the environment.*
- *To promote the concept of environmental sustainability as an essential criterion of planning for development.*
- *To educate and inform the community on all aspects of conservation.*
- *To research and report on current and proposed activities likely to affect the local environment.*
- *To encourage the widest possible public consultation and informed debate on matters of conservation and environmental importance to the local community.*

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588



SUBMISSION BY

LOGAN AND ALBERT CONSERVATION ASSOCIATION (LACA)

OBJECTION TO

DEV2010/095 for Reconfiguring a Lot and Plan of Development and Material Change of Use (1 Lot into 151 Lots) for houses (142 Dwellings) and Multiple Residential (16 Dwellings) on land at Pub Lane, Sentinel Drive and Cunningham Drive , Greenbank . Part of Lot 9968 on SP 163061 Parish of Perry, county of Stanley.

Prepared by

Anne Page (BA Hons Dip Ed M Env Mgt)

President Logan & Albert Conservation Association
PO BOX 557 BEAUDESERT
QLD 4285
www.laca.org.au

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| TABLE OF CONTENTS | Page |
|--|-------------|
| BACKGROUND | 5 |
| OBJECTION | 5 |
| REASONS FOR OBJECTION TO CURRENT DA DEV2010/095 | 5 |
| 1.0 OUT OF SEQUENCE PLANNING PROCESS | 5 |
| 2.0 DEGRADATION OF BIOREGIONAL CORRIDORS | 6 |
| 3.0 MATTERS OF NATIONAL SIGNIFICANCE | 6 |
| 3.1 GREENBANK MILITARY TRAINING AREA (GMTA) | 6 |
| 3.2 DASYURUS MACULATUS (QUOLL) | 7 |
| 4.0 LACK OF ENVIRONMENTAL ASSESSMENT - FAUNA | 8 |
| 4.1 KOALAS | 8 |
| 4.2 WILDNET | 11 |
| 4.3 GLOSSY BLACK COCKATOOS | 11 |
| 4.4 FROGS AND REPTILES | 11 |
| 4.5 PLATYPUS | 12 |
| 4.6 BIODIVERSITY ASSESSMENT REPORT | 12 |
| 5.0 LACK OF HYDROLOGICAL ASSESSMENT | 12 |
| 6.0 SEQRP CONSIDERATIONS | 14 |
| 7.0 BUFFERS | 15 |
| 8.0 PROTECTION OF VEGETATION | 15 |
| 9.0 ROADS | 15 |
| 10.0 SERVICES | 16 |
| 11.0 WATER QUALITY | 16 |
| APPENDIX 1 BIRD SPECIES OBSERVED ON 9 MARCH 2011 (BRISBOCA) | 19 |
| APPENDIX 2 QUOLL COMMUNITY SIGHTINGS NORTH BEAUDESERT | 23 |
| APPENDIX 3 Endangered Spotted-tailed Quoll in the MLNBSA | 24 |
| APPENDIX 4 LACA FAUNA SIGHTINGS (Collected February to March 2011) | 33 |
| APPENDIX 5 KOALA DECLINE NEYS RD, REDLANDS SHIRE | 65 |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

LOGAN AND ALBERT CONSERVATION ASSOCIATION

SUBMISSION FOR DA DEV2010/095

Part of Lot 9968 on SP 163061 Parish of Perry, county of Stanley. This DA was lodged by Teviot Downs Estate Pty Ltd

BACKGROUND

The Logan and Albert Conservation Association (LACA) is a volunteer run community group that has been operating in the Logan and Albert area for over 20 years. Its membership extends over the Logan City Council and Scenic Rim Regional Council areas. LACA has conducted wildlife workshops in the area of Greenbank, the Logan City Council and Scenic Rim Regional Council areas. LACA attends public events like the Greenbank Show and engages with the community. As part of LACA's previous community engagement, we have collected community sightings of fauna in the local area over a period of time. LACA has followed the SEQRP and Planning Scheme changes since 2004.

OBJECTION

The Logan and Albert Conservation Association would like to lodge its formal objection to the development application of DA DEV 2010/095 Part of Lot 9968 on SP 163061. Our reasons for this objection are outlined below.

REASONS FOR OBJECTION TO CURRENT DA DEV2010/095

1.0 OUT OF SEQUENCE PLANNING PROCESS

The community of Teviot Downs and Greenbank have only until 15 March to make a submission on the current development proposal for DEV2010/095. However, the state government community consultation for Greater Flagstone (Greenbank, North Maclean, New Beith and Flagstone) does not begin until 21 March. This situation highlights a lack of democratic process. The community is not being given the opportunity to see how the proposed development on the North side of Pub Lane will fit into the larger ULDA planning that will be undertaken for the local area and Greater Flagstone UDA(Greenbank – New Beith- North Maclean- Flagstone) . LACA recommends and **requests a moratorium on any early release DA approvals** until the appropriate State Government planning processes and associated studies for Greater Flagstone are fully completed and the results of those studies are released to the community.

5

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

2.0 DEGRADATION OF BIOREGIONAL CORRIDORS

The location of the proposed Teviot Downs site north of Pub Lane lies adjacent to bioregional corridors (DERM) that are significant to SE Queensland including

- Karawatha to Flinders Peak Corridor (including linkages from Karawatha – Greenbank Military Training area and surroundings- Flinders Peak
- Greenbank Military Training Area - Greenbank East- Munruben Wetlands Reserve (Chambers Creek) – Chambers Flat – Logan River- stockleigh – Birnam Range

The existing vegetation on and around the Teviot Downs site north of Pub Lane, provides valuable habitat linkages and stepping stones to these bioregional corridors. Some remnant vegetation exists on and adjacent to this site. The approval of this proposed development will contribute to the fragmentation of habitat, fragmentation of linkages to the bioregional corridors, degraded water quality for Oxley Creek tributaries, lagoons and its associated wetlands located downstream of this proposed development.

3.0 MATTERS OF NATIONAL SIGNIFICANCE

3.1 GREENBANK MILITARY TRAINING AREA (GMTA)

- GMTA was placed on the **National Heritage Estate Register** in 1996 for its flora and fauna values
- GMTA is listed in the **Directory of Important Wetlands in Australia** (see link <http://www.environment.gov.au/cgi-bin/wetlands/report.pl> and enter Greenbank Army Training Area Reference code QLD180 into the search query)
- The wetland types for GMTA are listed as
B1 - Inland wetlands permanent rivers and streams including waterfalls
B4 – Riverine floodplains including river flats, flooded river basins, seasonally flooded grassland and savanna
- GMTA's criteria for inclusion in the **Directory of Important Wetlands in Australia** is –
Criteria 1 – It is a good example of a wetland type occurring within a biogeographic region in Australia
Criteria 5 – The wetland supports native plant or animal taxa or communities which are considered endangered or vulnerable at a national level.
- The proposed development has 2 drainage lines that flow northwards from the eastern and western sides of the proposed development site, before these drainage lines join near Hobury Rd and flow into Oxley Creek. Oxley Creek then flows into the GMTA.

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

- The proposed development will have serious downstream impacts and degrade the water quality of Oxley Creek and the wetlands of the GMTA which are listed on the Federal Department of Environment's website in the Directory of Important Wetlands in Australia. Any negative impacts from degraded water quality will be flowing directly into Oxley Creek and the GMTA with impacts on the riparian areas, floodplains, and seasonally flooded areas.
- Erosion and sedimentation issues need to be considered and their impact on degrading water quality. The Biodiversity Assessment report (Feb 2010 p 10) states that "erosion, saltation, lowered water quality and loss of aquatic species and biota of waterways at the construction phase in particular" will occur.
- Insufficient consideration has been given to frog, reptile and bird species in the environment and biodiversity assessment reports. Very limited information for frog and reptile species is given in the environmental and biodiversity assessment. There is certainly a lack on ground field assessment and even accessible data sources such as Wildnet (DERM database) are not referred to in these reports. Wildnet records list a tusked frog (vulnerable) within 4 km radius of the proposed development. The location of this proposed development, at the headwaters of two tributaries that join and flow north into Oxley Creek with ponds and lagoons, indicates that this information should be considered seriously in the planning stages of any proposed development. However, this has not been the case.
- Wetland migratory birds would also utilise this area and be of significance because of the proximity of this site to the GMTA wetlands and Oxley Creek . A bird survey by BRISBOCA produced 67 bird species observed on 9 March 2011 (see **Appendix 1**). BRISBOCA has been conducting bird surveys in the Greenbank area since at least 2005.

3.3 DASYURUS MACULATUS (QUOLL)

- There is no reference to quolls (EPBC Act endangered, Nature Conservation Act vulnerable) in any of the Environmental reports or Biodiversity Assessment for this proposed development, yet this species is of significance nationally, within Queensland and is known to occur in the local area.
- No quoll surveys have been conducted by the developer. Yet a survey of community sightings of quolls in 2006 by Dr Scott Burnett (WPSQ) revealed quoll sightings to the

7

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

east (south of Stoney Camp Rd) , south east (Teviot Rd) and north west (near Amy Rd, Pakenham Rd , and two sightings along Goodna-Springfield Rd (at Edwards Bridge and near the Greenbank State School) of the proposed development north of Pub Lane.(see **Appendix 2**) This information is readily accessible via Wildnet. Some of these sightings around the Greenbank area lie within close vicinity of Oxley Creek. Two drainage lines to the east and west of the proposed development join into Oxley Creek to the north of this site near Hobury Rd. Some of these sightings were road kill e.g. Teviot Rd and Goodna-Springfield Rd.

- Any environmental reports for the proposed Teviot Downs development conducted prior to Dr Scott Burnett's community quoll survey in 2006, would not have been able to access his information for the Greenbank area as it would not have been available at that time in 2003. However, the more recent Biodiversity Assessments in February 2010 and November 2010 **should** have picked up this information. This information about quolls is available on Wildnet but only by doing a 4km radius search from the northern edge of the DA site. Wildnet searches conducted of 1.5 and 2.5 km radius from the same location did not produce any reference to quolls.
- See **Appendix 3** for quoll development issues in the Mt Lindesay North Beaudesert Study Area as outlined by Dr Scott Burnett (2006) .

4.0 LACK OF ENVIRONMENTAL ASSESSMENT - FAUNA

There is a lack of environmental data and information relating to the Teviot Downs development proposal including a lack of on ground surveys to support the Environmental and Biodiversity Assessment reports that have been compiled.

