
Hollow Log Homes

Nest Box Audit
Port Of Brisbane Authority

Pritchard Road, Wynnum North Road,

September 29th 2016



*Hollow Log
Homes*



Common Brushtail Possum with young.

Trichosurus vulpecular

Box number 44

Wynnum Road North

Table of Contents

1.Summary

1.1 Pritchard Road Buffer Zone - *Page 3*

1.2 Wynnum North Road - *Page 3*

2.Discussion

2.1 Pritchard Road Buffer Zone - *Page 4*

2.2 Wynnum North Road- *Page 5*

3.Tables

3.1 Native Species Mentioned - *Page 6*

3.2 Box Usage - *Page 6*

3.3 Habits, Signs and Identification of Native Fauna in Nest Boxes - *Pages 7 - 9*

4.Result Graphs - Habitation Rates

4.1 Habitation Rates 2016 - *Page 10*

4.2 Habitation Rates 2008 - 2016 - *Page 10*

4.3 Activity

4.3.1. Pritchard Road 2008-2016 - *Page 11*

4.3.2. Wynnum Road North 2008-2016 - *Page 11*

4.4 Overview of Individual Nest Box Use 2008 - 2016

4.4.1. Pritchard Road - *Page 12*

4.4.2. Wynnum Road North - *Page 13*

5.Field Notes

5.1 Pritchard Road - *Pages 14 - 15*

5.2 Wynnum North Road - *Page 16*

1.Summary

1.1Pritchard Road Buffer Zone: 36 Boxes

Date of Installation: 4th of June 2008

5 new boxes installed 7th of August 2013

3 new boxes installed 29th of September 2016

Date of previous audits: 27th of January 2010, 23rd of March 2011, 24th of January 2012, 31st January 2013, 27th August 2014, 9th September 2015

Date of Current Audit: 29th September 2016

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

Boxes with native species present: 10 boxes (30%)

Squirrel Glider (3 colonies), Possums (7 animals), Micro bats (1 colony)



Box 52. Squirrel Glider colony, *Petaurus norfolcensis*

Box Type	Small Parrot	Boobook Owl	Owlet Night jar	Wood duck	Possum	Glider	Microbat	Kookaburra
Number Installed	4	2	3	3	6	9	8	1

1.2Wynnum North Road, 22 Boxes

Date of Installation: 4th of June 2008

4 new boxes installed 29th of September 2016

Date of previous audits: 27th of January 2010, 23rd of March 2011, 24th of January 2012, 31st January 2013, 27th August 2014, 9th September 2015

Date of Current Audit: 29th September 2016

Box usage by native species: Overall 13 boxes (72%)

Boxes with native species present: 7 boxes, (38%)

Possum,(9 animals),Native bees,(1 hive)



Box 34. Australian Native Bees, *Trigona carbonaria*

Box Type	Small Parrot	Boobook Owl	Owlet Night jar	Wood duck	Possum	Glider	Microbat	Kookaburra
Number Installed	3	1	3	1	2	6	4	2

2. Discussion

2.1 Pritchard Road Buffer Zone: 36 Boxes (3 extra boxes installed)

This year we repaired and or replaced any damaged boxes. Any box that had a missing lid with animals present were left and an extra Cyplas box was installed close by. Glider box #9, which has a missing lid, had a single wood duck egg inside, so a suitable sized Cyplas box for wood ducks was installed in the closest tree. Boxes #10 and #17 with missing lids had common brushtail possums residing so again a suitable sized Cyplas box was installed nearby. There were a total of 4 new lids installed on boxes #2, #4, #7 and #8. Box #19 was decommissioned and replaced with a new Cyplas box.



Box 17. The original box lid needed replacing but there were 2 possums inside so this new Cyplas box was installed in an adjacent tree.

