

---

# Hollow Log Homes

Nest Box Audit

Port Of Brisbane Authority

Pritchard Road, Wynnum Road North, Perrin Creek

August 27<sup>th</sup> 2014

---



Photo 1

Squirrel Glider Colony  
*Petaurus norfolcensis*

Box number 36  
Wynnum Road North

## 1.Summary

### 1.1Pritchard Road Buffer Zone: 33 Boxes

Date of Installation: 4th of June 2008

5 new boxes installed 7<sup>th</sup> of August 2013

Date of previous audits: 3<sup>rd</sup> of December 2008, 27<sup>th</sup> of January 2010, 23<sup>rd</sup> of March 2011, 24<sup>th</sup> of January 2012, 31<sup>st</sup> January 2013

**Date of Current Audit: 27<sup>th</sup> August 2014**

Native species present: 3 mammal species, 1 bird species

Box usage by native species: Overall 22 boxes (67%)

Boxes with native species present: 9 boxes (27%)

Squirrel Glider (3 colonies), Possums, (4 animals) micro bats ( 1 colony)  
Rainbow lorikeet ( 1 pair)

Photograph 2 on right Box number 02 showing Rainbow lorikeet in entrance



Photo 2

### 1.2Wynnum North Road, 18Boxes

Date of Installation: 4th of June 2008

Date of previous audits: 3<sup>rd</sup> of December 2008, 27<sup>th</sup> of January 2010, 23<sup>rd</sup> of March 2011, 24<sup>th</sup> of January 2012, 31<sup>st</sup> January 2013

**Date of Current Audit: 27<sup>th</sup> August 2014**

Native species present ; 2 mammal, 1 insect

Box usage by native species: Overall 14 boxes (60%)

Boxes with native species present: 5 boxes, (29%)

Squirrel Glider ( 1 colony), Possum,(3 animals),Native bees,(1 hive)

Photograph 3 on right Box number 35 showing chew marks around entrance



Photo 3

Box Type	Small Parrot	Boobook Owl	Owlet Night jar	Wood duck	Possum	Glider	Microbat
Number Installed	4	1	2	1	1	5	4

## 1.3 Perrin Creek: 10 Boxes

Date of Installation: 4th of June 2008

Date of previous audit: 4<sup>th</sup> December 2008, 27<sup>th</sup> of January 2010, 23<sup>rd</sup> of March 2011, 7<sup>th</sup> of March 2012, 31<sup>st</sup> of January 2013

**Date of Current Audit; 27<sup>th</sup> August 2014**

Box usage by native species: Overall 5 boxes ( 50%)

Boxes with native animals present 1 Box , (10%) wood ducks,

Boxes with introduced Species 3 boxes, 1 rat, 2 geckos

Box type	Small Parrot	Possum	Glider	Microbat
Number Installed	2	2	3	3

## 2. Discussion

### 2.1 Pritchard Road Buffer Zone

Five new boxes were installed at this site in August 2013 to cater for the number of possums and gliders located during audits. Glider colonies have remained constant over the last 18 months. With Three boxes containing Glider colonies and another seven boxes showing signs of recent glider activity. Common brushtail possums have dropped in numbers since the last audit from 6 animals recoded in January 2013 to 4 animals in August 2014. The number of boxes with evidence of possum use has however increased from 3 additional boxes to five boxes showing signs of brushtail possum use in 2014. Indications of use by this species include flattening out or removal of nesting material , hair caught in entrance hole, droppings and strong smell of possum urine . The micro bat colony that were using box number 18 in 2013 were in box number 12 at this audit in 2012 they were in box number 27 , in 2011 there was some evidence of use by bats in the form of staining and droppings but no colony sighted. In 2010 there were several bats in box number 05. There were markedly less ant colonies invading boxes this year and the introduced Mynah birds that are abundant in the area have not been observed nesting in any of the boxes since 2012. Box 03 had its lid replaced, Boxes number 07 and 10 have had the lids removed presumably by the possums that were using them, these lids will need replacing next year if the possums are not inside the boxes.