4.1 KOALAS

- The National Koala Conservation Strategy 2009-2014 (p13) states that "the koala is a protected species in Queensland...In addition, the legislation requires that government agencies consider the management measures necessary to conserve existing koala populations" .
- The koala is listed under the Nature Conservation Act as vulnerable.
- Koalas in SE Queensland are in decline and this makes all koalas and their habitat important for conservation in SE Queensland
 - 2004 koalas in SE Qld Bioregion listed vulnerable to extinction
 - 26% decline in Koala Coast koalas was reported in a Survey 2005-06
 - Koala Coast koala surveys predict local extinction of koalas in the wild by 2010

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

- Declines in koala populations - Redlands 27%, Logan 26%, Brisbane 21%
 - Largest declines have occurred in Urban Footprint areas
 - Causes – habitat loss, car strikes, dog attacks, disease
 - Importance of urban and bushland koalas (QPWS 2007)
 - 46% decline in Pine Rivers" urban koala population density (in 6 years)(2008 GHD Report for Moreton Regional Council)
- Detailed koala surveys are needed at this local level of planning and has not been undertaken in relation to this proposed development. No koala surveys have been conducted by Beaudesert Shire or Logan City Council for the Greenbank area or for the Mount Lindesay North Beaudesert area. Koala Mapping conducted by GHD for the state government did not include on ground assessment in the Teviot Downs, Greenbank area or surrounding suburbs. In fact, the Environmental and Biodiversity Assessment Reports prepared for this proposed development dated February 2010 and November 2010 states that koalas in the area are "locally extinct" (Biodiversity Assessment Nov 2010 p 6) and that the narrow riparian corridors alone will improve biodiversity.
 - **Wildnet records** for koalas have not been referred to and reveal 62 records for koalas up to a 4 km radius from a GPS location taken from the northern edge of the proposed development site . There are 20 records for koalas up to a 2.5 km radius from the same GPS location on the northern edge of the proposed development site. There are 5 records for koalas up to a 1.5 km radius from the same GPS location on the northern edge of the proposed development site.
 - The land use surrounding the proposed site is currently rural-residential and does contain koalas (see **Appendix 4 LACA Fauna Sightings** from a community survey conducted from **February – March 2011**). These resident sightings confirm the presence of koalas in the vicinity of the proposed development site and the Greenbank area. Of the 29 koala sightings reported from the Greenbank area, 8 of those 21 of those sightings have been observations since 2007, and 12 of those sightings have occurred in 2010 and 2011.
 - There are no provisions or guidelines in this proposed development that comply with the State Koala Planning Guidelines. The developer has made no attempt to comply with this at all e.g. "koalas are extinct in the area". The current proposed development includes no provisions for ensuring koala safety and resilience of the species during or after this proposed development. These provisions need to incorporate the koala conservation guidelines, surveys (short and long term) , long term monitoring, green offsets, green infrastructure, review of linear infrastructure and wildlife connectivity, fauna movement solutions, land acquisition especially to consolidate and connect

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

habitat, climate change policy, tree clearing regulations to protect koalas and their habitat.

- The current proposal for Teviot Downs does not include the retention of large core green areas. The proposed narrow vegetation corridors along the drainage lines that flow north of this site into Oxley Creek are not of significant width to be best practice for habitat connectivity and biodiversity. It is not best environmental practice to retain narrow riparian corridors – this traditional and outdated approach (as used in the previous Teviot Downs development to the south of Pub Lane) increases the likelihood of invasion by pest and feral species into a long and narrow corridor that will suffer significant edge effects, weed invasion and pest invasion that will degrade and not protect biodiversity in the Greenbank area.

Larger areas need to be protected as core green areas and the widths of the corridors along the riparian areas of Oxley Creek need to be significantly wider to provide best practice linkages to core habitat. Existing vegetation in the area should not be removed but retained as stepping stones for fauna. Whatever is current best practice now will surely not be sufficient in the future i.e. 50 years (based on current experience from past decision-making and planning). This alone indicates that better than current best practice needs to be applied now in future planning for Teviot Downs and Logan City especially in relation to proposed high densities which are not supported for this site.

Previous acreage development south of Pub Lane retained the traditional narrow riparian corridors and these corridors were inappropriately buffered with local roads. This proposed higher density development proposes to do the same thing and also proposes to have a road entrance from Pub Lane that will cross the eastern drainage line of a tributary that flows into Oxley Creek. The higher density development will increase vehicle movements and the proximity of roads to waterways and vegetation will increase the risk of road deaths and injury for native fauna and will contribute to the decline of biodiversity. Local wildlife rescue groups and care groups such as BARN (Brisbane Area Rescue network) and Wildcare have data that shows koala and other fauna injuries and deaths in the local area. This information has been forwarded to DERM and is to be forwarded to the ULDA.

- Conserving very narrow areas of vegetation along drainage lines to the east and west of the proposed development and roads through these and adjacent to these drainage lines will fragment habitat, degrade habitat linkages, expose narrow vegetation corridors to weeds and pest invasion (edge effects), increase the risk of road kill to koalas and the high density of development will increase the risk of dog attacks for koalas. The impacts of stress related to habitat loss and changes in their environment can also increase the risk of diseases for koalas.

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

- A **Neys Road case study from Redlands Shire Council** shows the fatal impact of high density urban development on a healthy koala population on a 70 hectare bushland site (See **Appendix 5**). The EPA surveyed the area of bushland before development (it had healthy koalas, a density of 1 koala/ha and 100% of adult females had young). After development (with just 16 hectares of bushland left along a riparian corridor), 36% of koalas were diseased, a density of 0.16 koala/ha and only 1 adult female had young. The total population declined from 1998 to 2005 after development (De Villiers 2007).

4.2 WILDNET

- There is a lack of detailed flora and fauna assessment in the Vegetation and Biodiversity Assessment reports. These reports fail to include readily accessible information sources such as Wildnet data (DERM) and Wetlands data accessible on DERM's website or through DERM contacts .

4.3 GLOSSY BLACK COCKATOOS

- There is no reference to glossy black cockatoos or their food source trees *Allocasuarina littoralis* in the biodiversity assessment. Five residents reported sightings of glossy black cockatoos in the LACA fauna survey. Glossy black cockatoos are listed as vulnerable under the Nature Conservation Act in Queensland. They have very specialized food requirements and specific hollow requirements for nesting. Some sightings have been reported from the area of Woodfall and Hobury Rd north of the proposed development site. The LACA fauna sightings in **Appendix 4** lists sightings of glossy black cockatoos reported by some residents .

4.4 FROGS AND REPTILES

- Insufficient consideration has been given to frog and reptile species in desktop format with limited species listed and certainly a lack on ground field assessment. There is only one sentence in the Biodiversity Assessment (p 15) that states " Reptiles and Amphibians will utilize the corridors depending on water quality". There is also no information about turtle species. Wildnet records up to 4 km from the northern boundary of the proposed development list a tusked frog (vulnerable) within 4 km radius of the proposed development. The location of this proposed development, at the headwaters of two tributaries that join and flow north into Oxley Creek with ponds and lagoons ,indicates that this information should be considered seriously in the planning stages of any proposed development. However, this has not been the case.

4.5 PLATYPUS

- There is no reference to platypus species in the Biodiversity Assessment especially as this development will have downstream impacts on Oxley Creek.
- Wildnet records up to 4 km from the northern boundary of the proposed development had a 2 records of 2 platypus within 4 km radius of the northern boundary of the proposed development and 1 platypus sighting up to 1.5 km from the northern boundary of the proposed development. The location of this proposed development, at the headwaters of two tributaries that join and flow north into Oxley Creek with ponds and lagoons ,indicates that this information should be considered seriously in the planning stages of any proposed development. However, this has not been the case.
- LACA fauna sightings (see **Appendix 4**) recorded one historic sighting and one recent sighting for February 2011 for platypus in Oxley Creek.

4.6 BIODIVERSITY ASSESSMENT REPORT

The Biodiversity Assessment Report for February 2010 includes a Fauna Survey of the Teviot Downs development site from October 1993. However, this report has not been updated.

5.0 LACK OF HYDROLOGICAL ASSESSMENT

- The location of this proposed development is at the headwaters of two drainage lines that join and flow north into Oxley Creek, adjacent ponds and lagoons. In the Beaudesert Shire Planning Scheme 2007 these are shown as „Stream order Category A“ on the Catchment Management, Waterways and Wetlands Overlay.
- On the LCC Website – Greater Flagstone (New Cities) being prepared for the new LCC Planning Scheme (not yet been approved), the waterways are listed as drainage on the Existing Waterway Buffers, Flood and Overland Flow.
- Where the two tributaries join near Hobury Rd ,to the north of the proposed development site, the Flagstone Strategic Plan (Existing Waterway Buffers, Flood and Overland Flow) the area is mapped as flood and overland flow area.
- Critical hydrological studies and modeling for before and after site development have not been undertaken. In the light of the impacts of the January 2011 Brisbane River flooding, any increased upstream development will have impacts on areas further downstream. In the case of Oxley Creek there was significant flooding from the

12

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

Rocklea to Graceville right down to the mouth of Oxley Creek where it joins the Brisbane River. At present the headwaters of Oxley Creek are less developed than the middle and lower sections of Oxley Creek. However, high density urban development will increase the amount of hard surfaces (eg bitumen, concrete, roofs, pavers) and this will increase the amount of runoff and water flow.

- The Biodiversity Assessment report (November 2010 p9 & February 2010 p 8) acknowledges that “water flows in these mostly ill-defined lines are intermittent but there is evidence that flows may be vigorous when they do occur”.
- Any immediate increase in stormwater flow and overland flow will increase the risk of flooding locally and further downstream for Oxley Creek.
- The endangered vegetation on the development site may be negatively impacted by altered water flows and regimes. The Biodiversity Assessment Report (p 15) states that “ the endangered vegetation , which is associated with initially overland flows of stormwater”.
- For the properties to the immediate north of the proposed development site overland water flow and flood risk will be increased more than what is currently experienced. These properties already experience overland flow and flooding. The resident at 31-47 Woodfall Rd commented on the significant flooding in November 2009 and January 2011 and is concerned about where the water flow will go and the increased flood risk to his property. The property owner of 38-50 Woodfall Rd confirmed the concerns of the resident at 31 – 47 Woodfall Rd and said he recalled the property flooding. The resident from 38-50 is also concerned about overland flow and flooding issues. The resident at 2-8 Woodfall Rd (Mr Barry Richardson) is also concerned about the down stream impacts and possible increased flooding on his property. He is a resident of 21 years who recalls that the 1974 flood heights were half way up his block. Ms Jan Lia, a resident from 85-111 Hobury Rd was also concerned about flood impacts on her property. She recalled that in November 2008 water flooded to the fence line near her house and covered the paddocks of her property.
- Where is the legal point of discharge from the proposed development site?
- Residents in the existing Teviot Downs estate, to the south of Pub Lane, have been negotiating unsuccessfully with Logan City Council and the Teviot Downs Developer to correct overland flow and flooding issues that have been reported in the local Logan West leader in January 2010 and Jimboomba Times in November 2009, January 2010

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

and February 2010. Some residents have had costs in excess of \$12 000 to fix overland flow and drainage ,but this has still not fixed the problem. Both the Logan City Council and Teviot Downs developer have taken the position that this is the resident"s problem to fix up. Will this same experience occur if this development north of Pub Lane is approved?

- Hydrological assessment and modeling is needed.
- Erosion and sedimentation issues and constraints need to be considered. Sandy soils in this location predispose the area to erosion risk especially when vegetation is removed.