Native animals present is down from 13 boxes to 10 boxes this year with signs of native animal activity remaining constant at 12 boxes. There have been no signs of feral animal use in the last 4 years. The squirrel glider (*Petaurus norfolcensis*) population and usage of boxes have slightly decreased. This may be due to the amount of boxes with missing lids. Now they are repaired, we should hopefully see the glider population/usage increase next year. Possum usage remains the same with the amount of common brushtail possums (*Trichosurus vulpecular*) present decreased by 2 from the previous year. A colony of Gould's Wattled bat (*Chalinolobus gouldii*) is still active in the area switching between 5 boxes (#3, #16, #18, #20, #27). They were present in an Owlet nightjar box #3 this year which is a regular roost for them as there was bat guano present in this box the previous year.

Overall 22 of the 33 boxes audited showed signs of use or had native animals present, which is a good result of 67% usage. There are now a total of 36 nest boxes installed on this site as of the current audit date.



Box 13. One of three squirrel glider colonies present on this site.



Box 10. Common brushtail possum using a parrot box without a lid. A replacement box was installed near by.

2.2 Wynnum North Road: 22 boxes (4 extra boxes installed)

The activity at this site is consistent with the previous year with 13 out of the 18 boxes (72%) audited being used. The amount of native animals present increased from 5 boxes to 7 boxes. The native bee hive in the Owlet nightjar box #34 is still going strong after 7 years. Squirrel glider (*Petaurus norfolcensis*) population has declined on this site with only box#31 showing signs of use. There has been a record number of common brushtail possums present this year with 9 animals recorded in 6 boxes (box #39, #42, #44 with 2 possums present) and 2 boxes showing evidence of use at time of audit. Micro bat use is on the rise with 3 boxes (#32, #33, #45) showing evidence of recent use. A total of 4 new boxes were installed to offset boxes #36, #37, #42, #44 which all had no lids and common brushtail possums present. Four boxes (#35, #38, #41, #47) had their lids replaced and two boxes (#40, #48) were decommissioned and replaced. No feral animals were observed in the nest boxes at this site during this audit.



Box 31. Old gliders nest with spider egg sacs.



Box 36. Common brushtail possum, lid needed replacing so an extra Cyplas box was installed near by.



Box 37. Common brushtail possum, lid needed replacing so an extra Cyplas box was installed near by.

3.Tables

3.1 Native Species Mentioned

Common name	Scientific Name
Squirrel Glider	<i>Petaurus norfolcensis</i>
Common Brushtail Possum	<i>Trichosurus vulpecular</i>
Goulds wattled Bat	<i>Chalinolobus gouldii</i>
Native Bee	<i>Trigona carbonaria</i>
Wood Duck	<i>Chenonetta jubata</i>
Rainbow Lorrieket	<i>Trichoglossus haematodus</i>

3.2 Box Usage # indicates dual occupancy

Park	Species	Boxes with animals present	Boxes with evidence of use
Pritchard Road	Squirrel glider	13, 51, 52	01, 04, 23, 29
	Micro bat	3	16, 18, 20 27
	Brushtail possum	10, 14, 17, 21, 24, 49	11, 50, 53
	Wood Duck		9
Wynnum Road North	Squirrel glider		31
	Microbat		32, 33, 45
	Brushtail possum	36, 37, 39, 42, 44, 46	38, 41
	Native bees	34	

3.3 Habits, Signs and Identification of Native Fauna in Nest Boxes

3.3.1 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Common Brushtail Possum	<i>Trichosurus vulpecular</i>	Common	17	12

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.



Box 41. Evidence of use by Possum.



Box 42. Common Brushtail Possum with young using an Owllet nightjar box with the lid removed.

3.3.2 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Squirrel Gliders	<i>Petaurus norfolcensis</i>	Common	8	3

Habits: Each colony will use up to five nest holes. Colonies are loosely family based with up to 12 Gliders in each colony, usually with 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.



Box 23. Gliders nest.



Box 51. Squirrel glider colony, *Petaurus norfolcensis*

3.3.3 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Could's Wattled bat	<i>Chalinolobus gouldii</i>	Common	8	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.



Box 20. Microbat guano in a Parrot box.



Box 03. Colony of Goulds Wattled Bats in an Owlet nightjar box.

3.3.4 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Australian Wood duck	<i>Chenonetta jubata</i>	Common	1	0

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

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



Box 09. A single Australian Wood duck egg in a glider box without a lid.