Photo 4



Photo 5

Photographs 4 & 5 above, box 01 showing a Squirrel glider colony , box 04 showing recently used glider nest

## 2.2 Wynnum Road North

Activity is fairly constant at this site , this year one glider colony was present at time of audit and three Common Brushtail possums, the native beehive that was first observed in 2009 is still going strong. Two boxes had lids replaced and a further two boxes will need replacement lids next year if they are uninhabited, this year a common brushtail possum was in box number 48 and a colony of gliders with young were in box number 36 so the lids could not be replaced. No feral animals were observed in the nest boxes at this site during this audit. Access was good to all boxes this year .



Photographs 6, 7 & 8 above ; box 48 common brushtail possum , box 40 fresh eucalyptus leaves in box indicating recent use by gliders , also lack of nesting material indicating use by brushtail possums box 47 common brushtail possum.

## 2.3 Perrin Creek

Wood ducks are again nesting in box number 6 at Perrin Creek, at this audit the female wood duck left the box as we approached and on inspection 10 eggs were observed inside the box. There has been no further evidence of Introduced Mynah bird activity in any of the boxes. Box number 5 a micro bat box was filled with Eucalyptus leaves , this is usually an indication of Glider activity , although we did not look inside the box as due to the shape and size of the box this would have disturbed any animals inside and may have resulted in the animals vacating the box . Two boxes showed evidence of brushtail possum habitation however no animals were observed, this is not unusual as possums will move around and change den sites often if they are available. Box number 1 , a small Parrot box required a new lid as with the other lid replacements this was probably due to possum activity. Asian house geckos were found in two boxes this is a common species in this area and although not native no action is required to remove them. Box number 9 a glider box contained 3 young rats , because of the nest and the size of the animals it was first thought that these animals may have been native however after consultation with Dr Geoffrey Smith (senior zoologist) Science Delivery, DSITIA We are of the opinion that these animals are most likely *Ratus ratus* and did not build the nest in which they were found , this nest is more typical of native rats.

### 3. Tables

#### 3.1 Native Species Mentioned

Common name	Scientific Name
Squirrel Glider	Petaurus norfolcensis
Common Brushtail Possum	Trichasourus vulpecular
Could's wattled Bat	Chalinolobus gouldii
Native Bee	Trigona carbonaria
Wood Duck	Chenonetta jubata
Rainbow Lorrieket	Trichoglossus haematodus

#### 3.2 Introduced Species Mentioned

Common name	Scientific Name	Number of boxes	Site
Common Mynah	Acidotheris Tristris	0	
Asian House Gecko	Hemidactylus frenatus	2	Perrin creek
Tree Rat	Ratus ratus	1	Perrin creek

#### 3.3 Box Usage # new box

Site	Species	Boxes with animals present	Boxes with evidence of use
Pritchard Road	Squirrel glider	01, 17, #52	04, 09, 13, 19, 20, 23, 29
	Micro bat	12	18, 22, 27,
	Brushtail possum	07, 08, 10, 11,	14, 24, 49, 50, 53,
	Rainbow Lorrieket	2	16, 20
Wynnum Road North	Squirrel glider	36	35, 38, 40, 41, 42,
	Brushtail possum	39, 47, 48	30, 37, 44, 46,
	Native bees	34	
Perrin creek	Wood duck	6	
	Gliders		1, 5
	Possums		2, 10,

### 3.4.Habits, Signs and Indication of Native Fauna in Nest Boxes

3.4.i Common name	Scientific name	Status	Total boxes used	No. Of animals present
Common Brushtail possum	Trichasourus vulpecular	Common	18	7

**Habits:** Will use between 2- 40 nest holes within home range.

**Indications:** Hair caught around entrance hole, wood shavings flattened and often pushed aside or not present , polishing of entrance hole, bite marks around entrance, strong smell.

3.4.ii Common name	Scientific name	Status	Total boxes used	Boxes with Animals present
Squirrel gliders	Petaurus norfolcensis	Common	18	4

**Habits:** Each colony will use up to five nest holes, colonies are loosely family based with up to 12 gliders in each colony, usually 3-5 individuals using one nest hole.