6.0 SEQRP CONSIDERATIONS

- The current submissions for the proposed development north of Pub Lane closes on 15 March, however the ULDA consultation for the Greater Flagstone UDA is not due to commence until 21 March. The community has the right to view this current development proposal in connection with the ULDA consultation for Greater Flagstone. This proposed Teviot Downs development is located within the Greater Flagstone area.
- The SEQRP (2009-2031) states that " Prior to any development, the corridor needs coordinated planning to effectively provide infrastructure services and a network of centres , and to ensure high levels of employment self –containment." This is not provided by the current site proposed for development.
- The proposed development does not provide road and public transport infrastructure to link the area the gold Coast, Logan and Ipswich (SEQRP p 28).
- This development proposal has not adequately assessed environmental issues and will not achieve world leading environmental performance for any urban development and related infrastructure (SEQRP p 28).
- The ULDA currently requires that site specific environmental studies are to be undertaken by developers. LACA believes that this is a conflict of interest. The proposed DA does not adequately address the environmental constraints as previously outlined.
- This development does not demonstrate a high level of employment self-containment.

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

- This proposed development does not include considerations for public transport and does not reduce car dependence and private vehicle travel. There is no bus or rail public transport available other than the local school buses. The passenger rail proposal is still aimed at 2031.
- This proposed development is not providing services (eg schools, community services) to provide social infrastructure to cater for the population increase eg more primary school students, more high school students.

7.0 BUFFERS

- The current development plans for the site do not incorporate buffers between the existing rural-residential properties and the proposed future high density residential development .

8.0 PROTECTION OF VEGETATION

- The large area of Endangered Regional Ecosystem vegetation north-east of the proposed development site near the railway line needs to be retained as a bushland stepping stone.
- Any revegetation and rehabilitation should utilize locally endemic species not introduced species.
- The endangered vegetation on the development site may be negatively impacted by altered water flows and regimes. The Biodiversity Assessment Report (February 2010 p 15) states that “ the endangered vegetation , which is associated with initially overland flows of stormwater”.
- Mowing of a linear parkland (as stated on p 16 of the Biodiversity Assessment Report) will reduce the biodiversity of the corridor.
- The Biodiversity Assessment Report (February 2010 p 16) proposes clearing species of *E. teriticornis* which is a preferred koala food source tree and should not be occurring.

9.0 ROADS

Road design needs to be compatible with fauna movement solutions and include fauna sensitive designs and reduced road speeds (e.g. road number 1 on development plans) . There is no comment about this in the current reports other than a brief reference to road

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

speed at the end of the Biodiversity Assessment report November 2010. Koala design guidelines should be adhered to.

The road structures being considered must consider the fauna that may utilize the area eg height suitability for kangaroos and wallabies, culverts and piped crossings that do not flood with water and prohibit safe fauna access during rainfall events. Dry area movement for fauna should be provided even during wet weather events.

10.0 SERVICES

- The bio detention basins are located very close to the drainage line that runs to the east of the proposed development. What impacts will these have on downstream water quality when they overflow? How frequently will this occur?
- The Combined Services Layout Plan proposes that 6 bio-detention basins be located approximately 40 metres or less from the existing drainage line that flows to the eastern tributary of Oxley Creek . The largest proposed bio detention basin shown in the NE of the proposed development on the Combined Services Layout Plan, would be no more than 5 metres from the Oxley Creek Tributary as revealed in the External Sewerage Layout Plan.
- Will the sewerage pumping station have a downstream impact on water quality. What will this be? What will the operation hours/times be?

11.0 WATER QUALITY

1. The 2008 to 2010 Healthy Waterways Ecosystem Reports revealed Oxley Creek received a F grade or fail for Freshwater results and Estuarine results. In the report Oxley Creek is described as a highly modified, urbanised catchment with some grazing lands and natural bush/forested areas remaining in the upper parts of the catchment.

Water quality in the upper Oxley Creek Catchment is still in a good condition. However, continuing to remove vegetation in the upper areas of the Oxley Creek Catchment as this DA proposes will continue to degrade the water quality and introduce more contaminants from runoff from a more densely populated urban development.

Continuing development around the proposed Stage 1-3 on Lot 9968 SP 163061 will increase nutrient and sediment runoff, and increase water flow more than has been experienced in the past for downstream areas along Oxley Creek .

There is no reference to flood modeling undertaken by the developer of the catchment to determine the increased flow that will occur. This is especially relevant as Oxley Creek experienced significant flooding during the floods in January 2011. Has flood

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

modeling been undertaken? If so, where are the reports? If not, why not and when will these be done?

2. An F for Freshwater environments in Oxley Creek noted that

- Streams generally failed to meet ecosystem health guidelines.
- Decrease in physical/chemical indicator.
- Increases in nutrient cycling, ecosystem processes, macroinvertebrates and fish indicators. (Healthy Waterways Report 2010)

3. An F for Estuarine environments noted that Oxley Creek had poor water quality with continued high nutrients, high turbidity and low dissolved oxygen concentration (Healthy Waterways Report 2010).

Increased stormwater with nutrients from higher density urban development will increase the nutrient levels being discharged into Oxley Creek , resulting in higher water pH, weed invasion of bushland, remnant and regrowth vegetation, a loss of local biodiversity , and may result in altered breeding patterns eg for frogs that are adapted to certain water pH levels.

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

APPENDIX 1 BIRD SPECIES OBSERVED ON 9 MARCH 2011 (BRISBOCA)

BrisBOCA is the Brisbane/Gold Coast Branch of Bird Observation & Conservation Australia. We are a not for profit organisation participating in bird surveys throughout the region. Our aim is to educate the community in general, to make submissions on matters of conservation and to protect native bird species and their habitats.

TOTAL 67 SPECIES OBSERVED

SITE 1 - PUB LANE TURF FARM

GPS 27.44.12S/152.57.05E

Purple Swamphen – 5
Willie Wagtail – 12
Australasian Grebe – 3
Australian Wood Duck - 14
Australian Magpie – 1
Magpie-Lark – 77
Dusky Moorhen – 7
Crested Pigeon – 8
Pacific Black Duck – 25+
Grey Butcherbird – 1
Masked Lapwing – 50+
Little Pied Cormorant – 2
White-faced Heron – 6
Common Bronzewing – 1
Intermediate Egret – 2
Eastern Great Egret – 1
Blue-faced Honeyeater – 11
Scaly-breasted Lorikeet – 4
Buff-banded Rail – 1
Welcome Swallow - 30+
Noisy Miner – 3
Little Corella – 20+
Common Mynah – 2
Little Black Cormorant – 3
Cattle Egret – 1
Australian Pipit – 1
Sulphur-crested Cockatoo – heard
Striated Pardalote – heard
Black-fronted Dotterell – 3
Fairy Martin – 10+
Double-barred Finch – 2
Black-faced Cuckoo-Shrike – 1
Superb Fairy-Wren – 5 (2 separate groups)
Laughing Kookaburra – 2

18

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

Brown Quail – 2

Rainbow Lorikeet – heard

Pheasant Coucal – 1

Little Grassbird – heard

SITE 2 - CORNER OF PUB LANE AND NEW BEITH ROAD TO OXLEY CREEK

GPS 27.44.00S/152.56.49E

Darter – 1 female*

Dusky Moorhen – 5

Crested Pigeon – 1

Little Black Cormorant – 6

Welcome Swallows – 10

Little Friarbird – 3*

Rainbow Lorikeet – 2

Plumed Whistling Duck – 7*

Australian Magpie – 2

Australasian Grebe – 1

Fairy Martin – 10

Superb Fairy-Wren – 1

Scaly-breasted Lorikeet – 2

Noisy Miner – 17

Blue-faced Honeyeater – 3

Pied Butcherbird – 1*

Laughing Kookaburra – 1

Striated Pardalote – 2

White-throated Honeyeater – 1*

Australian Wood Duck – 1

Common Mynah – 1

White-throated Needletail – 2*

White-bellied Woodswallow – 2*

Spotted Dove – heard*

Tawny Grassbird – 1*

Noisy Friarbird – heard*

Little Corella – 2

Torresian Crow – 2

Silvereye – 1*

Brown Honeyeater – 1*

Willie Wagtail – 1

Little Egret – 1*

Bar-shouldered Dove – heard*

SITE 3 – NEW BEITH ROAD LAKE UNDER POWER EASEMENT AND ROBERTS ROAD

GPS 27.43.46S/152.56.57E

Dollarbird -1*

Noisy Friarbird – heard

Black-faced Cuckoo-Shrike – 3

White-throated Gerygone – heard*

Lewin's Honeyeater – heard*

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

Blue-faced Honeyeater – 1
Dusky Moorhen – 5
Pacific Black Duck – 1
Red-browed Finch – 3*
White-throated Honeyeater – 1

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

Australian Wood Duck – 1
Striped Honeyeater – heard*
Striated Pardalote – 2
Australasian Grebe – 3
Plumed Whistling Duck – 1
Brown Quail – heard
Little Grassbird – heard
Sacred Kingfisher – 1*
Brown Honeyeater – heard
Purple Swamphen – 3
Golden-headed Cisticola – 1*
Mistletoebird – heard*
Crested Pigeon – 1
Pied Butcherbird – heard
Australian Magpie – 1
Eastern Whipbird – heard*
Silvereye – 1
Scarlet Honeyeater – 2 – male and female*
Double-barred Finch – 1
Cicadabird – 1 female*
Tawny Grassbird – 1
Red-backed Fairy-Wren – 1*

SITE 4 – RICHARD WILSON PARK, NEW BEITH ROAD, NEW BEITH

GPS 27.44.43S/152.56.24E

Purple Swamphen – 4
Australian Magpie – 1
Laughing Kookaburra – 1
Eastern Whipbird – heard
Scaly-breasted Lorikeet – 2
Brown Honeyeater – heard
Noisy Miner – heard
Striated Pardalote – heard
Dollarbird – 1
White-throated Honeyeater – heard
Rainbow Bee-eater – heard*
Grey Butcherbird – heard
Red-backed Fairy Wren – 1
Variegated Fairy Wren – 2*

SITE 5 – LAKE AND MARSHLAND AT END OF TULLY ROAD

GPS 27.44.32S/152.55.58E

Blue-faced Honeyeater – 2
Laughing Kookaburra – 1
Dusky Moorhen – 6
Australian Wood Duck – 16
Little Black Cormorant – 1

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

Superb Fairy-Wren – 1 male
Australasian Grebe – 3
Sacred Kingfisher – 1
Pacific Black Duck – 11
Purple Swamphen – 1
White-throated Honeyeater – heard
Grey Butcherbird – heard
Rainbow Bee-eater – heard
Welcome Swallow – 1
Magpie-Lark -
Noisy Friarbird – 1
Sulphur-crested Cockatoo – heard
Fan-Tailed Cuckoo*