3.3.5 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Native Bees	<i>Trigona carbonaria</i>	Common	1	1 nest

Habits: Common around Brisbane. Less active in winter but will forage on warm, sunny days.

Indications: Fills the nest box with a mixture of wax and resin; combs spiral.



Box 34. Owllet Nightjar box being used by Australian Native bees.



Box 34. The bee's will block the main entrance hole with wax to make a smaller more suitable hole for themselves.

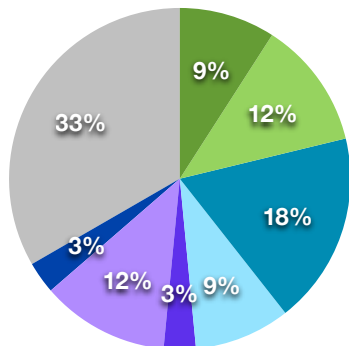


Box 34. Australian Native Bees, *Trigona carbonaria*, have been using this same box for 7 years.

4.Result Graphs

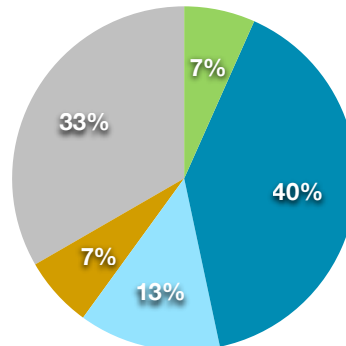
4.1 Habitation Rates 2016

4.1.1 Pritchard Road



- Glider colony - 3 boxes
- Glider nest - 4 boxes
- Possum - 6 boxes
- Possum den - 3 boxes
- Micro bat colony - 1 box
- Micro bat use - 4 boxes
- Wood duck use - 1 box
- No signs - 11 boxes

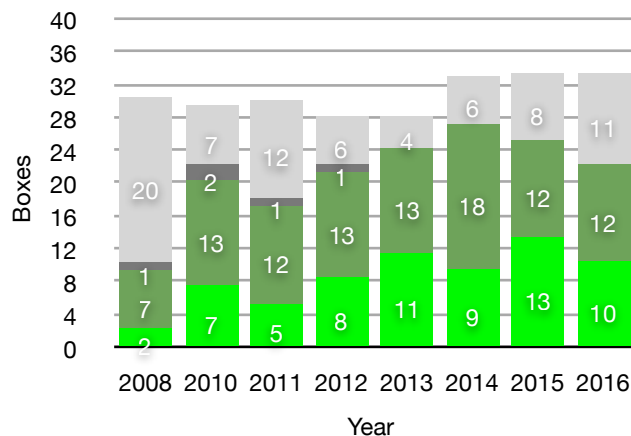
4.1.2 Wynnum North Road



- Glider nest - 1 box
- Possum - 6 boxes
- Possum den - 2 boxes
- Native bees - 1 box
- No sign - 5 boxes