**Indications:** Nest hole lined with eucalyptus leaves, in winter time one favorite nest hole may be full to the top of leaves; hair caught in entrance hole; fine scratches on tree above 1 metre and box sides and lid. Shelter holes within feeding areas are often apparent, these will not be lined with leaves but will have scratches on lid and sides and often hair caught in hole. These shelter boxes may become nest holes at a later stage. Bottom opening bat boxes are sometimes used as shelter boxes.

3.4.iii Common name	Scientific name	Status	Total boxes used	Boxes with animals present
Goulds Wattled bat	Chalinolobus gouldii	common	4	1

**Habits:** Micro bats will often change their roost sites nightly. Boxes may also be used for shelter as they digest their food throughout the night.

**Indications:** In boxes with bases, droppings are often visible, these droppings will be very friable and full of insect remains. Staining at the entrance hole is often a further indication of micro bat use.

3.4 .iv Common name	Scientific name	Status	Total boxes used	Boxes with animals present
Rainbow Lorrikeep	Trichoglossus haematodus	common	3	1

**Habits :**Has been known to nest all year round , usually lays two white eggs,

**Indications :** Green Feathers and red/yellow/grey down In box, moist smelly droppings , entrance hole often chewed. If gliders have placed leaves in box prior to birds nesting these will be chewed to little pieces .

3.4.v Common name	Scientific name	Status	Total boxes used	Boxes with animals present
Australian Wood duck	Chenonetta jubata	common	1	1

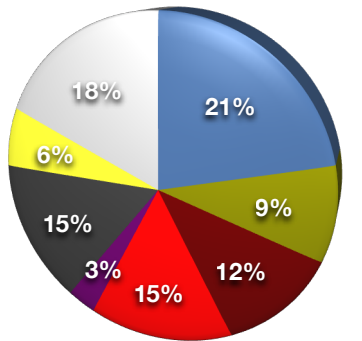
**Habits :** Has been know to nests in most months of the year, up to 12 large white eggs. Duickling jump from nest hole within 24 hours of hatching.

**Indications :** copious amounts of soft grey down , small eggshell fragments .

## 4. Result Graphs

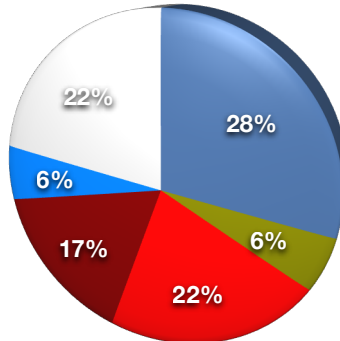
### 4.1 Habitation Rates 2014

4.1.1 Pritchard Road



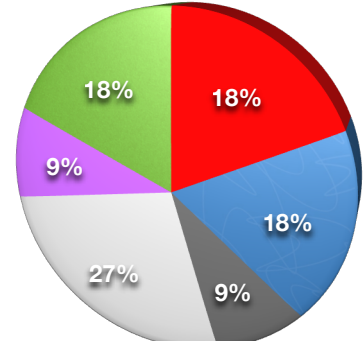
- Glider nest 7 boxes
- Glider colony 3 boxes
- Possum 4 boxes
- Possum den 5 boxes
- Micro bats 1 box
- Limited signs 5 boxes
- Rainbow Lorikeets 2 boxes
- no signs 6 boxes