Logan & Albert Conservation Association

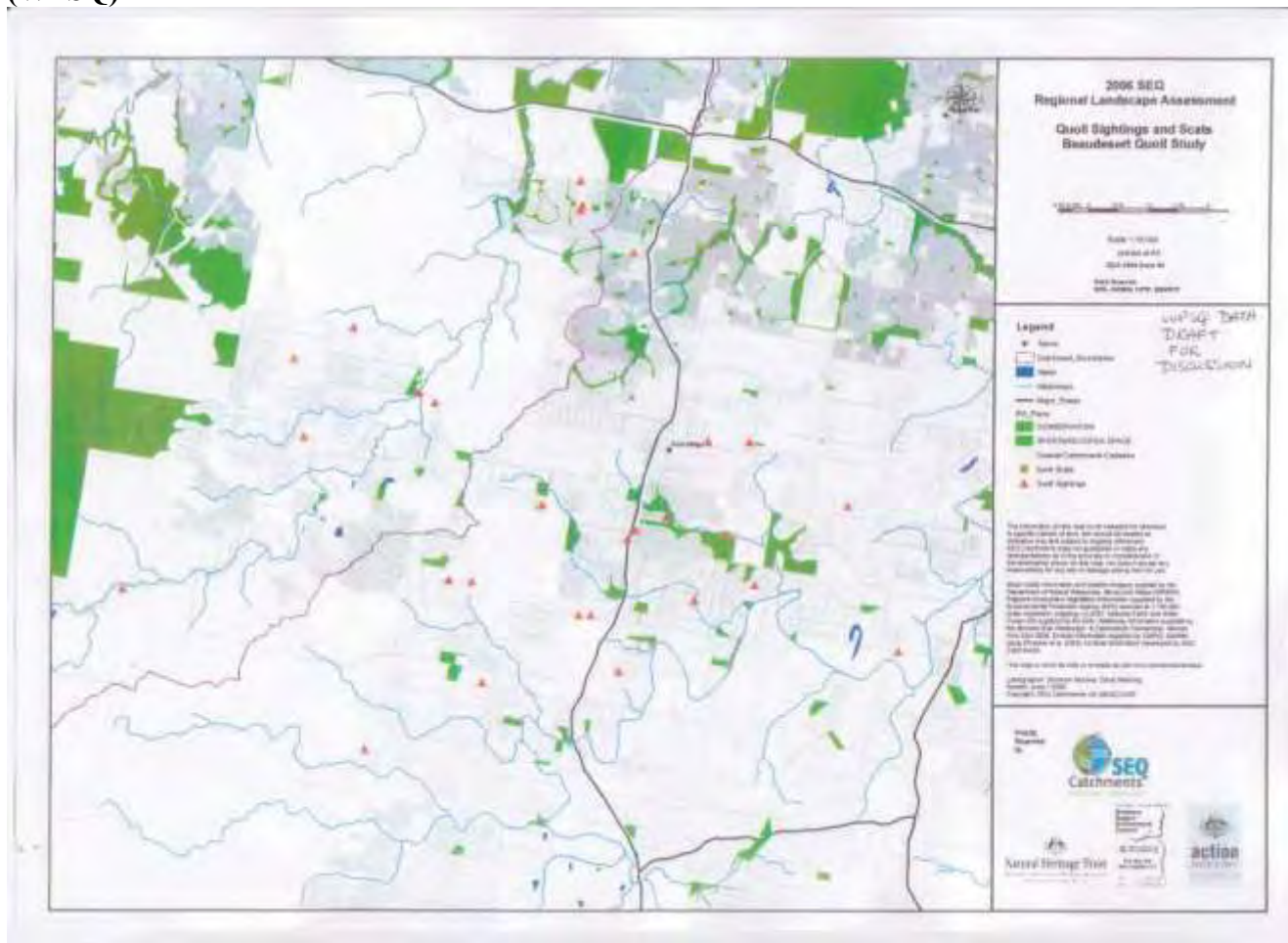
PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

APPENDIX 2 QUOLL COMMUNITY SIGHTINGS NORTH BEAUDESERT TO 2006 (Dr Scott Burnett (WPSQ))



Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

APPENDIX 3

Submission to the MLNBSA study

Identifying and mitigating against impacts on populations of the Endangered Spotted-tailed Quoll in the MLNBSA

12th April 2006

Dr. Scott Burnett (Quoll biologist)

Wildlife Projects Officer

Wildlife Preservation Society of Queensland

1. Summary

- I. It is now known (since June 2005) that a population of the Endangered Spotted-tailed Quoll occurs within the MLNBSA.
- II. In lieu of further data, the precautionary principle dictates that all remnant vegetation in the MLNBSA be viewed as potential Quoll habitat, and mitigation measures implemented as such.
- III. The precautionary principle dictates that until targeted studies are undertaken, the Greenbank - Spring Mountain /Teviot Range - Border Ranges corridor, and the Greenbank - Tamborine-Border Ranges corridor be considered essential inter-population linkages for Quolls, and actions taken to maintain them as such.
- IV. Regional planning instruments provide grounds for classifying remnant vegetation within the MLNBSA as Essential Habitat for Spotted-tailed Quoll, by the EPA.
- V. The North Beaudesert OUM Plan proposes to replace large areas of native vegetation (and potential Quoll habitat) with housing estates, enterprise precincts and linear service infrastructure.
- VI. The North Beaudesert OUM Plan will cause fragmentation of potential inter-population linkages identified above (III). Fragmentation of the MLNBSA Quoll population, and the hypothetical Border Ranges-Greenbank meta-population, will result from clearing, development and subsequent impermeability of housing estates, enterprise precincts and linear service infrastructure to movements by Quolls.
- VII. State, Regional and Local Bioregional corridors in the MLNBSA must be re-evaluated, including the addition for Norris Creek to Greenbank to Greenbank Military Training Area, and a corridor along Chambers Ck.
- VIII. A direct result of increased business and residential populations will be increases in traffic and of road infrastructure. This will create a major and probably unsustainable mortality sink for

24

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

Spotted-tailed Quolls in the area, which are expected to be killed on the areas roads at ever increasing rates as the area develops.

- IX. A direct result of proposed urban communities in Park Ridge, Boronia Heights, Greenbank Central, New Beith, Flagstone and Undullah will be larger numbers of dogs in the area. Even when contained in backyards, this will result in an increased kill rate of Quolls. Our surveys to date suggest that backyards in the region are regularly visited by Quolls.
- X. It is likely that increases in the residential/bushland edge will result in an increase in wild dog incidents and calls for council control of wild dogs in adjacent natural areas, especially in the Flagstone/Undullah area. Control by 1080-baiting is likely to be sought and may impact on Quoll populations.
- XI. An increase in the number of householders in the area, and our documentation of Quolls visiting local backyards here, suggest that interactions between Quolls and humans will increase. We would therefore also expect the incidence of hostile interactions to increase.
- XII. Constraints mapping needs to be rerun using information on Quolls already collated by the community, and including any subsequent information collated as a result of further Quoll studies conducted within the MLNBSA.
- XIII. As a general consideration, and in lieu of further data, provisions must be made to maintain current areas of remnant vegetation as open space (conservation) areas, and to maintain and enhance existing wildlife corridors.
- XIV. A comprehensive regional survey of Spotted-tailed Quoll populations within and adjacent to the MLNBSA and Quoll management plan are required in order to adequately address concerns regarding impacts of the North Beaudesert Plan on Spotted-tailed Quoll populations. These must be undertaken prior to any further planning or on-ground works are undertaken.

2. Background

The Spotted-tailed Quoll *Dasyurus maculatus* is a carnivorous marsupial of the family Dasyuridae. It is the largest surviving marsupial carnivore on mainland Australia, and as such plays an integral role in ecosystem processes. Like most top order carnivores the species is also particularly prone to localized extinction due to habitat disturbance, direct persecution and indirect affects.

Not surprisingly then, Spotted-tailed Quolls are classed as Vulnerable, Threatened or Endangered in all mainland Australian states in which they occur (i.e. South Australia, Victoria, New South Wales and Queensland). The species is classed as Vulnerable in south-east Queensland under the provisions of the *Queensland Nature Conservation (Wildlife) Act 1992*. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, lists the species as Endangered.

3. MLNBSA as Quoll habitat

Until June 2005, the Spotted-tailed Quoll was thought to be extinct in the Greater Brisbane area. Quolls had not been known from the area since 1956.

On 5th July 2004, Munruben local Ivell Whyte picked up a roadkilled Spotted-tailed Quoll on the Centenary Highway off-ramp at Carole Park. At the time, experts assumed that this animal was most likely a stow-away which had hitched a ride on a vehicle coming in from the Granite Belt or Border Ranges area. However, on the 21/6/05, Ivell Whyte picked up another roadkill, this time from the Mt Lindesay Highway in Munruben. This second roadkill (which now resides in the Queensland Museum), indicated that there was a population of Quolls in the district. This prompted a survey amongst the local community which, over a three month period from January-April 2006, resulted in a total of 22 contemporary Quoll sightings being collated from the Mt Lindesay North Beaudesert Study Area (MLNBSA) (see Attachments A and B).

The spatial extent, numerical size, movements, and residency status of the Spotted-tailed Quoll population in the MLNBSA remains unknown. As such it is impossible to pin down the key habitats

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

and movement areas used by Quolls in the area. **In lieu of further data, the precautionary principle dictates that all remnant vegetation in the MLNBSA be viewed as potential Quoll habitat, and mitigation measures be implemented to protect it.**

Similarly, there is no specific information regarding linkages and movement corridors between the MLNBAS Quoll population and the nearest other Quoll populations in the Border Ranges and environs (the Greenbank-Border Ranges meta-population), to the south. Two such potential corridors can be inferred from aerial photography:

- (i) one to the south-west from Greenbank Military Reserve through Spring Mountain, Flinders Peak, Teviot Range and thence into the Mt Barney/Border Ranges Quoll populations, and,
- (ii) another to the south-east from Greenbank Military Reserve through Mt Tamborine and thence to the Border Ranges/Lamington Plateau Quoll population.

The precautionary principle dictates that until targeted studies are undertaken, these corridors be considered essential inter-population linkages and actions taken to maintain them as such.

4. Potential impacts of the North Beaudesert OUM plan on Quolls

The very short life-span (i.e. about 3 years) and low breeding rate (i.e. 1 litter of no more than 6 young/year) means that Quoll populations can not sustain consecutive years of low recruitment, or sustained levels of unnaturally high mortality. This, coupled with the species wide-ranging behaviour (i.e. animals forage over several kilometers/night), and their opportunistic foraging (i.e. Quolls eat everything of animal origin ranging from rancid roadkill to caged poultry, meaty household scraps and pet food to rodents and possums), means that individuals are very susceptible to encountering hostile environments such as roads and households. The high extinction proneness of Quoll populations also require that inter-population linkages be maintained and enhanced where possible, to ensure the long-term survival of the MLNBSA quoll population.

This combination of life history strategy, feeding and ranging behaviour has led to Spotted-tailed Quolls becoming one of the most susceptible Australian species to the intensification of land-use and to offsite effects resulting from development. In particular, roads and urbanization in areas adjacent to Quoll habitat can take an immense toll on Quoll populations (see below).

Research suggests the following specific threats to Quoll populations in general, and within the MLNBSA in general:

(1) *Habitat loss*

The North Beaudesert OUM Plan proposes to replace large areas of native vegetation (and potential Quoll habitat) with housing estates, enterprise precincts and linear service infrastructure.

Habitat loss is the single greatest threat to any wildlife species. Being at the top of the food chain, Spotted-tailed Quolls are particularly affected by habitat loss, both because of their large spatial requirements (i.e. about 500 – 1000ha per animal), and because of their dependence on a diverse and abundant mammalian prey community. Therefore even habitat change which results in nothing except the loss of tree hollows will affect Quolls through a decline in possum populations.