4.2 Habitation Rates 2008 - 2016

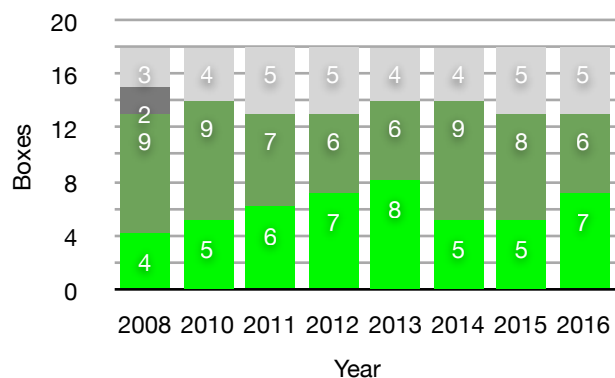
4.3.1 Pritchard Road



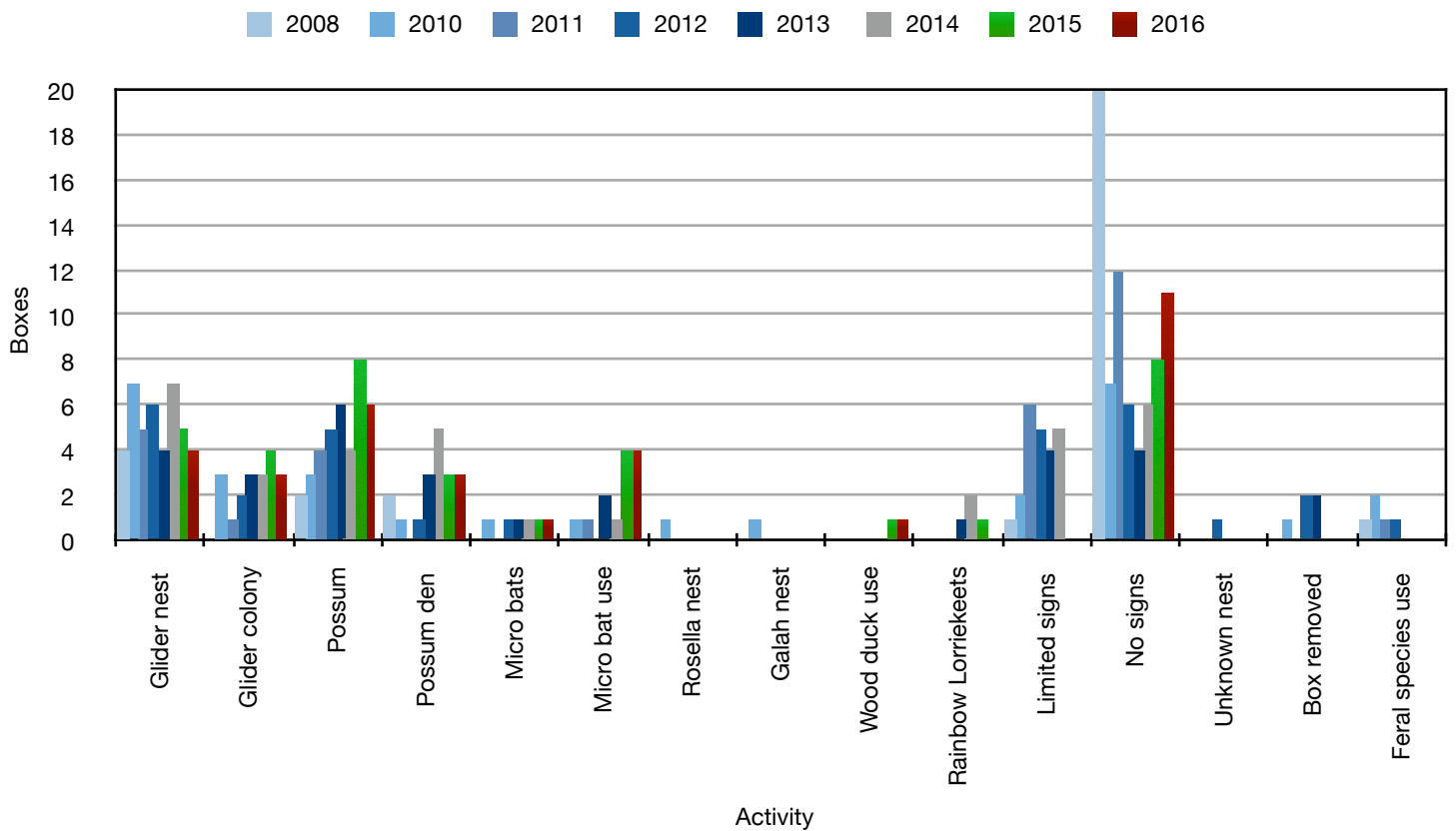
Key

- no activity
- feral animal activity
- signs of native animal activity
- native animals present

