NOTES ON A FIELD TRIP TO GENOA IN NORTH-EAST VICTORIA (AUSTRALIA)

Part One Raymond T. Hoser

WITH PARTICULAR EMPHASIS ON THE GREEN AND GOLDEN BELL FROG (LITORIA AUREA)

INTRODUCTION

During the period 4th November 1995 to 7th November 1995, I went from Melbourne in southern Australia to Genoa Lat. 37(29' Long. 149(35' in far north-east Victoria. The area is about six hours drive from Melbourne. I was with another Melbourne-based herpetologist, Rob Valentic. We had been notified prior to our arrival by local herpetologist Clinton Logan that many frogs were active on his property adjoining the Genoa River.

(Schedule 12)(White 1995a). It used to be regarded as common. The frog remains common in north-east Victoria (Hero, Littlejohn and Marantelli 1991, Gillespie, 1996), where it is usually found at low altitudes (Gillespie, Humphries, Horrocks, Lobert, and McLaughlin, 1992). The species is also feral in New Zealand and elsewhere and breeds readily

A number of reasons have been put forward for the alleged decline in L. aurea in NSW, including the so-called hole in the ozone layer, pollutants, and introduced viruses. Local declines caused by feral fish and other pests,

while

regarded by this

contributing factors, are not

volume and

diversity frog species encountered during the visit to area substantial by Victorian standards. The heavy rainfall that coincided with our visit was conducive to frogging as many species appear to rely upon these rains for breeding purposes. Within Victoria, the area of greatest abundance of anurans is warm, moist east Gippsland with more than seventeen taxa' (Rawlinson 1971).

The area was about 25 km inland from the coast of the south Pacific Ocean. The habitat around the property consisted of hilly eucalypt forest in a relatively pristine state. Vegetation included areas of woodland with minimal understorey other than native grasses, ranging to temperate rainforest in shaded dullies. Some areas had granite outcrops, particularly along major watercourses and peaks of major hills. Elevated areas often had scrubby heath vegetation.

This second part of the article will deal with observations relating to the Green and Golden Bell Frog for several reasons. The species is on the New South Wales (NSW) National Parks and Wildlife Service (NPWS) Endangered Species List

REPTILIAN

Clinton Logan.

Weather Conditions: Cool, no wind and overcast, 100% cloud cover.

Air Temp.: 16º C.

Species Found.

- 40 Lesueur's Tree Frogs Litoria lesueuri. All were small specimens, found resting under large pebble-like rocks, in or adjacent to the river bed.
- 1 adult male Blue Mountains Tree Frog Litoria citropa. It was under a stone along the exposed river bed.
- 1 Green and Golden Bell Frog Litoria aurea. The female was basking in the open on a log in the seepage area noted ahove
- 1 Common Froglet Ranidella signifera found in the seepage area noted above. Found under a log.
- 6 Garden Skinks Lampropholis delicata found adjacent to house under tin and other ground debris.
- 2 Grass Skink Lampropholis guichenoti found under cover near house.
- 2 Weasel Skinks Saproscincus mustelina found under cover near house.

SPOTLIGHTING ON NIGHT OF 04/11/95

Weather conditions were either raining, drizzling or not raining but very humid and with near total cloud cover (100%) at most times. The moon in the sky could only rarely be seen through the cloud. Air temp. ranged from 16°C at the start of the night to 14°C later in the night. search went from 22:00 hrs. to 02:00 hrs..

SITE A

Location: A dam on the property (referred to as the upper dam).

Habitat: A large open dam of approx. 1 hectare, with discarded tyres built into a retaining wall and dense vegetation on other three sides, including tussock grasses, a few bullrushes and sapling Melaleuca.

Weather Conditions: Air temp. was 16(C... There was light rain.

Species Found.

Approximately 500 Peron's Tree Frogs Litoria peroni. Most were seen perched on rubber tyres on the dam wall which was devoid of vegetation. Some tyres had up to three frogs on them. There were about 100 tyres in the site and the chorus of frogs was deafening. Some frogs on tyres were in amplexsus.