Female Quolls have specialized denning requirements during the period of litter rearing. Maternity dens are usually found within tree hollows and rock piles. They are usually characterised by a long and narrow entrance tunnel into a larger nursery chamber. These are not common landscape features, and their loss may render an area unsuitable to Quolls, even if other factors such as food are present.

The SEQ Regional Plan sets out Indicators of the Natural Environment (Table 3, p.25). These include Extinct, Endangered and Vulnerable species and ecological communities. The presence of populations of the Spotted Tailed Quoll, and other Rare and Threatened species (e.g. Glossy Black Cockatoo, acid frog *Crinia tinnula*, Koala and others still being collated), therefore provides **grounds for classifying remnant vegetation within the MLNBSA as Essential Habitat by the Qld EPA.**

28

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

(2) Habitat fragmentation

The North Beaudesert OUM Plan will cause fragmentation of potential inter-population linkages via the Spring Mountain/Teviot Range area to the south-west and through the Munruben/Logan area to the south-east. Fragmentation of the MLNBSA Quoll population, and the hypothetical Border Ranges-Greenbank meta-population, will result from clearing, development and subsequent impermeability of housing estates, enterprise precincts and linear service infrastructure to movements by Quolls.

Habitat fragmentation occurs as a result of partial clearing of the landscape, such that not all remnant vegetation is removed, however fauna access between these remnants is greatly reduced such that fauna populations become fragmented which in turn results in lower numbers in each new fragmented population and increases the risks of extinction through inbreeding and stochastic events.

There are also precedents (existing Essential Habitat Mapping and Beaudesert Shire Council Biodiversity Mapping Map PM 31A) for State, Regional and Local Bioregional corridors in the MLNBSA to be re-evaluated, including the addition for Norris Creek to Greenbank to Greenbank Military Training Area, and a corridor along Chambers Ck.

(3) Roadkill

Green and Scarborough (1990) attribute the majority of human induced mortality of the species in Tasmania today to road kills. In Queensland there are fewer data, but many Quolls are reported to authorities as roadkill. Tasmanian researchers found that local populations of two Quoll species, the Spotted-tailed and Eastern Quolls became extinct following the development of a high speed road environment through Quoll habitat in Tasmania.

Quolls spend a lot of time on roads, where they forage for roadkills. They also use roads as sites for scent marking.

Quoll roadkills are known to have occurred in the MLNBSA at Mt Lindesay Highway, Teviot Rd, Greenhill Rd, and Goodna-Springfield Rd.

A direct result of increased business and residential populations will be increases in traffic on existing roads and development of new road infrastructure in particular, the OUM proposes new road investigations for a Gateway Motorway extension that will link up to Chambers Flat Rd and Crowson Lane, as well as two road investigations for New Beith and Flagstone area west of the interstate rail line at present.

This will create a major and probably unsustainable mortality sink for Spotted-tailed Quolls in the area, which are expected to be killed on the areas roads at ever increasing rates as the area develops.

(4) Domestic dogs and cats

A direct result of proposed urban communities in Park Ridge, Boronia Heights, Greenbank Central, New Bieth, Flagstone and Undullah will be larger numbers of dogs in the area. Even when contained in backyards, this will result in an increased kill rate. Our surveys to date suggest that backyards in the region are regularly visited by Quolls at present.

Dogs rarely prey on Quolls in natural situations, where Quolls can readily escape up trees and into rockpiles. In more open, modified landscapes, Quolls can be trapped in open areas and killed by dogs. Dogs rarely eat the Quolls they kill.

Adult Cats and Quolls are evenly matched as combatants and probably rarely come into direct conflict. However, young Quolls have been known to be killed by cats and vice versa, Quolls have been known to hunt kittens.

(5) Poisoning

1080 baiting

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

It is likely that increases in the residential/bushland edge will result in an increase in wild dogs incidents and calls for council control of wild dogs in adjacent natural areas, especially in the Flagstone/Undullah area. Control by 1080-baiting is likely to be sought and may impact on Quoll populations.

Circumstantial evidence suggests that accidental poisoning of Quolls occurs when they ingest baits laid for wild dog control (e.g. Belcher 1996), although there is also evidence to the contrary (Cremasco unpublished data). Although Quolls are more resistant to the effects of 1080 than dogs and foxes, the amounts of 1080 used in meat baits in Queensland is still potentially high enough to result in massive mortality.

Secondary poisoning

An increase in the number of workplaces and households in the Park Ridge, Boronia Heights, Greenbank Central, New Beith, Flagstone and Undullah areas is likely to result in increases in the number of people using rodenticides, and an increase in the number of poisoned rats available for scavengers (including Quolls) in the environment.

An unknown but potentially very significant impact on peri-urban Quoll populations is secondary poisoning when they consume rats which have been poisoned in domestic households and in places of business. Quolls are inveterate scavengers which naturally consume living and dead animals. There may also be other secondary poisoning risks associated with suburbia (e.g. Blue-tongue Lizards are known to die from eating poisoned snails and its unknown if this poison would affect Quolls which subsequently consume these blue-tongues).

(6) Hostile landowners

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

An increase in the number of householders in the area, and our documentation of Quolls visiting local backyards here, suggest that interactions between Quolls and humans will increase. We would therefore also expect the incidence of hostile interactions to increase.

Deliberate killings of Spotted-tailed Quolls occur in retaliation for their depredations upon domestic poultry and other pets, and to a lesser extent, when they enter houses, scavenging for food and food scraps.

Of 152 collated records of *D. maculatus* in Queensland, 91 were of animals that were found at poultry yards or scavenging around houses. The predilection of *D. maculatus* for poultry has been noted in many instances dating back to Goulds' observations from the late 1800s (Gould 1974). In this monograph he describes the species as, "a most dreaded enemy to poultry: it is consequently regarded by the settler as one of his greatest pests" (p110). A common theme during the closer settlement of Quoll habitat is of immediate Quoll depredations upon poultry, retaliation against Quolls and rapid disappearance of *D. maculatus* from those areas (e.g. Lunney and Leary (1988), Bennett (1990)).

Museum records also indicate that Quolls attack aviary birds and house cats.

5. Recommendations: Mitigating Potential Impacts

The magnitude and geographical locus of potential impacts identified above can not be defined at present; there is insufficient information on the distribution and movements of Quolls in the MLNBSA and adjacent areas. **Therefore I submit that a comprehensive regional survey of Spotted-tailed Quoll populations within and adjacent to the MLNBSA be undertaken prior to any further planning or on-ground works are undertaken. These surveys are to include studies of population demography, movement patterns, and key resource areas e.g. den sites, foraging areas.**

I note also that Spotted-tailed Quoll habitat was not one of the filters used in the constraints mapping study, and so submit that **constraints mapping should be rerun using information already collated**

32

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

by the community and any subsequent information collated as a result of further studies conducted within the MLNBSA.

As a general consideration, and in lieu of further data, **provisions must be made to maintain current areas of remnant vegetation as open space (conservation) areas, and to maintain and enhance existing wildlife corridors.**

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

APPENDIX 4 LACA FAUNA SIGHTINGS (Collected February to March 2011)

**For information regarding these sightings please contact
Anne Page (Logan and Albert Conservation Association)**

QUOLL SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|-------------------------|---|---------------|---|
| Feb 2011 | Corner Andrews Rd and Middle Rd Greenbank – paddock next to house with fence knocked down | 1 | Quoll - approximately 20 – 30 sightings over last 2 years |
| 2008 | Corner Andrews Rd and Middle Rd Greenbank | 1 | Quoll – running across road , almost hit it |
| 2009 | Near the Plant Shop going into Army Camp (Middle Road) -27.716245 S 152.992834 E | 2 | Quoll – running across road |
| Nov or Dec 2010 | Corner of Andrew Rd and Middle Rd on island located south of roundabout -27.707025 S 153.002727 E | 1 | Quoll ran across the road 9.30 pm into planted refuge area of island, long body and tail (tail as long as body) running tail straight out, low slung cat) from the park to the refuge island on the road . near the first roundabout driving north on Middle Rd from Greenbank. |
| Sept 2010 | Seen on West side of Goodna-Springfield Rd north of the corner of Thompson Rd (opposite the Greenbank Military Training Area) | 1 | Quoll – 10 am in morning walking/running in long grass on west side of Goodna-Springfield Rd (brown body with white spots) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

KOALA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|--------------------|-------------------------------------|-------------------------------------|---|
| Dec 2009 | 156-158 Sentinel Drive Greenbank | 1 | Koala in tree (male) |
| Jan or Feb 2011 | 365 Groome Rd Greenbank | 1 | Koala – sees koala a few times a year and has always seen them in the last 6 years |
| 2007 or 2008 | 49 Woodfall Road Greenbank | 1 | Koala (observed in tree close on west side of house) |
| 1997 | 38-50 Woodfall Road Greenbank | 1 | koala |
| 1999 | 38-50 Woodfall Road Greenbank | 2 | Koalas (males) |
| 2001 | 140 Hobury Road Greenbank | 1 | koala |
| 28/02/2011 | 101 Farm Road Greenbank | At least one but more than 1? | heard Koalas growling in the early hours of the morning of 28/02/2011 at about 3.30am |
| 01/03/2011 | 101 Farm Road Greenbank | At least 1 ,possibly more | Koala heard Koalas growling in the early hours of the morning at 1.30 am |
| 2009 | 82 Farm Road | 1 | Koala |

KOALA SIGHTINGS – GREENBANK AREA

35

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|-----------------------------|--|-------------------|---|
| first week of November 2010 | 101 Farm Road Greenbank | Koala scratchings | Koala - recent Koala scratchings on trees on my property (confirmed by a PhD student doing a study in the area) |
| October 2010 | 101 Farm Road Greenbank | 1 | koala |
| Jan 2011 | 101 Farm Road Greenbank | 1 | Koala – heard growling at night |
| Feb 2011 | 370 Equestrian Drive Greenbank | 1 | Koala – growling at night |
| 1991 | 151 Olson Rd North Maclean | 2 | Koalas in same tree |
| Sept 2010 | junction of Lyndale Rd/Kingfisher Rd near the Spring Mountain sign in Greenbank. | 1 | Large koala - on the ground bounding from one tree to another |
| 2007 | 58 Sandpiper Drive Greenbank | 1 | Koala (at night time) |
| Feb 2011 | 9 Jillian Court Logan Village | 1 | Koala (always hear or see koalas) |
| 2009 | 9 Jillian Court Logan Village | 1 | Koala (always hear or see koalas) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