4.1.2 Wynnum Road North



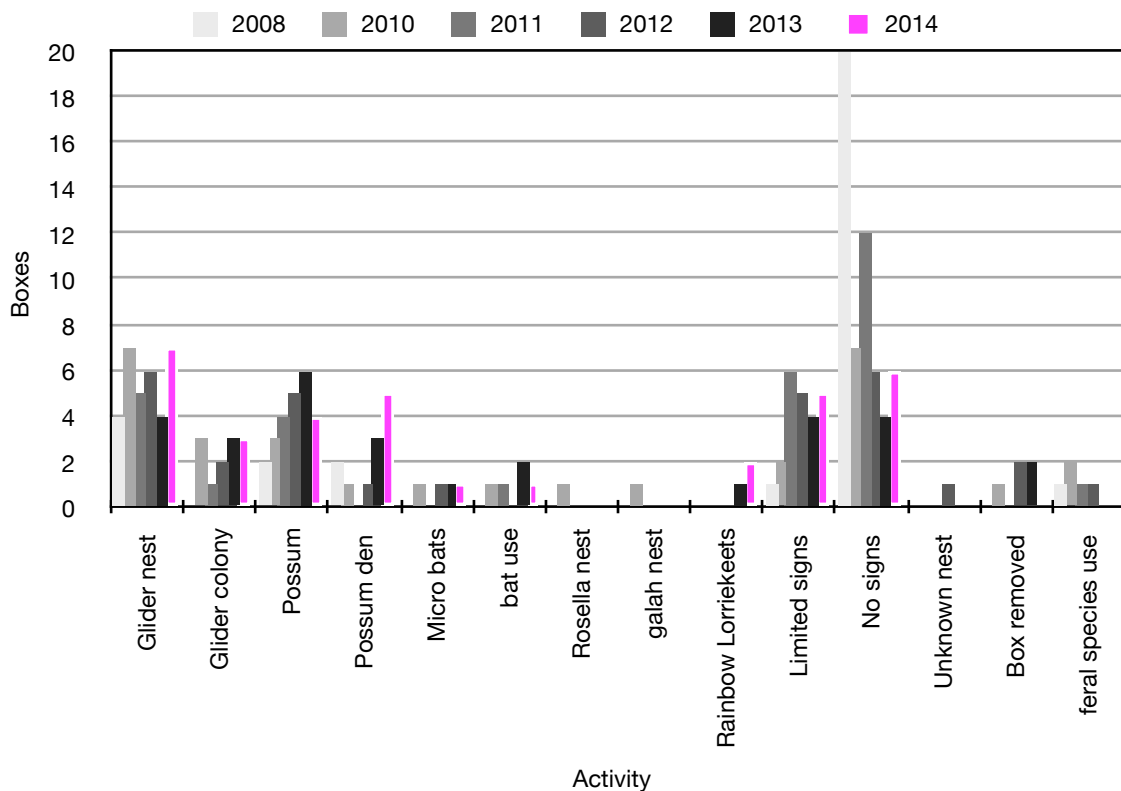
- Glider nest 5 boxes
- Glider colony 1 box
- Possum den 4 boxes
- Possum 3 boxes
- Native bees 1 box
- no sign 4 boxes

4.1.3 Perrin creek

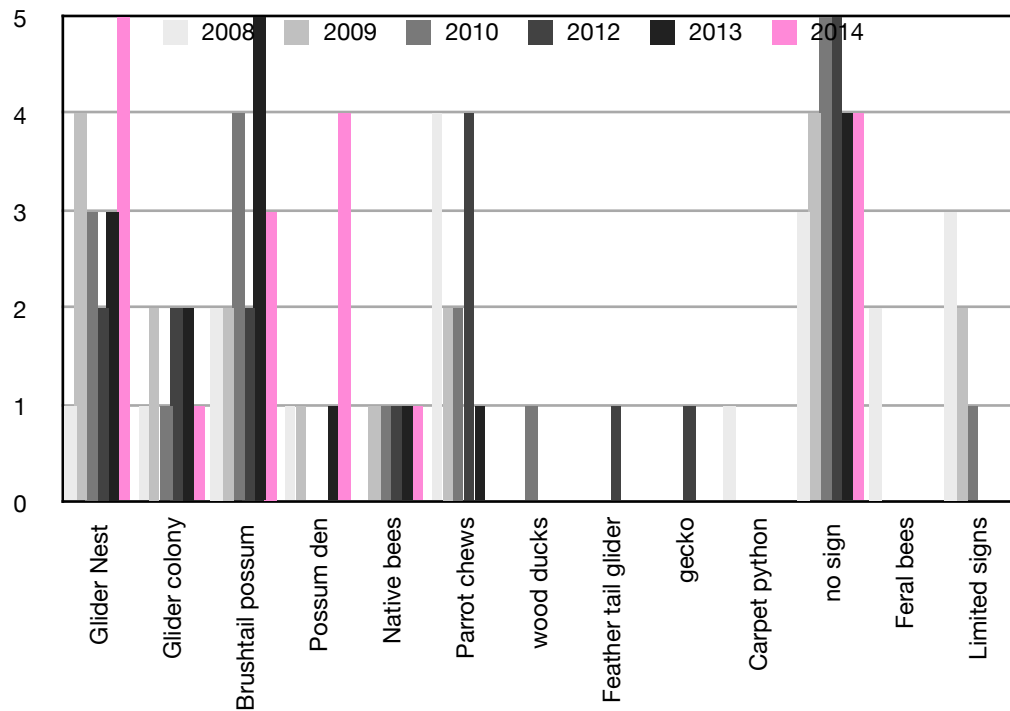


- Possum den 2 boxes
- Glider nest 2 boxes
- Rats 1 box
- no sign 3 boxes
- wooducks nest 1 box
- gecko 2 box