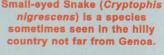
- 8 Green and Golden Bell Frogs Litoria aurea in the heavily vegetated parts of the dam edges. A single specimen was seen in an exposed open area.
- 1 male Haswell's Froglet Crinia haswelli, seen while calling in a clump of Wallaby
- 1 Whistling Tree Frog Litoria verreauxii 2 Common Froglets Ranidella signifera

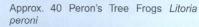
NIGHT DRIVE

Area traveled: From the Logan's property to the Princes Highway, then on to the Gypsy Point Hotel, situated on a tidal estuary and then back again. Rain had ceased at the start of this drive and then the sky cleared to some extent with cloud cover going from 100% to 50% and then building up to 100% at the end of the drive. After arrival at Logan's house at about 02:00 hrs., there was torrential rain for the remainder of the night. Air temperature dropped during the drive from 16°C to 14°C. All frogs were found moving across the road.

Species Found.

Small-eyed Snake (Cryptophis nigrescens) is a species sometimes seen in the hilly country not far from Genoa.





3 Haswell's Froglets Crinia haswelli

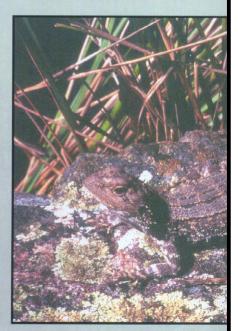
- 12 Green and Golden Bell Frogs Litoria aurea, most were found in an area where a swamp runs under the Princes Highway, near Genoa Falls, and more significantly adjacent to two dams and adjoining swamps at the Genoa end of the Gypsy Point road. One large female was found in high sandy forested habitat along the Jones Creek Road, while two were found near the Gypsy Point Hotel, which has a large swamp situated on the opposite side of the road.
- 1 Lesueur's Tree Frog Litoria lesueuri, large adult.
- 2 Striped Marsh Frogs Limnodynastes peroni
- 2 Blue Mountains Tree Frogs Litoria citropa adults. Found in a single flat area of relatively distinctive Melaleuca and Swamp Stringybark Trees Eucalyptus sp.
- 2 Blue Mountains Tree Frogs Litoria citropa, juveniles. We found them in pools along the dirt road track in the same area as the adults above.
- 20 Pobblebonk/Banjo Frogs Limnodynastes dumerilii insularis.
- 1 Brown Tree Frog Litoria ewingii

FURTHER NOTES

Among the above, 10 Limnodynastes dumerilii insularis, 10 Litoria peroni and 1 Limnodynastes peroni were D.O.R., with most D.O.R.'s being found on the Gypsy Point Road, near the Genoa end. Traffic that night had been light to moderate in

Jacky Dragon (Amphibolorus muricatus) from Genoa, Victoria. The species is commonly seen in forested areas.





When photos of *Litoria citropa* were taken a pair were induced into amplexsus, but none were seen in this state in the wild. The only frogs directly observed in the wild in amplexsus at any stage were *Litoria peroni*. As a result of the amplexsus an estimated 50 fertilised eggs were produced. (Amplexsus in breeding frogs is usually easily induced by placing a pair in a small container with water, whereby the swimming frogs cross paths and subsequently couple).

SUNDAY - 05/11/95.

Searches during the day around the property of Clinton Logan and nearby sites. Air temps, were in the mid to high teens (C for most of the day.

SITE 1 ON DAY

Location: Seepage and small permanent dam just beyond two large dams on the road out of Clinton's property.

Habitat: A swampy area with lots of surface water, seepages and soaks with much tussock grass and ground cover with scattered trees. The trees were a type of Blue Gum. Most hard ground cover was in the form of logs.

Time: 15:00-15:30 hrs.

Species found.

- 2 Martin's Toadlets Toadlets *Uperoleia martini* both found under a sheet of tin which was partially submerged in water in a shallow roadside ditch.
- 1 She-oak Skink *Cyclodomorphus* casuarinae. Missing the end of its tail. It was a subadult.
- 10 Lampropholis delicata
- 2 Litoria peroni



1 *Litoria aurea* on a branch overhanging the water in a small dam and exposed to sunlight, etc., although the weather at the time was cloudy and drizzling. This species of frog is notable for its well documented habit of diurnally basking.

SITE 2 ON DAY

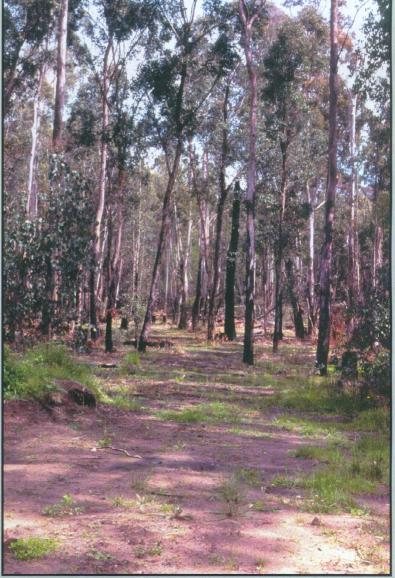
Location: Tasker's block. 16 km along Jones Creek Road from Princes Highway. Habitat: Includes a cleared paddock followed by a wooded area. A dam is located in a gully abutting the wooded

Weather at time: Overcast but very bright with the sun attempting to break through the clouds, while there was a persistent light drizzle. The time of the search was from 15.40-16.10 hrs.