KOALA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|----------------------------|---|-------------|--|
| Sept 2010 | 20 Garragoolba Rd Greenbank | 1 | Koala (heard koala growls) |
| 2008 | 20 Garragoolba Rd Greenbank | 1 | Koala (found dead) |
| Late Feb /early March 2011 | 12-16 Damper Court Jimboomba 4280 | More than 1 | Koalas (heard at night) |
| Late 2010 | at the end of Koorinal Road at the bush reserve called Wearings Reserve | More than 1 | Koalas seen here by their next door neighbour |
| 1990 | 83 Koorinal Road, MUNRUBEN 4125 | 1 | Saw one koala on 4 separate occasions about 20 years ago |
| 2010 | 39 Jamboree Close Greenbank 32000103 | More than 1 | Can hear koalas sometimes in the mating season |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|---|---------------------------|--|
| Summer 2010 | 34 Raglan Rd Greenbank 4124 | Can smell and hear koalas | Not seen |
| 25/8/07 | 34 Raglan Rd Greenbank 4124 | 1 live koala | Koala sleeping and moving from neighbours property to tree at this address |
| Before 2006 | 32 Shephard Drive Greenbank 4124 | More than 1 koala | Koala seen in Greenbank Army Camp Area |
| 2005 | 46 Harvest Rd Greenbank 4124 | 1 | koala |
| 2005 | 56 New Beith Rd Greenbank | 1 | Koala near Greenbank State School |
| Nov/Dec 2005 | 143-147 Sentinel Drive | 1 | Live koala on vacant block next door |
| 2000-2005 | Corner of Greenbank Rd and Teviot Rd on south east corner | 3 koalas in 6 years | |
| 13/6/05 | Olson Rd North Maclean | 3 koalas | Usually feed on gum trees |
| 2000 - 2006 | Harvest Rd Greenbank | 1 | Koala sighted once but hears them often. Property is land for Wildlife |
| 2005 | 2-8 Woodfall Road Greenbank | 1 | Koala on fenceline of this property with neighbour |
| 1993 | 2-8 Woodfall Road Greenbank | 1 | Koala in tree opposite property |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

GLOSSY BLACK COCKATOO – GREENBANK SIGHTINGS

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|--|-------------|---|
| Unsure of date | Near corner of Woodfall Road and Hobury Rd ,Greenbank 4124 | More than 1 | Glossy Black cockatoo |
| 2008 | 101 Farm Road Greenbank 4124 | More than 1 | Glossy black cockatoos visit a few times, casuarina trees at the eastern end of my block |
| 14/3/11 | 22-34 Border Crescent Teviot Downs | More than 1 | Glossy black cockatoos |
| 2009 | 20 Garragoolba Rd Greenbank 4124 | 1 | Glossy black cockatoo (seen more cockatoos previously at this property over 30 years) |
| Dec 2010 | 12-16 Damper Court Jimboomba 4280 | 1 | Glossy black cockatoo |
| 2010 | 10 -18 Woodfall Road Greenbank | 1 | Glossy black cockatoo (have seen these cockatoos here regularly over the years) |
| 2010 | 10 – 18 Woodfall Road Greenbank | 1 | Sugar or squirrel glider (have seen these a few times each year over the 11 years residents have lived here) |
| 2011 | 10 – 18 Woodfall Road Greenbank | 1 | Feathertail glider (have seen many over 11 years, recognized tail of glider, their cat sometimes brings one in) |
| 9/3/11 | Greenbank Community Centre Teviot Road (2 km north on west side from corner of Pub Lane and Teviot Rd) | 1 | Ring Tail possum |
| Late 2010 | at the end of Koorinal Road at the bush reserve called Wearings Reserve | More than 2 | Glossy black cockatoos nesting – observed by next door neighbour who always sees black cockatoos nesting there |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