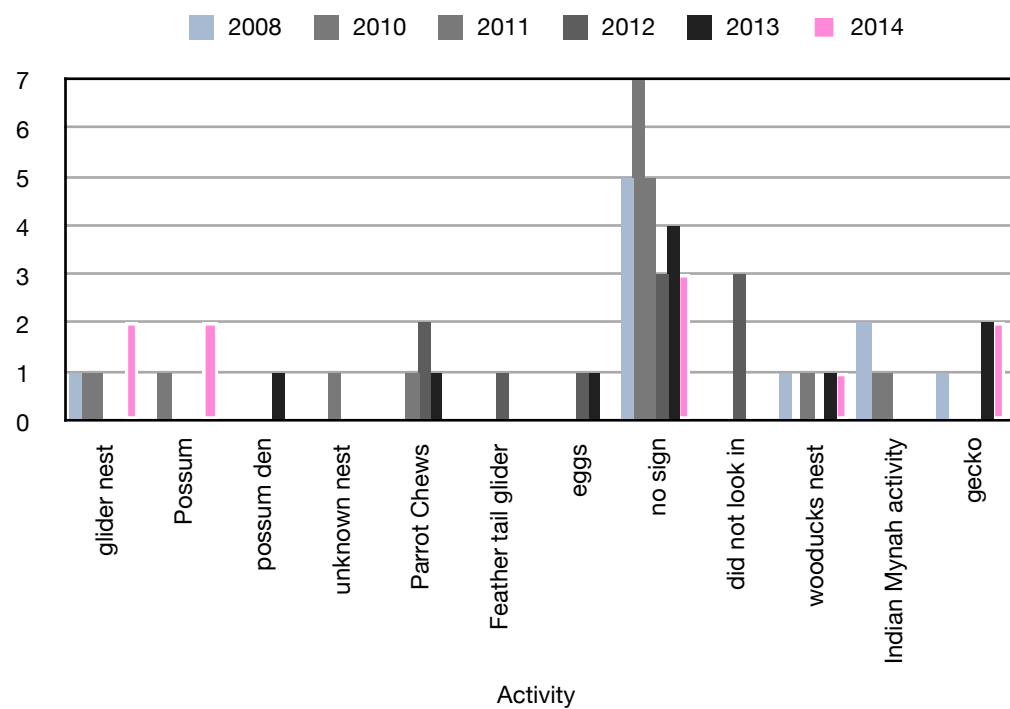
### 4.2.i Activity: Pritchard Road 2008-2014



