

Field report  
**Napp Springs - Biodiversity Survey**



Napp Springs



**Date of report:** 6-August-2012

**Author(s):** Gary Rethus

**Contact info:** grethus107@hotmail.com

**Field period:** May 2012

**Field area:** Napp Springs Legune station NT.

**Summary:** Biodiversity survey while accompanying Amber Heitman on her research.

## General info and data

### Schedule of activities for the fieldwork

The methodology described in Amber Heitman's research paper gives a more descriptive account. In general, funnel traps were checked three times a day, transects were walked, and opportunistic observations were made.

**Table 1: Participants**

Participant/staff	Affiliation/Agency	Role
Gary Rethus	Kimberley Toad Busters	Researcher
Amber Heitman	Kimberley Toad Busters	Researcher
Mat	Kimberley Toad Busters	Camera Man

**Table 2: Biodiversity survey results.**

Category	Common Name	Scientific Name
Bird	Little Pied Cormorant	<i>Phalacrocorax melanoleucos</i>
Bird	White-faced Heron	<i>Ardea novaehollandiae</i>
Bird	Nankeen Night Heron	<i>Nycticorax caledonicus</i>
Bird	Black Bittern	<i>Ixobrychus flavicollis australis</i>
Bird	Black-fronted Dotterel	<i>Charadrius melanops</i>
Bird	Black Kite	<i>Milvus migrans affinis</i>
Bird	Whistling Kite	<i>Haliastur sphenurus</i>
Bird	Wedge-tailed Eagle	<i>Aquila audax audax</i>
Bird	Brown Goshawk	<i>Accipiter fasciatus didimus</i>
Bird	Brown Falcon	<i>Falco berigora</i>
Bird	Peregrine Falcon	<i>Falco peregrinus macropus</i>
Bird	Nankeen Kestrel	<i>Falco cenchroides</i>
Bird	Peaceful Dove	<i>Geopelia striata placida</i>
Bird	Diamond Dove	<i>Geopelia cuneata</i>
Bird	Bar-shouldered Dove	<i>Geopelia humeralis inexpectata</i>

Category	Common Name	Scientific Name
Bird	White-quilled Rock Pigeon	<i>Petrophassa albipennis boothi</i>
Bird	Red-tailed Black-Cockatoo	<i>Calyptorhynchus banksii macrorhynchus</i>
Bird	Sulphur-crested Cockatoo	<i>Cacatua galerita fitzroyi</i>
Bird	Little Corella	<i>Cacatua sanguinea</i>
Bird	Red-collared Lorikeet	<i>Trichoglossus haematodus rubritorquis</i>
Bird	Red-winged Parrot	<i>Aprosmictus erythropterus</i>
Bird	Southern Boobook	<i>Ninox novaeseelandiae ocellata</i>
Bird	Tawny Frogmouth	<i>Podargus strigoides phalaenoides</i>
Bird	Azure Kingfisher	<i>Alcedo azureus ruficollaris</i>
Bird	Blue-winged Kookaburra	<i>Dacelo leachii</i>
Bird	Rainbow Bee-eater	<i>Merops ornatus</i>
Bird	Sacred Kingfisher	<i>Todiramphus sanctus</i>
Bird	Striated Pardalote	<i>Pardalotus striatus uropygialis</i>
Bird	Red-backed Fairy-wren	<i>Malurus melanocephalus cruentatus</i>
Bird	Little Friarbird	<i>Philemon citreogularis sordidus</i>
Bird	Silver-crowned Friarbird	<i>Philemon argenticeps</i>
Bird	Yellow-throated Miner	<i>Manorina flavigula lutea</i>
Bird	White-gaped Honeyeater	<i>Lichenostomus unicolor</i>
Bird	Brown Honeyeater	<i>Lichmera indistincta</i>
Bird	Rufous-throated Honeyeater	<i>Conopophila rufogularis</i>
Bird	Grey-crowned Babbler	<i>Pomatostomus temporalis rubeculus</i>
Bird	Grey Shrike-thrush	<i>Colluricincla harmonica brunnea</i>
Bird	Rufous Whistler	<i>Pachycephala rufiventris falcata</i>
Bird	Willie Wagtail	<i>Rhipidura leucophrys picata</i>
Bird	Paperbark Flycatcher	<i>Myiagra nana</i>