A B N 9 1 9 9 3 3 4 8 5 8 8

GLOSSY BLACK COCKATOO SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------------|---------------------------------|--------|---|
| Reported in March 2006 | 56 New Beith Rd Greenbank | 1 | Heard glossy black cockatoo |
| 2004 | 33 Dungaree Drive Greenbank | 1 | Neighbour has casuarinas tree and saw glossy black cockatoo |
| | 66 Thornbill Drive Greenbank | 1 | Common tree snake Dendrelaphis punctulata |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|----------------------------------|--------------------------------------|--------|--|
| Nov 2010 – Jan 2011 | 56-66 Blue Heeler Drive New Beith | Many | Limnodynastes peroni Striped Marsh Frog |
| Nov 2010 – Jan 2011 | 56-66 Blue Heeler Drive New Beith | many | Limnodynastes salmini Salmon-striped Frog |
| Nov 2010 – Jan 2011 | 56-66 Blue Heeler Drive New Beith | Many | Limnodynastes terraereginae Northern Banjo Frog |
| Nov 2010 – Jan 2011 & March 2011 | 56-66 Blue Heeler Drive New Beith | Many | Opisthodon ornatus Ornate Burrowing Frog |
| July 2010 | 2-8 Woodfall Rd Greenbank | 1 | Sugar glider (have seen about 4-5 of these over 21 years as a resident) |
| 2009 | 2-8 Woodfall Rd Greenbank | 1 | Sugar glider (have seen about 4-5 of these over 21 years as a resident) |
| 2010 | 56-66 Blue Heeler Drive New Beith | 1 | Giant wood moth |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------------|--------------------------------------|--------|---|
| Nov 2010 – Jan 2011 | 56-66 Blue Heeler Drive New Beith | Many | Litoria fallax, Dwarf Tree Frog |
| Nov 2010 – Jan 2011 | 56-66 Blue Heeler Drive New Beith | Many | Limnodynastes tasmaniensis, spotted Marsh Frog |
| Nov 2010 – Jan 2011 | 56-66 Blue Heeler Drive New Beith | Many | Litoria caerulea , Green Tree Frog |
| March 2011 | 2-8 Woodfall Road Greenbank | 1 | Wedge tail eagle landed on property (saw a previous sighting about 2 years ago on driveway) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|--|--------|--|
| March 2011 | 244 Backwater Rd Greenbank 4124 | 2 | Female bobuck and joey |
| 4/3/11 | On north side of the road between the second gate to the substation and the large rock culvert before the roundabout at Sentinel Court and Dungaree Drive. | 1 | Pheasant Coucal |
| 4/3/11 | near the lake at the roundabout at New Beith Road and Pub Lane , Greenbank 4124 | 4 | Cattle Egrets |
| 4/3/11 | on the vacant land in Spring Mountain Drive near the roundabout at Platypus Drive | 2 | Red neck wallabies lying down |
| 28/2/11 | Outside 142 Crowson Lane Munruben 4125 | 1 | male brush tail possum dead (roadkill) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|--|--------------------|--|
| 25/2/11 | Teviot Rd just south of the Greenbank community centre (-27.732886, 152.984518) | 1 | Phascogale – roadkill on west side of Teviot Rd. Specimen taken to Queensland Museum. |
| Nov 2010 | 49 Woodfall Road Greenbank | 1 | Feathertail Glider (last saw one 10 years ago at this address) |
| Jan 2011 | 49 Woodfall Road Greenbank | 1 adult and 1 joey | Red neck wallaby and joey (see these all the time, less now than in past) |
| Jan 2011 | 49 Woodfall Road Greenbank | More than 1 | Eastern grey kangaroo (see these all the time, less now than in past) |
| Dec 2010 | 49 Woodfall Road Greenbank | 1 adult and 2 pups | Dingo mother with 2 pups (Has always seen dingoes in the area in 27 years as resident and has a photo of one) |
| March 2011 | 370 Equestrian Drive Greenbank | 3 | Kangaroos saw 3 moving through the bush |
| Dec 2010 | 370 Equestrian Drive Greenbank | More than 1 | Wallabies Saw more than 1 |
| March 2011 | 370 Equestrian Drive Greenbank | 1 | Pale headed rosella |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|----------------------------------|--------|----------------------------------|
| Unsure of date | 38-50 Woodfall Road Greenbank | 1 | Mopoke owl |
| Unsure of date | 38-50 Woodfall Road Greenbank | 1 | Boobook owl |
| Unsure of date | 38-50 Woodfall Road Greenbank | 1 | Tawny frogmouth owl |
| Nov 2010 | 38-50 Woodfall Road Greenbank | 1 | Lace monitor |
| Date not given | 38-50 Woodfall Road Greenbank | 1 | Dingo – always seen dingoes here |
| Date not given | 38-50 Woodfall Road Greenbank | 1 | Native round tail gecko |
| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| | | | |
|-------------------|----------------------------------|-------------|---|
| Date not given | 38-50 Woodfall Road Greenbank | many | Red bellied black snake and brown snakes |
| Date not given | 38-50 Woodfall Road Greenbank | many | Many different frog species (tributary of Oxley Creek and lagoons are located on this property) |
| Date not given | 38-50 Woodfall Road Greenbank | many | Bearded dragons and water dragons |
| Date not given | 38-50 Woodfall Road Greenbank | many | Blue tongue lizards |
| Date not given | 38-50 Woodfall Road Greenbank | many | Short and long necked turtles |
| Feb 2011 | 31-47 Woodfall Road Greenbank | More than 1 | Red neck wallabies – see these daily |
| Feb 2011 | 31-47 Woodfall Road Greenbank | 1 | Eastern Grey kangaroo |
| Unsure of date | 31-47 Woodfall Road Greenbank | 1 | Dingo |
| Unsure of date | 31-47 Woodfall Road Greenbank | More than 1 | Turtles |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|----------------------------------|-----------------------|--|
| Unsure of date | 31-47 Woodfall Road Greenbank | More than 1 | Bearded dragons and water dragons |
| 26 Feb 2011 | 22 Woodfall Road Greenbank | 10 (in early morning) | Eastern grey kangaroo (see these every day) |
| 26 Feb 2011 | 22 Woodfall Road Greenbank | 1 | Red neck wallaby |
| 2009 | 22 Woodfall Road Greenbank | 1 | Small black bat |
| Date not given | 20 Woodfall Road Greenbank | 1 | Feather tail glider - saw one years ago |
| Jan 2011 | 20 Woodfall Road Greenbank | More than 1 | Eastern grey kangaroos (see less now due to vegetation clearing) |
| Date not given | 20 Woodfall Road Greenbank | More than 1 | Flying foxes |
| 26 Feb 2011 | 140 Hobury Road Greenbank | 1 | Eastern grey Kangaroo – see these daily |
| Since July 2010 | 140 Hobury Road Greenbank | 1 | Squirrel glider |
| 26 Feb 2011 | 140 Hobury Road Greenbank | 1 | Red neck wallaby – see these everyday |
| 2010 | 151 Olson Rd North Maclean | 1 | Squirrel or sugar glider |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING (e.g. address detail) | NUMBER | DETAILS (e.g. eating, sleeping, moving, saw here 5 years ago) |
|------------------|--|--------|---|
| Feb 2011 | 101 Farm Road Greenbank | 1 | barn owls, and frog mouth owls (I hear them almost every night) |
| End of 2010 | 101 Farm Road Greenbank | 1 | wedge tailed eagle perched on top of a large dead tree |
| 12/3/11 | 85 -111 Hobury Road Greenbank | 2 | Eastern grey kangaroo – see these daily |
| 10/3/11 | 85 -111 Hobury Road Greenbank | 1 | Red neck wallaby – usually see one everyday |
| Dec 2010 | 85 -111 Hobury Road Greenbank | 1 | Blue tongue lizard – sitting on dead tree stump |
| 2010 | 85 -111 Hobury Road Greenbank | 1 | Squirrel glider – small one |
| Feb 2011 | 85 -111 Hobury Road Greenbank | 1 | Ring tail possum |
| 1996 | 85 -111 Hobury Road Greenbank | 1 | Lace monitor – large 1.5 metre long walking through horse paddock |
| 7/3/11 | 85 -111 Hobury Road Greenbank | 1 | Micro bat – has seen another here about 5-6 years ago |
| 4/3/11 | 85 -111 Hobury Road Greenbank | 1 | Long neck turtle – have seen |
| 2008 | 101 Farm Road Greenbank | 1 | yellow footed antichenus caught in a rat trap |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|-----------------------------------|--------|---|
| 2010 | 156-158 Sentinel Drive | 1 | Eastern brown snake |
| 2010 | 156-158 Sentinel Drive | 1 | Red bellied black snake |
| 2010 | 156-158 Sentinel Drive | 1 | Bearded dragons |
| 2010 | 156-158 Sentinel Drive | 1 | Tree snakes |
| 2009 | 1-9 Windmill Close Greenbank | 1 | Red belly black snake |
| 2010 | 1-9 Windmill Close Greenbank | 1 | Kangaroo |
| 2010 | 22-34 Border Cres Teviot Downs | 1 | Echidna |
| 2011 | 22-34 Border Cres Teviot Downs | 1 | Kangaroos – see a few times a week |
| 2011 | 22-34 Border Cres Teviot Downs | 1 | Red neck wallaby |
| March 2011 | 22-34 Border Cres Teviot Downs | 1 | Dingo – not seen before, use to see along Goodna-Springfield Rd |
| 2010 | 22-34 Border Cres Teviot Downs | 1 | Lace monitor |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|--|-------------|--|
| 2010 | 22-34 Border Cres Teviot Downs | 1 | Blue faced honeyeater |
| 2010 | 22-34 Border Cres Teviot Downs | 1 | Pale headed rosella |
| 2010 | 22-34 Border Cres Teviot Downs | 1 | Blue kingfisher |
| 26 Jan 2010 | 7 -11 Whistler Court Greenbank 4124 | 1 | Lace monitor (have seen another one about 1.5 metres long previously) |
| 7 Dec 2010 | 7 -11 Whistler Court Greenbank 4124 | 2 | Red neck wallabies |
| Jan 2011 | 35 Mountain Ridge Rd South Maclean | More than 1 | Eastern grey kangaroos |
| March 2011 | 35 Mountain Ridge Rd South Maclean | More than 1 | Red neck wallabies |
| 2011 | 35 Mountain Ridge Rd South Maclean | 2 | Pale headed rosellas |
| Feb 2011 | 35 Mountain Ridge Rd South Maclean | 1 | Blind snake |
| 2011 | Springfield- Goodna Rd & Ison Rd Greenbank | 1 | Lace monitor - roadkill |
| Before Dec 2010 | 35 Mountain Ridge Rd South Maclean | 1 | Sugar glider (had also seen one 9 years before at this address) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|---------------------------------------|-------------|---|
| 11/3 11 | 35 Mountain Ridge Rd South Maclean | 1 | Sedge frog |
| 25/2/11 | 35 Mountain Ridge Rd South Maclean | 1 | Pobblebonk |
| March 2011 | 35 Mountain Ridge Rd South Maclean | 1 | Rocket frog |
| Feb 2011 | 35 Mountain Ridge Rd South Maclean | 1 | Wedge tail eagle |
| 2009 | 300 Equestrian Drive Greenbank | 1 | Echidna |
| 2008 | 300 Equestrian Drive Greenbank | 1 | Echidna |
| 2011 | 300 Equestrian Drive Greenbank | More than 1 | small finches |
| 2011 | 300 Equestrian Drive Greenbank | More than 1 | Blue kingfishers |
| 11/3/11 | 8 Perry Road Greenbank | More than 1 | kangaroos |
| Feb 2011 | 8 Perry Road Greenbank | More than 1 | Long neck turtles – there all the time |
| 2011 | 8 Perry Road Greenbank | 1 | Pale headed rosella |
| 2011 | 8 Perry Road Greenbank | 1 | Blue kingfisher |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|----------------------------------|-------------|--|
| Since July 2010 | 81-83 Tall Timber Road Greenbank | 1 | Squirrel glider(saw on dusk) |
| Feb 2011 | 81-83 Tall Timber Road Greenbank | 1 | Lace monitor |
| 2008 | 58 Sandpiper Drive Greenbank | 1 | Echidna |
| 2009 | 58 Sandpiper Drive Greenbank | 1 | Tawny frog mouth owl |
| 2007 | 58 Sandpiper Drive Greenbank | 1 | wallaby |
| 2011 | 58 Sandpiper Drive Greenbank | 1 | Rocket frog |
| 2008 | 9 Jillian Court Logan Village | 1 | Squirrel glider (injured by neighbour's dog) |
| March 2011 | 9 Jillian Court Logan Village | More than 1 | King parrots |
| March 2011 | 9 Jillian Court Logan Village | 2 | Crested falcon |
| Feb 2011 | 9 Jillian Court Logan Village | 1 | Turtles – snake neck |
| March 2011 | 9 Jillian Court Logan Village | 1 | Lace monitor – over 4 feet long (have seen before) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|---|-------------|--|
| March 2011 | 9 Jillian Court Logan Village | More than 1 | Pobblebonk frogs, rocket frogs |
| March 2011 | 9 Jillian Court Logan Village | 1 | Azure kingfisher |
| June 2008 | 83 Koorungal Rd Munruben 4125 | 1 | phascogale |
| 2010 | 83 Koorungal Rd Munruben 4125 | More than 1 | Eastern grey kangaroo (always in neighbour's yard) |
| 25/3/11 | In Oxley Creek on corner of New Beith Rd and Spring Mountain Rd | 1 | Platypus (seen on dusk) |
| 1985 | Roberts Rd Greenbank (where causeway crosses over Oxley Creek) | 1 | Platypus – historic sighting from a local resident who reported seeing a platypus on the north side of the causeway 25 years ago |
| 2011 | 7 – 11 Whistler Crt Greenbank 4124 | 1 | Swamp wallaby |
| Early 2010 | 7 – 11 Whistler Crt Greenbank 4124 | 2 | Lace monitor |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|--------------------------------------|-------------|---|
| 2001 | 20 Garragoolba Rd Greenbank 4124 | 1 | Squirrel glider |
| 2001 | 20 Garragoolba Rd Greenbank 4124 | 1 | Powerful Owl |
| June 2009 | 12-16 Damper Court Jimboomba 4280 | 1 | Squirrel glider or sugar glider |
| June 2009 | 12-16 Damper Court Jimboomba 4280 | 1 | Feathertail glider |
| Feb 2010 | 12-16 Damper Court Jimboomba 4280 | More than 1 | Eastern grey kangaroos (have seen these at least once a month each year in a 10 year period) |
| 2010 | 12-16 Damper Court Jimboomba 4280 | 1 | Lace monitor |
| 2011 | 12-16 Damper Court Jimboomba 4280 | More than 1 | King parrots (have seen these many times each year over a 10 year period) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------------|---------------------------------------|-------------|--|
| July 2010 | 66 Thornbill Drive Greenbank 4124 | 1 | cormorant |
| July 2010 | 66 Thornbill Drive Greenbank 4124 | 1 | White faced heron |
| 2011 | 66 Thornbill Drive Greenbank 4124 | More than 1 | King parrots (have seen these here before) |
| 2011 | 66 Thornbill Drive Greenbank 4124 | 1 | Red neck wallaby (have seen these wallabies here before) |
| Dec 2010 | Silvereye Crescent Spring Mountain | 1 | Eastern Grey kangaroo |
| March 2009 | 89-93 Smith Rd, Park Ridge South | 1 | Squirrel glider |
| 11/3/11 | 13-15 Goldfinch Ct Spring Mountain | 1 | Striped marsh frog (see these often) |
| Nov 2010 | 13-15 Goldfinch Ct Spring Mountain | 1 | Tawny frog mouth |
| Feb 2011 & Dec 2010 | 13-15 Goldfinch Ct Spring Mountain | More than 1 | Eastern grey kangaroos (have seen these here before) |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|--------------------|--|----------------|--|
| 2010 | 13-15 Goldfinch Ct Spring Mountain | 1 | Bearded dragon (have seen more here at this address) |
| 11/3/10 | 10 – 18 Woodfall Road Greenbank | 1 | Eastern grey kangaroo (numbers have declined due to past clearing used to be 16 everyday about 10 years ago) |
| 2009 | 32 Jabiru Avenue, Spring Mountain, Greenbank | More than 1 | Red neck wallabies - feeding |
| Oct 2010 | 32 Jabiru Avenue, Spring Mountain, Greenbank | More than 1 | Red neck wallabies - feeding |
| Jan- March 2006 | 1/17 Honeyeater Drive Spring Mountain | More than 1 | Feather tail gliders and squirrel gliders observed at this address |
| 2005 | 46 Harvest Rd Greenbank | More than 1 | Feather tail gliders (this is a Land for Wildlife property) |
| Jan- March 2006 | 186 Olson Rd North Maclean | 1 | Gliders on property (species not known) |
| Jan- March 2006 | 16 – 18 Sheppard Drive Greenbank | 1 | Sugar glider in area |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

FAUNA SIGHTINGS – GREENBANK AREA

| DATE OF SIGHTING | LOCATION OF SIGHTING | NUMBER | DETAILS |
|------------------|--|----------------|---|
| Feb 2011 | 39 Jamboree Close Greenbank | More than 1 | Gliders |
| Feb 2011 | 39 Jamboree Close Greenbank | 1 | Flying Fox |
| Feb 2011 | 39 Jamboree Close Greenbank | More than 1 | large kangaroos |
| March 2011 | 1 Bluebird Court Greenbank Qld 4124. | More than 1 | Ornate Burrowing Frog spring/summer months before it goes into hibernation for the autumn/winter months they have been there now for 5 years |
| March 2011 | 1 Bluebird Court Greenbank Qld 4124. | More than 1 | Striped Marsh Frog they have been there now for 5 years |
| March 2011 | 1 Bluebird Court Greenbank Qld 4124. | More than 1 | Green frog they have been there now for 5 years |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