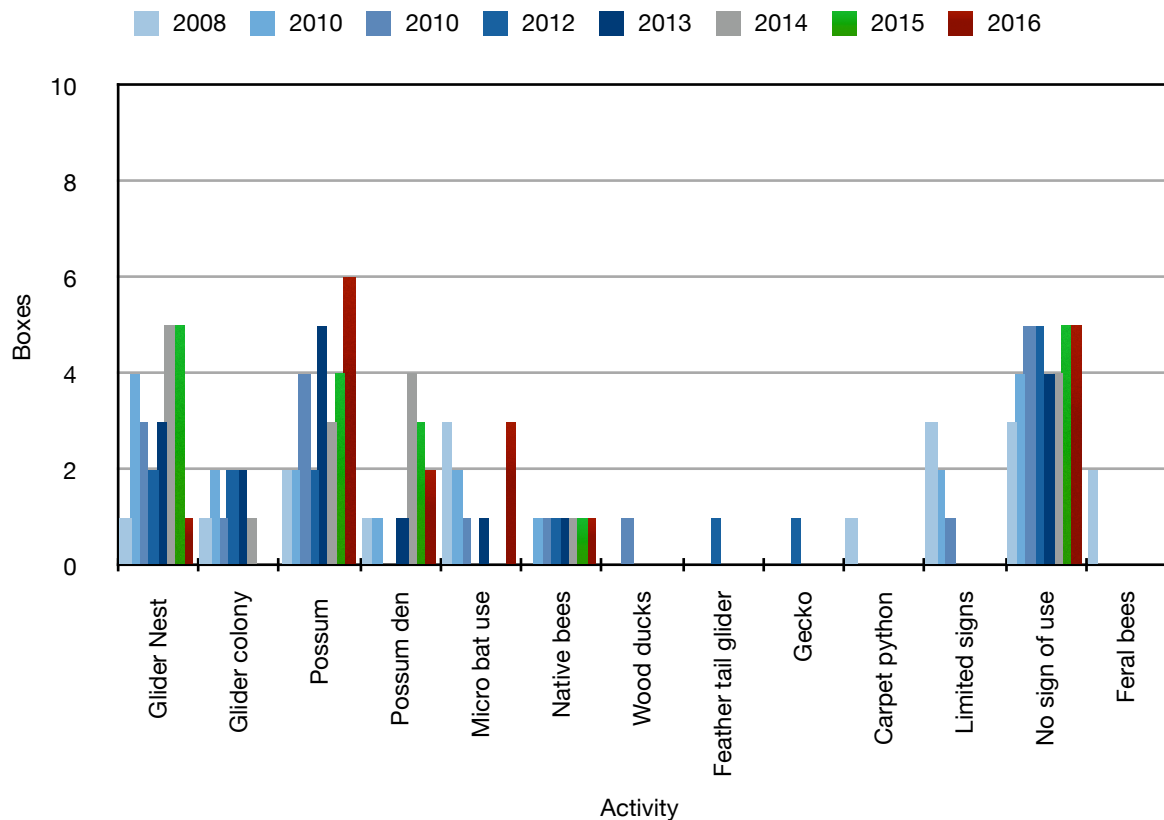
4.3.2 Wynnum North Road



4.3.1 Activity: Pritchard Road 2008-2016



4.3.2 Activity: Wynnum Road North 2008-2016



4.4 Overview of Individual Nest Box Use 2008 - 2016

Key

No signs	Glider nest	Glider colony	Possum den	Possum	Rainbow Lorrikest nest	Native Bees	Carpet Python	Feral species	Bats	Bat use	Galah nest	Rosella nest	Wood ducks	Wood duck use

4.4.1 Pritchard Road

Box number & type	2008	2010	2011	2012	2013	2014	2015	2016
1 Glider			ants	ants				
2 Parrot			ants				needs lid	New lid installed
3 ONJ		moved box	ants	moved box	ants	new lid	micro bat droppings	
4 Glider		feral bees						New lid installed
5 Bat								
6 ONJ			ants		ants	lid chewed	ants	Ants
7 Parrot	moved box	hole chewed	moved box	ants		needs lid	needs lid	New lid installed
8 Boobook				2 possums			needs lid	New lid installed
9 Glider			ants		ants			Extra box installed
10 Parrot				unknown nest		needs lid	needs lid	Extra box installed
11 Boobook				2 possums				
12 Bat				ants				
13 Glider			ants				old bee hive	
14 Possum		2 possums					+ WD down	
15 Bat								
16 ONJ				ants	ants			
17 Glider			ants	ants				Extra box installed
18 Bat				ants				
19 Wood duck								Box replaced Kookaburra C16-268
20 Parrot	droppings on lid			hole chewed	ants	also gliders nest	micro bat droppings	micro bat droppings
21 Possum	2 possums	2 possums		2 possums			needs replacing	
22 Bat			ants	ants				
23 Glider								
24 Wood duck			tree fallen					
25 Bat			replaced boxes					
26 Bat				ants				
27 Bat								
28 Bat								N/A
29 Glider								
49 Possum							2 possums	
50 Possum								
51 Glider								
52 Glider								
53 Possum								
54 Wood Duck Cyplas C16-743								New box
55 Possum Cyplas C16-741								New box
56 Galah Cyplas C16-648								New box