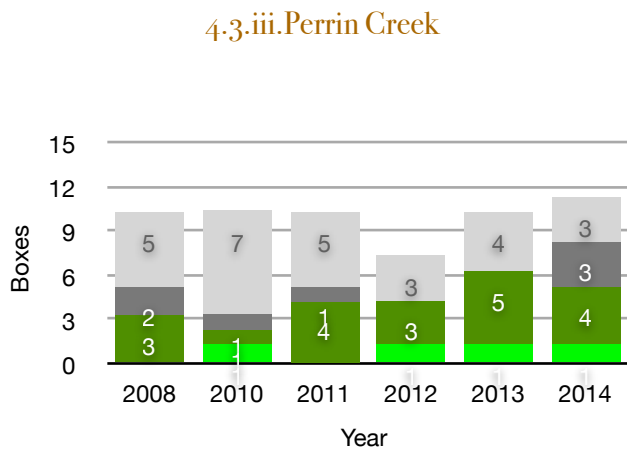
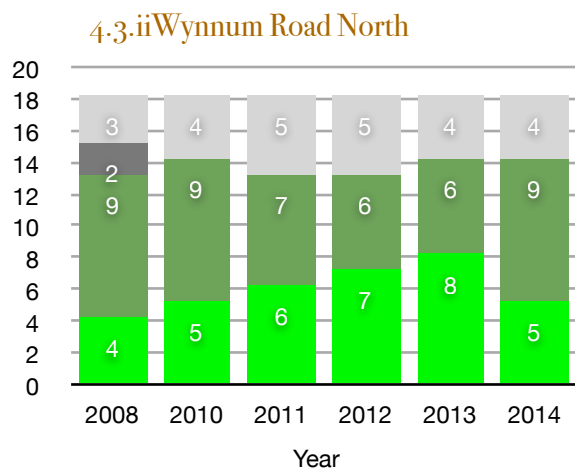
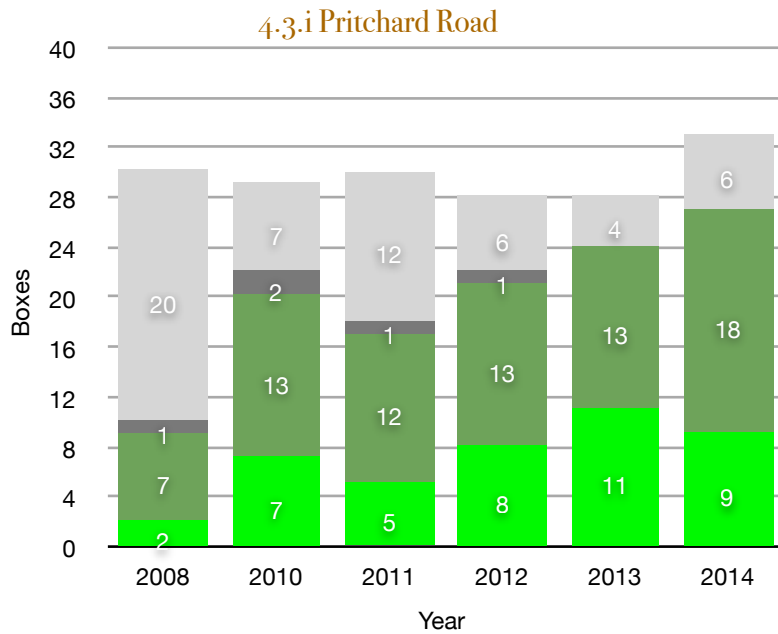
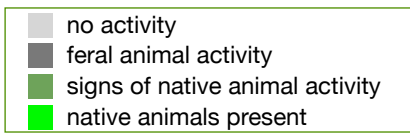
#### 4.2.ii Wynnum Road North 2008-2014



#### 4.2.iii Perrin Creek 2008-2014



## 4.3 Habitation Rates 2008-2014



## 4.4 Overview of Individual Nest Box Use By Year 2008-2014

### Key

no signs	glider nest	glider colony	possum den	possum	rainbow lorrieket nest	native bees	carpet python	feral species	bats	bat use	galah nest	rosella nest	wood ducks

### 4.4.i Pritchard Road

Box number & type	2008	2010	2011	2012	2013	2014
1 glider			ants	ants		
2 parrot			ants			
3 onj		moved box	ants	moved box	ants	new lid
4 glider		feral bees				
5 bat						
6 onj			ants		ants	lid chewed
7 parrot	moved box	hole chewed	moved box	ants		needs new lid
8 boobook				2 possums		
9 glider			ants		ants	
10 small Parrot				unknown nest		needs new lid
11 boobook				2 possums		
12 bat				ants		
13 glider			ants			
14 possum		2 possums				
15 bat						
16 oNJ				ants	ants	
17 glider			ants	ants		
18 bat				ants		
19 wood duck						
20 parrot	droppings on lid			hole chewed	ants	also gliders nest
21 possum	2 possums	2 possums		2 possums		
22 bat			ants	ants		
23 glider						
24 wood duck			tree fallen			
25 bat			replaced boxes			
26 bat				ants		
27 bat						
28 bat						
29 glider						
49 Possum '13						
50 Possum '13						
51 Glider '13						
52 Glider '13						
53 Possum '13						