Species found.

- 10 Lampropholis delicata seen sheltering beneath water soaked timber.
- 1 DEAD *Litoria peroni* in the dam. It was revealed that the owner of the property had laid a large amount of poison on his property. This may have caused the death of the above frog through seepage of toxin into the dam. Idiot farming practices like this are still too common in Australia.
- 1 Limnodynastes dumerili under a log next to the dam.
- 1 Red-bellied Black Snake *Pseudechis* porphyriacus 1.5 metre adult female, found basking in drizzle in the open adjacent to a pile of logs along the dam

Habitat, Genoa, Victoria. This wooded habitat has large numbers of Red-bellied Black Snakes (Pseudechis porphyriacus), Jacky Lizards (Amphibolorus muricatus), and Lace Monitors (Varanus varius).



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edge.

SITE 3 ON DAY

Location: In a State Forest on Horse Hill track (off Jones Creek Road) on Horse Hill

Habitat: Elevated and sloped dry sclerophyll forest area with scattered granite outcroppings.

Species Found.

1 Jacky Dragon Lizard *Amphibolurus* muricatus. An adult female was seen perched on a fallen log in cold drizzly weather. The lizard was of unusual pattern and appeared lethargic and sick.

SITE 4 ON DAY.

Location: An adjacent property owned by neighbors of Clinton Logan, (Lat. 37º 26 Long. 149º 29'). The people were locally known as the 'God Squad' due to their bible reading habits and biblical interpretations on life. The Logan's and other herpetologists were known as 'heathens!' The 'God Squad' consisted of husband, wife and an army of kids with unusual ideas about life and religion.

Weather: At the time it was cool and drizzly, with 100% cloud cover.

Habitat: Cleared land surrounded on three sides by forest and on the fourth by the Genoa River. Around the property was strewn piles of sheets of tin (that habitat God created for herps), logs and other cover.

Species found.

- 1 She-oak Skink *Cyclodomorphus* casuarinae (subadult with regenerated tail)
- 10 Lampropholis delicata
- 1 Southern Toadlet Pseudophryne dendyi found beneath a burnt log.
- 1 Toadlet Uperoleia martini with the

Southern Toadlet under the same burnt

- 1 Litoria peroni
- 4 Litoria lesueuri (small specimens).

FURTHER NOTES

All were found under cover.

The 'God squad' regarded She-oak Skinks with a sort of religious significance. They called them 'false snakes' and killed them on sight.

The *Uperoleia* and the *P. dendyi* found at the above site were found under a large burnt blackened log in a heavily burnt area adjacent to a rubbish dumping site and nowhere near any surface water and on a hill

DATE: 6/11/95

Several sites inspected along the road between Clinton Logan's house and the main Princes Highway. Weather conditions ranged from overcast to drizzle with occasional sunny breaks. At one stage the air temp. hit 23° C, but for most of the day hovered in the upper teens (C.

Species seen:

1 - Lace Monitor Varanus varius - in tree and sought refuge in upper tree hollow. On this trip, this was the only one seen. However this was due to the relatively cool and wet weather. In sunnier conditions these Monitors are extremely common and frequently seen. They usually are seen on the ground and then take to the nearest tree. Gippsland

White-lipped Snake (*Drysdalia* coronoides) from Lithgow, NSW. The species is common around Genoa where several different colour morphs occur.

specimens tend to be among the bulkiest in Australia. They also tend to be very dark in colour.

- 1 Pseudechis porphyriacus, an adult male seen in the open, basking on the edge of a track. It was nearly 2 metres in length.
- 1 Litoria aurea basking on a fallen log over the dam (see below).
- 1 Pseudophryne dendyi
- 1 Amphibolurus muricatus.
- 3 Black Rock Skinks *Egernia saxatilis*, two juveniles, one adult.
- 50 Lampropholis delicata
- 20 Lampropholis quichenoti
- 20 Saproscincus mustelina

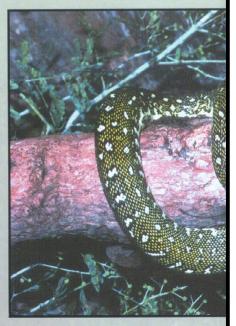
NIGHT DRIVE

From Clinton Logan's property to main princes Highway, then north to about 2 km past the turn off for Genoa Falls exit and then back again (one sweep only) with two stops along the way and searching with torches in the swamps at those two stops. Both sites were along the Jones Creek road between Clinton Logan's house and the main Princes Highway.