Key

No signs	Glider nest	Glider colony	Possum den	Possum	Rainbow Lorrikeet nest	Native Bees	Carpet Python	Feral species	Bats	Bat use	Galah nest	Rosella nest	Wood ducks

4.4.2 Wynnum Road North

Box number & type	2008	2010	2011	2012	2013	2014	2015	2016
30 Possum							N/A	N/A
31 Glider			feral bees	ants		ants		Spider egg sacks
32 Bat								Staining
33 Bat				FTG				Staining
34 ONJ	feral bees							
35 Glider				box repaired				New lid installed
36 Glider					feral bees	needs new lid	needs lid	Extra box installed
37 Possum	2 possums		ants					Extra box installed
38 Glider							needs lid	New lid installed
39 Wood duck								2 possums
40 Boobook	2 possums						needs replacing	Box replaced Wood Duck C16-744
41 Glider	feral bees						needs lid	New lid installed
42 ONJ							needs replacing	Extra box installed
43 Bat								
44 Parrot	chewed hole		feral bees	chewed hole			2 possums	Extra box installed
45 Bat								
46 Parrot	chewed hole		chewed hole	ants			needs lid	
47 Parrot	chewed hole	chewed hole	ants	chewed hole			needs lid	New lid installed
48 Parrot	chewed hole	chewed hole		chewed hole		needs new lid	needs lid	Box replaced Glider C16-594
57 ONJ Cyplas C16-740								New box
58 Possum Cyplas C16-742								New box
59 Kookaburra Cyplas C16-270								New box
60 Kookaburra Cyplas C16-274								New box

5. Field Notes

5.1 Pritchard Road

Box Number	Box Type	GPS Co-ordinates		Observations 2016
POB01	Glider	S27 25.558	E153 09.558	Eucalyptus leaves indicating use by gliders
POB02	Parrot	S27 25.563	E153 09.561	New lid installed
POB03	Owlet	S27 25.557	E153 09.568	Micro bat colony
POB04	Glider	S27 25.549	E153 09.569	Glider nest with decayed glider remains.
POB05	Bat	S27 25.569	E153 09.578	No sign of recent habitation
POB06	Owlet	S27 25.559	E153 09.589	Ant colony, sprayed box with a mixture of eucalyptus and pyrethrum
POB07	Parrot	S27 25.554	E153 09.582	New lid installed
POB08	Boobook owl	S27 25.563	E153 09.588	New lid installed
POB09	Glider	S27 25.560	E153 09.581	Wood duck egg. Couldn't replace lid so installed new Cyplas box C16-743, near by.
POB10	Parrot	S27 25.558	E153 09.593	Common Brushtail Possum. Needs lid, Installed new Cyplas box C16-741 near by.
POB11	Boobook owl	S27 25.562	E153 09.599	Evidence of Possum use
POB12	Bat	S27 25.563	E153 09.580	No sign of recent habitation however no cobwebs over entrance hole
POB13	Glider	S27 25.565	E153 09.593	Glider Colony
POB14	Possum	S27 25.561	E153 09.600	Common Brushtail Possum
POB15	Bat	S27 25.561	E153 09.600	No sign of recent habitation however no cobwebs over entrance hole
POB16	Owlet	S27 25.568	E153 09.609	Micro bat droppings
POB17	Glider	S27 25.565	E153 09.605	Possum with young. Couldn't replace lid so installed a new Cyplas box C16-648 near by.
POB18	Bat	S27 25.571	E153 09.620	Evidence of use by micro bat. Staining at entrance hole and clear of cobwebs.
POB19	Wood Duck	S27 25.572	E153 09.629	Replaced box with new Cyplas box C16-268
POB20	Parrot	S27 25.568	E153 09.632	Micro bat droppings
POB21	Possum	S27 25.578	E153 09.649	Common Brushtail Possum
POB22	Bat	S27 25.579	E153 09.648	Entrance hole is clear of cobwebs.
POB23	Glider	S27 25.577	E153 09.632	Glider nest
POB24	Wood Duck	S27 25.578	E153 09.653	Common Brushtail Possum
POB25	Bat	S27 25.580	E153 09.645	Entrance way clear of cobwebs
POB26	Bat	S27 25.575	E153 09.668	Entrance way clear of cobwebs
POB27	Bat	S27 25.575	E153 09.668	Staining at entrance way and clear of cobwebs
POB29	Glider	S27 25.566	E153 09.617	Glider leaf nest