#### 4.4.ii Wynnum Road North

Box number & type	2008	2010	2011	2012	2013	2014
30 Possum						
31 glider			feral bees	ants		ants
32 bat						
33 bat				FTG		
34 ONJ	feral bees					
35 Glider				box repaired		
36 Glider					feral bees	needs new lid
37 Possum	2 possums		ants			
38 glider						
39 wood duck						
40 boobook	2 possums					
41 glider	feral bees					
42 ONJ						
43 bat						
44 parrot	chewed hole		feral bees	chewed hole		
45 bat						
46 parrot	chewed hole		chewed hole	ants		
47 parrot	chewed hole	chewed hole	ants	chewed hole		
48 parrot	chewed hole	chewed hole		chewed hole		needs new lid

#### 4.4.iii Perrin Creek

Box number & type	2008	2010	2011	2012	2013	2014
1 parrot		gecko		hole chewed	hole chewed	replaced lid
2 parrot	moved box		gecko	hole chewed	replace lid	
3 Glider	ants		paper bark nest			
4 Glider	gecko		ants		gecko	
5 bat					ants	
6 Possum						
7 bat				FTG		
8 bat			ants	did not look	gecko	gecko
9 glider	ants			grass too		rats
10 possum			mynah nest	long		

Photographs 9, 10 & 11 previous page Common Brushtail possums at Pritchard Road boxes 07, 10 & 11



Photographs 12 & 13 Squirrel glider colonies Box number 52 & 17 Pritchard Road



Photographs 14 & 15 evidence of Lorrieket nesting Boxes 16 & 20 Pritchard Road

(box 20 also has evidence of recent glider activity)



Photo 16



Photo 17



Photo 18



Photo 19

Photograph 16, Rainbow lorikeet eggs. Pritchard Road Box 02  
 Photograph 17, Wood duck eggs Perrin Creek , Box 6  
 Photograph 18, Eucalyptus leaf nest indicating recent use by  
 gliders , Wynnum Road North box 38  
 Photograph 19, Possum den , Wynnum Road North box 46  
 wood shavings have been removed by possum as they exit the  
 box, polishing visible on base of box.

## 5 Field Notes

### 5.1 Pritchard Road

Box Number	Box Type	GPS Co-ordinates		Observations 2014
POB49	Possum	S27 25.550	E153 09.569	Evidence of use by common brushtail possum
POB50	Possum	S27 25.547	E153 09.587	Evidence of use by common brushtail possum
POB51	Glider	S27 25.556	E153 09.573	No signs of use
POB52	Glider	S27 25.571	E153 09.606	Glider colony
POB53	Possum	S27 25.552	E153 09.608	Evidence of use by common brushtail possum
POB01	Glider	S27 25.558	E153 09.558	Glider colony
POB02	Parrot	S27 25.563	E153 09.561	Rainbow lorriquets nesting 2 eggs
POB03	Owlet	S27 25.557	E153 09.568	New lid installed , no sign of recent activity
POB04	Glider	S27 25.549	E153 09.569	Fresh eucalyptus leaves indicating recent glider activity
POB05	Bat	S27 25.569	E153 09.578	No sign of recent habitation however no cobwebs over entrance hole
POB06	Owlet	S27 25.559	E153 09.589	Lid has chew marks, looks like investigations by Rainbow lorriquets
POB07	Parrot	S27 25.554	E153 09.582	Common Brushtail possum , needs new lid
POB08	Boobook owl	S27 25.563	E153 09.588	Common Brushtail possum
POB09	Glider	S27 25.560	E153 09.581	fresh eucalyptus leaves indicating recent glider activity
POB10	Parrot	S27 25.558	E153 09.593	Common Brushtail possum, needs new lid
POB11	Boobook owl	S27 25.562	E153 09.599	Common Brushtail possum
POB12	Bat	S27 25.563	E153 09.580	Colony of microbats
POB13	Glider	S27 25.565	E153 09.593	Fresh eucalyptus leaves indicating recent glider activity
POB14	Possum	S27 25.561	E153 09.600	Evidence of use by common brushtail possum
POB15	Bat	S27 25.561	E153 09.600	no sign of recent habitation cobwebs over entrance hole
POB16	Owlet	S27 25.568	E153 09.609	Evidence of rainbow lorriquet nesting
POB17	Glider	S27 25.565	E153 09.605	Glider colony
POB18	Bat	S27 25.571	E153 09.620	Entrance hole stained
POB19	Wood Duck	S27 25.572	E153 09.629	Fresh eucalyptus leaves possibly from Galahs
POB20	Parrot	S27 25.568	E153 09.632	Evidence of rainbow lorriquet nesting , fresh eucalyptus leaves indicating recent use by gliders
POB21	Possum	S27 25.578	E153 09.649	No sign of recent habitation
POB22	Bat	S27 25.579	E153 09.648	No sign of recent habitation no cobwebs over entrance
POB23	Glider	S27 25.577	E153 09.632	fresh eucalyptus leaves indicating recent glider activity
POB24	Wood Duck	S27 25.578	E153 09.653	Evidence of use by possum
POB25	Bat	S27 25.580	E153 09.645	no sign of recent habitation however no cobwebs
POB26	Bat	S27 25.575	E153 09.668	No sign of recent habitation however no cobwebs
POB27	Bat	S27 25.575	E153 09.668	Staining at entrance hole consistent with micro bat use
POB29	Glider	S27 25.566	E153 09.617	Fresh eucalyptus leaves indicating recent glider activity