Weather on the night was cool and clear with an exposed near-full moon. The ground was still saturated wet and there was pools of water everywhere. There had been a major thunderstorm in the area of Clinton Logan's house that afternoon, but it did not hit the nearby areas that ran onto the main Princes Highway, with the main part of the storm

Diamond Python (Morella spilota spilota) male from Kenthurst, NSW. The species occurs around Genoa in reasonable numbers, but due to it's secretive habits isn't often seen.





passing across the western side of Logan's property.

The storm had also had hailstones and this had contributed to a temperature drop at the time although all areas seemed to have the same fall by the time the night drive was done.

Drive comenced from 20.30 to 22.30 hrs. and the air temps. ranged from 16° C at the start of the drive to 12° C at the end.

Species Found:-

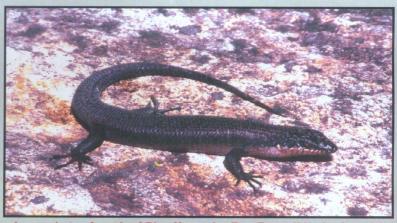
10 - Limnodynastes dumerili, 8 on road, 2 in dam

Ventral surface of a toadlet (Uperoleia sp., either tyleri or martini), found spawning by a roadside ditch just outside Genoa.





An adult Black Rock Skink (*Egernia saxatilis*) found inhabiting the walls of Clinton Logan's house at Genoa. The species is locally common and is often found away from rocks in spite of it's common and scientific names.



A rare photo of a pair of Blue Mountains Tree Frogs (*Litoria citropa*) in amplexsus. The pair were found in a small watercourse near a road just outside of Genoa.



Peron's Tree Frog (*Litoria peroni*) is one of the more common species around Genoa. This specimen was caught during the spring mating season.



1 - Litoria citropa adult.

1 - Litoria citropa half grown.

1 - Litoria aurea - on the Princes Highway north of Genoa Falls exit (3 L. aurea were found in this immediate area on night drive two nights earlier and the area is characterised by road-side ditches and a

large linear swamp that runs across the road).

2 - Verreaux's Tree frog Litoria verrauxii (male, one female, both in dam.

1 - Litoria verrauxii (female) on road.

30 - Litoria peroni (20 in swamps/dams, 10 on roads).

20 - Litoria lesueuri - all on roads and mainly smaller

1 - Toadlet or Ranidella frog seen hopping on road by Raymond Hoser after he jumped out of car to grab a Litoria peroni. The frog was not identified as it

hopped away and wasn't caught. 10 - Haswell's frogs - all in one dam.

TUESDAY 7/11/95 DRIVE BACK TO MELBOURNE

The only species seen were two live reptiles seen on or adjacent to the Jones Creek Track, from Clinton Logan's place

back to the main Princes Highway. These were one adult Jacky Dragon Amphibolurus muricatus seen basking on a fallen log at the side of the road, 2 km from Logan's house. A the time was overcast yet sunny with an air temp. of 18(



Later a 1.4 metre (total length) Pseudechis porphyriacus was seen crossing the dirt road. The snake turned on itself and fled into thick vegetation in a low lying area adjacent to a cleared forest. At this time the air temp. was still 18(C and it was still sunny although there was a light drizzle. This was seen shortly after the *A. muricatus* and closer to the main Princes Highway.

It rained for most of the trip back to Melbourne, particularly after Lakes Entrance. Both above reptiles were seen between 11.00 hrs. and 12 noon.

OTHER TRIPS

Both myself and Rob Valentic have made subsequent trips to the area (Myself 2 trips December 27th 1995/ January 18th 1996, Rob Valentic Easter 1996, February 1997). Clinton the resident Logan, herpetologist, Valentic and myself have caught numbers of other reptiles and frogs, as well as those species mentioned above.

Left: The Blue Mountains Tree
Frog (Litoria citropa) is one of the
more beautiful species
occasionally seen around Genoa,
usually around rocky
watercourses.
Below: Green and Golden Bell
Frog (Litoria aurea) from near

Genoa, Victoria.

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