Box Number	Box Type	GPS Co-ordinates		Observations 2016
POB049	Possum	S27 25.550	E153 09.569	Common Brushtail Possum
POB050	Possum	S27 25.547	E153 09.587	Evidence of use by Possum
POB051	Glider	S27 25.556	E153 09.573	Large glider colony
POB052	Glider	S27 25.571	E153 09.606	Glider colony
POB053	Possum	S27 25.552	E153 09.608	Evidence of use by Possum
POB054	Wood Duck Cyplas C16-743	S27 25.560	E153 09.581	New Box
POB055	Possum Cyplas C16-741	S27 25.558	E153 09.593	New Box
POB056	Galah Cyplas C16-648	S27 25.565	E153 09.605	New Box

5.2 Wynnum North Road

Box Number	Box Type	GPS Co-ordinates		Observations 2016
POB31	Glider	S27 25.401	E153 09.898	Old gliders nest with Spider egg sacks.
POB32	Bat	S27 25.402	E153 09.898	Evidence of use by micro bat. Staining at entrance and clear of cobwebs.
POB33	Bat	S27 25.384	E153 09.900	Evidence of use by micro bat. Staining at entrance and clear of cobwebs.
POB34	Owlet	S27 25.390	E153 09.885	Native Bee hive
POB35	Glider	S27 25.388	E153 09.884	New lid installed
POB36	Glider	S27 25.390	E153 09.877	Common Brushtail Possum, needs new lid, extra Cyplas box C16-740 installed near by.
POB37	Possum	S27 25.395	E153 09.873	Common Brushtail Possum, needs new lid, extra Cyplas box C16-742 installed near by.
POB38	Glider	S27 25.392	E153 09.885	Evidence of use by possum. Installed new lid
POB39	Wood Duck	S27 25.393	E153 09.887	Possum and young
POB40	Boobook	S27 25.395	E153 09.871	Replaced with new Cyplas box C16-744
POB41	Glider	S27 25.396	E153 09.872	New lid installed, evidence of use by possums
POB42	Owlet	S27 25.402	E153 09.863	Common Brushtail Possums x 2, extra box installed, Cyplas C16-270
POB43	Bat	S27 25.420	E153 09.854	No sign of use. Cobwebs over hole
POB44	Parrot	S27 25.423	E153 09.905	Common Brushtail Possums x 2, extra box installed, Cyplas box C16-274
POB45	Bat	S27 25.423	E153 09.905	Evidence of use by micro bat. Staining at entrance and clear of cobwebs.
POB46	Parrot	S27 25.425	E153 09.887	Common Brushtail Possum
POB47	Parrot	S27 25.418	E153 09.889	New lid installed
POB48	Parrot	S27 25.398	E153 09.904	Replaced box with RE Glider C16-594
POB57	ONJ Cyplas C16-740	S27 25.390	E153 09.877	New box
POB58	Possum Cyplas C16-742	S27 25.395	E153 09.873	New box
POB59	Kookaburra Cyplas C16-270	S27 25.402	E153 09.863	New box
POB60	Kookaburra Cyplas C16-274	S27 25.423	E153 09.905	New box