Category	Common Name	Scientific Name
Bird	Magpie-lark	<i>Grallina cyanoleuca neglecta</i>
Bird	Great Bowerbird	<i>Chlamydera nuchalis</i>
Bird	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae melanops</i>
Bird	White-bellied Cuckoo-shrike	<i>Coracina papuensis hypoleuca</i>
Bird	White-winged Triller	<i>Lalage sueurii</i>
Bird	Black-faced Woodswallow	<i>Artamus cinereus melanops</i>
Bird	Masked Woodswallow	<i>Artamus personatus</i>
Bird	Little Woodswallow	<i>Artamus minor</i>
Bird	Pied Butcherbird	<i>Cracticus nigrogularis</i>
Bird	Torresian Crow	<i>Corvus orru ceciliae</i>
Bird	Fairy Martin	<i>Hirundo ariel</i>
Bird	Tree Martin	<i>Hirundo nigricans</i>
Bird	Double-barred Finch	<i>Taeniopygia bichenovii annulosa</i>
Bird	Zebra Finch	<i>Taeniopygia guttata castanotis</i>
Bird	Mistletoebird	<i>Dicaeum hirundinaceum</i>
Mammal	Black Flying-fox	<i>Pteropus alecto</i>
Mammal	Common Sheath-tail Bat	<i>Taphozous georgianus</i>
Mammal	Agile Wallaby	<i>Macropus agilis</i>
Mammal	Common Wallaroo	<i>Macropus robustus</i>
Mammal	Long-tailed Planigale	<i>Planigale ingrami</i>
Mammal	Western Chestnut Mouse	<i>Pseudomys nanus</i>
Mammal	Common Rock-rat	<i>Zyzomys argurus</i>
Mammal	Dingo	<i>Canis lupus dingo</i>
Mammal	Cat	<i>Felis catus</i>
Amphibian	Bilingual Froglet	<i>Crinia bilingua</i>

Category	Common Name	Scientific Name
Amphibian	Marbled Frog	<i>Limnodynastes convexiusculus</i>
Amphibian	Green Tree Frog	<i>Litoria caerulea</i>
Amphibian	Rock Frog	<i>Litoria coplandi</i>
Amphibian	Bumpy Rocket Frog	<i>Litoria inermis</i>
Amphibian	Rockhole Frog	<i>Litoria meiriana</i>
Amphibian	Striped Rocket Frog	<i>Litoria nasuta</i>
Amphibian	Pale Rocket Frog	<i>Litoria pallida</i>
Amphibian	Northern Laughing Tree Frog	<i>Litoria rothii</i>
Amphibian	Desert Tree Frog	<i>Litoria rubella</i>
Amphibian	Magnificent Tree Frog	<i>Litoria splendida</i>
Amphibian	Wotjulum Frog	<i>Litoria watjulumensis</i>
Amphibian	Ornate Burrowing Frog	<i>Platyplectrum ornatum</i>
Amphibian	Northern Toadlet	<i>Uperoleia borealis</i>
Amphibian	Cane Toad	<i>Bufo marinus</i>
Reptile	Freshwater Crocodile	<i>Crocodylus johnstoni</i>
Reptile	Pygmy Crocodile	<i>Crocodylus ???</i>
Reptile	Saltwater Crocodile	<i>Crocodylus porosus</i>
Reptile	Dtella (Gecko)	<i>Gehyra australis</i>
Reptile	Dtella (Gecko)	<i>Gehyra kaira kaira</i>
Reptile	Spotted Gecko	<i>Gehyra nana</i>
Reptile	Legless Lizard	<i>Delma borea</i>
Reptile	Burton's Snake-lizard	<i>Lialis burtonis</i>
Reptile	Rainbow Skinks	<i>Carlia munda</i>
Reptile	Two-spined Rainbow Skink	<i>Carlia amax</i>
Reptile	Juno's Snake-eyed Skink	<i>Cryptoblepharus juno</i>