## 5.2 Wynnum North Road

Box Number	Box type	GPS coordinates		Observation 2014
POB30	Possum	S27 25.395	E153 09.873	Evidence of use by possum
POB31	Glider	S27 25.401	E153 09.898	Ants, sprayed with Eucalyptus
POB32	Bat	S27 25.402	E153 09.898	No sign of recent activity , cobwebs over entrance hole
POB33	Bat	S27 25.384	E153 09.900	no sign of recent activity , cobwebs over entrance hole
POB34	Owlet	S27 25.390	E153 09.885	Native beehive still healthy
POB35	Glider	S27 25.388	E153 09.884	Fresh eucalyptus leaves indicating recent use by gliders
POB36	Glider	S27 25.390	E153 09.877	Glider colony, adults & young, needs new lid
POB37	Possum	S27 25.395	E153 09.873	Evidence of use by common brushtail possum
POB38	Glider	S27 25.392	E153 09.885	Fresh eucalyptus leaves indicating recent use by gliders
POB39	Wood Duck	S27 25.393	E153 09.887	common brushtail possum
POB40	Boobook	S27 25.395	E153 09.871	Evidence of use by possum , & gliders
POB41	Glider	S27 25.396	E153 09.872	fresh eucalyptus leaves indicating recent use by gliders
POB42	Owlet	S27 25.402	E153 09.863	eucalyptus leaves indicating use by gliders
POB43	Bat	S27 25.420	E153 09.854	No sign of recent habitation, however no cobwebs
POB44	Parrot	S27 25.423	E153 09.905	Evidence of use by common brushtail possum
POB45	Bat	S27 25.423	E153 09.905	No sign of recent habitation
POB46	Parrot	S27 25.425	E153 09.887	Evidence of use by possum
POB47	Parrot	S27 25.418	E153 09.889	common brushtail possum
POB48	Parrot	S27 25.398	E153 09.904	common brushtail possum , box needs new lid

## 5.3 Perrin Creek

Box Number	Box Type	GPS location		Observations 2014
1	Small Parrot	S27 27.199	E153 04.673	Old gliders nest, replaced lid
2	small Parrot	S27 27.218	E153 04.655	Evidence of use by common brushtail possum
3	Glider	S27 27.215	E153 04.654	No sign of use
4	Glider	S27 27.218	E153 04.655	gecko
5	microbat	S27 27.216	E153 04.654	Entrance stuffed full of Eucalyptus leaves
6	possum	S27 27.215	E153 04.650	Wood duck nest 11 eggs ready to hatch , duck flew off as we approached
7	micro bat	S27 27.202	E153 04.698	No sign of use
8	micro bat	S27 27.222	E153 04.682	Gecko , staining at entrance indicating use by micro bats
9	glider	S27 27.222	E153 04.683	What appears to be young Rats in nest made by another species.
10	possum	S27 27.222	E153 04.660	Evidence of possum use