**LACA WILDLIFE REPORT FROM SHARON BATE FOR 27 – 33 Bellbird Drive Greenbank
4124**

Thursday, March 17, 2011

| | |
|---|------------|
| Sunday 20th February 2011 | No. |
| 27-33 Bellbird Drive Greenbank | |
| Rainbow Lorikeets | 4 |
| Laughing Kookaburras | 4 |
| King Parrots | 1 Pair |

| | |
|---|---|
| Monday 21st February 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Rainbow Lorikeets | 4 |
| Graceful Treefrogs | 3 |
| | |
| 25 Bellbird Drive Greenbank | |
| Australian Wood Ducks | 2 |

| | |
|--|---|
| Tuesday 22nd February 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Australian Wood Ducks | 2 |
| Common Grass Yellow Butterflies | 6 |
| | |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers (family) | 3 |
| | |
| 35 Bellbird Drive Greenbank | |
| Masked Plovers (possibly breeding) | 2 |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| | |
|--|---|
| Wednesday 23rd February 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Australian Wood Ducks | 4 |
| Noisy Miners | 4 |
| | |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers | 2 |

| | |
|---|-----|
| Thursday 24th February 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Small Green Banded Blue Butterflies | 30+ |
| Common Grass Yellow Butterfly | 1 |
| Common Crow Butterfly | 1 |
| Evening Brown Butterfly | 1 |
| Rainbow Lorikeets | 2 |
| | |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers (family) | 3 |
| | |
| 35 Bellbird Drive Greenbank | |
| Masked Plovers (possibly breeding) | 2 |
| | |

| | |
|---|---|
| Friday 25th February 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Noisy Miners | 2 |
| Rainbow Lorikeet | 1 |
| Common Crow Butterfly | 2 |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| | |
|------------------------------------|-----|
| Small Green Banded Blue Butterfly | 30+ |
| | |
| 35 Bellbird Drive Greenbank | |
| Masked Plovers (possibly Breeding) | 2 |
| | |

| | |
|---|-----|
| Saturday 26th February 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Australian Wood Ducks | 4 |
| Noisy Miners | 5 |
| Rainbow Lorikeets | 5 |
| Crested Pigeons | 4 |
| Pied Butcher Bird | 1 |
| Magpie Lark | 1 |
| Common Crow Butterflies | 2 |
| Small Green banded Blue Butterflies (possibly mating) | 20+ |
| Common Grass Yellow Butterflies | 6 |
| Lemon Migrant Butterflies | 2 |
| Orchard Butterfly (male) | 1 |
| Caper White Butterfly | 1 |
| Wanderer Butterflies2 | 2 |
| | |
| 35 Bellbird Drive Greenbank | |
| Masked Plovers (possibly mating) | 2 |
| Galahs | 2 |

| | |
|---|------------|
| Sunday 27th February 2011 | No. |
|---|------------|

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| | |
|---|-----|
| 27-33 Bellbird Drive Greenbank | |
| Noisy Miners | 6 |
| Orchard Butterflies | 2 |
| Wanderer Butterflies | 2 |
| Caper White Butterfly | 1 |
| Chequered Swallowtail Butterfly | 1 |
| Small Green Banded Blue Butterflies | 15+ |
| Common Crow Butterflies | 1 |
| Common Grass Yellow Butterflies | |

| | |
|---|-----|
| Monday 28th February 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Noisy Miners | 2 |
| Magpie Larks | 5 |
| Crested Pigeons | 4 |
| Caper White Butterfly | 1 |
| Common Crow Butterfly | 1 |
| Small Green Banded Blue Butterflies | 10+ |
| Large Green Banded Blue Butterflies | 2 |
| Evening Brown Butterflies | 3 |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers (family) | 3 |

| | |
|---|---|
| Tuesday 1st March 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Bearded Dragon | 1 |
| Noisy Miners | 2 |
| Rainbow Lorikeets | 1 |
| Magpie Larks | 5 |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| | |
|-------------------------------------|-----|
| Crested Pigeons | 2 |
| Laughing Kookaburra | 1 |
| Small Green banded Blue Butterflies | 30+ |
| Casper | |
| Chequered Swallowtail Butterfly | 3 |
| Dingy Swallowtail Butterfly | 1 |
| Common Grass Yellow Butterflies | 4 |
| Common Crow Butterflies | 2 |
| | |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers | 2 |
| | |
| 49 Platypus Drive Greenbank | |
| Superb Fairy Wrens | 3 |

| | |
|--|-----|
| Wednesday 2nd March 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Crested Pigeons | 1 |
| Noisy Miners | 16 |
| Welcome Swallow | 1 |
| Torresian Crow | 1 |
| Small Green Banded Blue Butterflies | 30+ |
| Common Crow Butterfly | 1 |
| Common Grass Yellow Butterflies | 2 |
| | |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers (family) | 3 |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| | |
|---|-----|
| | |
| 35 Bellbird Drive Greenbank | |
| Masked Plovers(Possibly breeding pair) | 2 |
| | |
| Thursday 3rd March 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Rainbow Lorikeets | 4 |
| Noisy Miners | 6 |
| Small Green Banded Blue Butterflies | 10+ |
| Common Grass Yellow Butterfly | 2 |
| Common Crow Butterfly | 2 |
| Large Green Banded Blue Butterflies | 3 |
| Chequered Swallowtail Butterflies | 3 |
| Orchard Butterfly | 1 |
| Wanderer Butterfly | 1 |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers (family) | 3 |
| 35 Bellbird Drive Greenbank | |
| Masked Plovers (possibly breeding) | 2 |

| | |
|---|---|
| Friday 4th March 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Noisy Miners | 2 |
| Rainbow Lorikeet | 2 |
| Australian Wood Ducks | 2 |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

| | |
|--|-----|
| Pied Butcher Bird | |
| Small Green Banded Blue Butterfly | 10+ |
| 25 Bellbird Drive Greenbank | |
| Masked Plovers (family) | 3 |
| | |
| Verge near Substation Pub Lane Greenbank | |
| Pheasant Coucal | 1 |
| Near Roundabout at Pub Lane & New Beith Road | |
| Cattle Egrets | 4 |
| | |
| Vacant Land on corner of Spring Mountain Drive & Platypus Drive | |
| Wallabies | 2 |

| | |
|---|-----|
| Saturday 5th March 2011 | |
| 27-33 Bellbird Drive Greenbank | |
| Pale Headed Rosellas | 2 |
| Noisy Miners | 2 |
| Rainbow Lorikeets | 2 |
| Pied Butcher Bird | 2 |
| Graceful Treefrog | 1 |
| Common Crow | 2 |
| Butterflies | |
| Small Green banded Blue Butterflies | 10+ |
| Chequered Swallowtail Butterflies | 2 |

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588

Impacts of habitat loss

Habitat loss – Ney Road case study

70 hectares
 bushland

Density = 1
 koala/ha

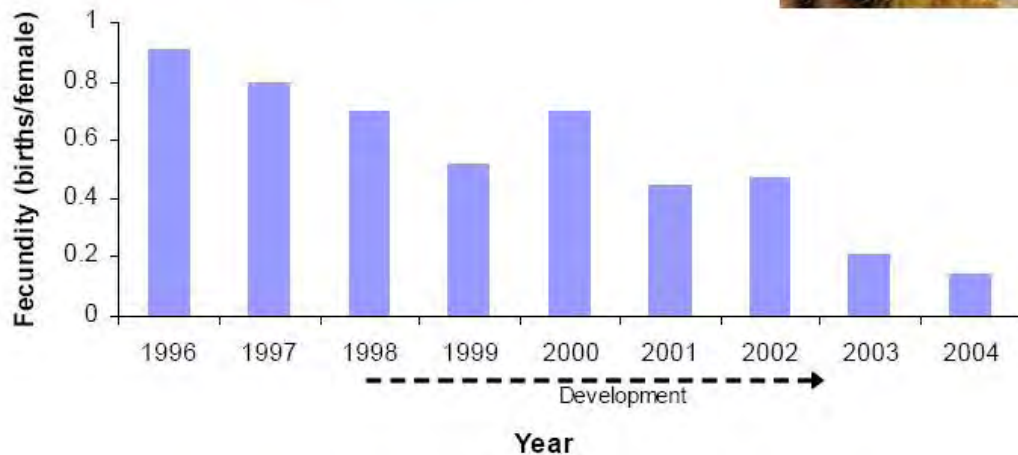
No signs of disease

Nearly 100% adult
 females with young



Impacts of habitat loss

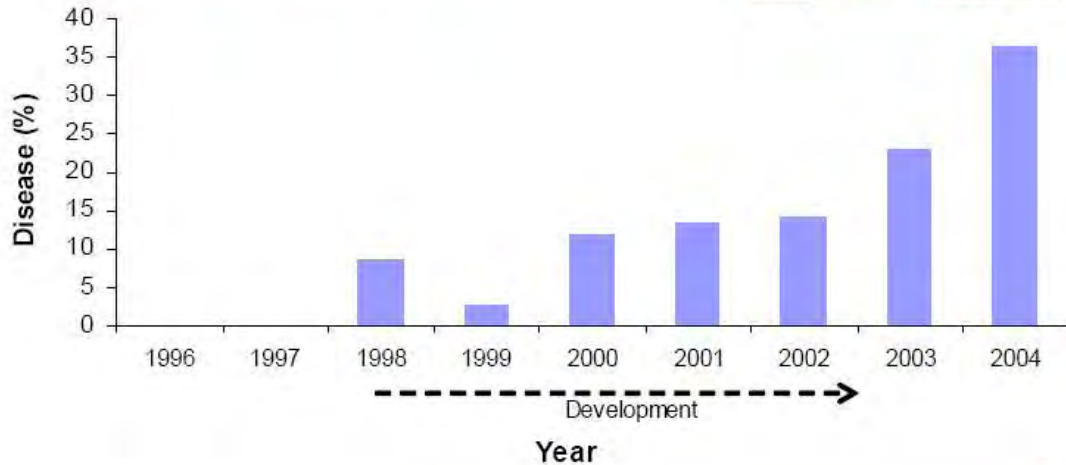
Birth rates – Ney Road case study



Loga1

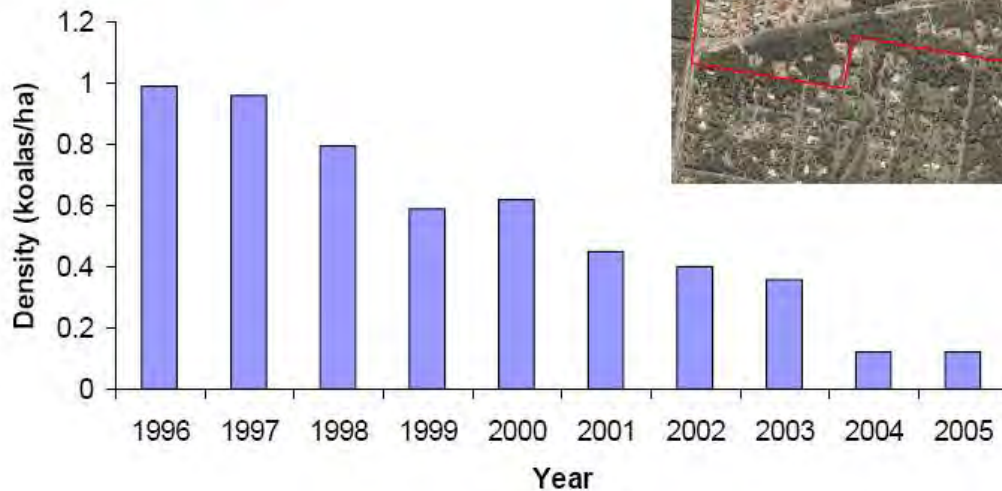
Impacts of habitat loss

Disease – Ney Road case study



Impacts of habitat loss

Results of 2005 surveys – Ney Road



Loga

Logan & Albert Conservation Association

PO Box 557, Beaudesert, Qld 4285

ecoinfo@laca.org.au

www.laca.org.au

ABN 91 993 348 588