Category	Common Name	Scientific Name
Reptile	Tawny Snake-eyed Skink	<i>Cryptoblepharus ruber</i>
Reptile	Striped Skinks	<i>Ctenotus inornatus</i>
Reptile	Leopard Ctenotus	<i>Ctenotus pantherinus</i>
Reptile	Sand-swimmers	<i>Eremiascincus isolepis</i>
Reptile	Fire-tail Skink	<i>Morethia ruficauda</i>
Reptile	Gilbert's Dragon	<i>Amphibolurus gilberti</i>
Reptile	Mitchell's Water Monitor	<i>Varanus mitchelli</i>
Reptile	Mertens' Water Monitor	<i>Varanus mertensi</i>
Reptile	blind Snake	<i>Ramphotyphlops sp.</i>
Reptile	Children's Python	<i>Antaresia Childreni</i>
Reptile	Night Tiger	<i>Boiga irregularis</i>
Reptile	keelback	<i>Tropidonophis mairii</i>
Reptile	Greater Black Whipsnake	<i>Demansia papuensis</i>
Reptile	Orange-naped Snake	<i>Furina ornata</i>
Reptile	Pygmy King Brown	<i>Pseudechis weigeli</i>
Fish	Western Rainbowfish	<i>Melanotaenia australis</i>
Fish	Northern Trout Gudgeon	<i>Mogurnda mogurnda</i>
Crustacean	Giant Freshwater Shrimp	<i>Macrobrachium rosenbergii</i>
Insect	Cedar Bush-brown	<i>Mycalesis sirius</i>
Insect	Dusky Knight	<i>Ypthima arctous</i>
Insect	Swamp Tiger	<i>Danaus affinis</i>
Insect	Goliath Stick Insects	<i>Eurycnema goliath</i>

## Accomplishments

112 species were identified, 55 birds, 9 mammals, 15 Amphibian, 26 Reptile, 2 fish above the water falls, 1 crustacean and 4 insects. Also, footprints in the sand look very much like Northern Quolls.

## Comments

The Napp Springs Creek system needs to be searched more up stream for pygmy crocodiles to see how many are left as we only found two, one adult and a juvenile in a 3km stretch of the creek during the ten days. Five Merten's water monitors were seen in this 3km section and another 8 were seen from below the falls to 7km downstream, 80% were adults. An abundance of monitor tracks were also seen along the 10km of the creek that was walk. It would be worth while researching why the Mertens seems to be doing so well considering the presence of cane toads.

Trail cameras need to be set to see if the Northern Quoll is present, as they are under risk of being wiped out by the cane toad and are usually one of the first specie to be impacted on with a 100% loss. Elliot traps should also be set for small mammals.

According to current literature the butterflies *Ypthima arctous* and *Mycalesis sirius* are not currently known to be distributed in the Napp Springs area.

## Pictures

Pictures by Gary Rethus of some of the species identified including a Goliath Stick Insect, Burten's Snake Lizard, Pygmy Crocodile, Pygmy King Brown, Two Spined Rainbow Skink and a Long-tailed Planigale.



Pygmy Crocodile *Crocodylus* ???



Pygmy King Brown *Pseudechis weigeli*



Goliath Stick Insect (female)  
*Eurycnema goliath*



Burton's Snake-lizard *Lialis burtonis*



Long-tailed Planigale *Planigale ingrami*



Two-spined Rainbow Skink