
Hollow Log Homes

Nest Box Audit
Port of Brisbane Authority

Pritchard Road, Wynnum North Road,

7th September 2017



*Hollow Log
Homes*



A colony of Squirrel gliders.

Petaurus norfolcensis

Box number 51

Pritchard Road

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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, 29th September 2016

Date of Current Audit: 7th September 2017

Box usage by native species: Overall 26 boxes (72%)

Boxes with native species present: 15 boxes (42%)

Squirrel Glider (2 colonies), Possums (6 animals),

Micro bats (7 colonies)



Box 16. A colony of Gould's wattled microbats and spider egg sacks.

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, 29th September 2016

Date of Current Audit: 7th September 2017

Box usage by native species: Overall 12 boxes (55%)

Boxes with native species present: 6 boxes, (27%)

Possum,(4 animals), Native bees (1 hive),

Carpet Python (1 snake)



Box 48. Carpet Python, *Morelia spilota variegata*.

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

Overall 26 of the 36 (72%) boxes audited showed signs of use or had native animals present, which is a great result. This is the second highest habitation rate next to the year 2014 results.

The Gould's wattled bat (*Chalinolobus gouldii*) activity has greatly increased this year to 7 boxes (#01, #02, #06, #12, #16, #25, #29) with microbats present at time of audit. Unfortunately a photo of the bats in some of the boxes were unattainable as the micro bats flew out as we checked the nest box. With the increasing population of microbats in the last 3 years we recommend installing four additional multi chambered microbat boxes as most of the boxes with bats present this year were suitable for parrot, glider and owlet nightjar.

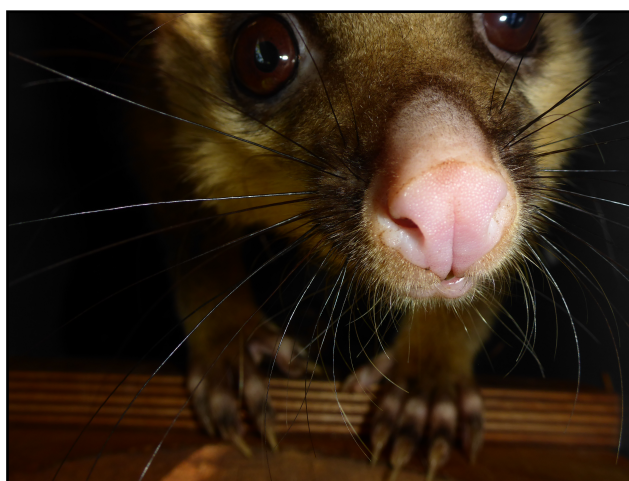
Possum usage remains healthy. The amount of common brushtail possums (*Trichosurus vulpecular*) present was the same as the previous year. The four new Cyplas recycled plastic nest boxes which were installed last year are all being utilised by common brushtail possums. With boxes #55 and #56 being occupied at time of audit and boxes #19 and #54 showing evidence of use by possum. Squirrel glider activity remains low with only two colonies recorded in boxes #23 and #51. Another 7 boxes (#01, #03, #04, #06, #13, #29, #52) had glider nests inside. No feral species were recorded at time of audit.



Box 25. A colony of Gould's wattled bat, *Chalinolobus gouldii*.



Box 23. A colony of Squirrel gliders, *Petaurus norfolcensis*.



Box 55. A common brushtail possum using a new Cyplas recycled plastic possum box.

2.2 Wynnum North Road: 22 boxes

The habitation rate at this site is consistent with the previous years with 12 out of now 22 boxes (55%) audited being used. Boxes with no signs of use is higher this year due to the amount of boxes with no lids that had possums present in them last year. At the next audit we recommend to install lids on the boxes without animals present.

The native bee (*Trigona carbonaria*) hive in the owllet nightjar box #34 is still going strong after 8 years but the actual box itself is starting to deteriorate. The squirrel glider (*Petaurus norfolcensis*) population remains low with only two boxes (#38, #47) showing signs of use. A glider colony has not been recorded in a nest box on this site at time of audit for three consecutive years now. Even though gliders don't often come down to ground level we believe there may be a relation between the over grown grass and the decline in glider numbers. It would be interesting to see if the grass is kept short whether the gliders would return.

Common brushtail possum population remains healthy with 4 boxes (#40, #42, #44, #46) with animals present and 4 boxes (#37, #39, #58, #60) showing evidence of use at time of audit. There were no signs of microbat use on this site at time of audit.

A total of 6 new Cyplas recycled plastic nest boxes were installed last year to replace/offset damaged boxes. Cyplas box #40 had a brushtail possum present while boxes #58 and #60 had evidence of use by possum at time of audit. A carpet python, *Morelia spilota variegata* was recorded in box # 48 while the other two Cyplas boxes showed no sign of use. No feral animals were observed in the nest boxes at this site during this audit.



Box 30. Common brushtail possum ran out of nest box. Lid needs replacing.



Box 40. Common brushtail possum in a new Cyplas Boobook owl/Wood duck box.



Box 34. Native bees still in same owllet nightjar box after 8 years.

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>
Carpet Python	<i>Morelia spilota variegata.</i>
Rainbow Lorikeet	<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	23, 51	#01, 03, 04, #06 13, #29, 52
	Micro bat	#01, 02, #06, 12, 16, 25, #29,	#20
	Brushtail possum	08, 17, 49, 50, 55, 56	07, 14, 19, 21, 53, 54,
	Rainbow Lorikeet		#20
Wynnum Road North	Squirrel glider		38, 47,
	Microbat		
	Brushtail possum	40, 42, 44, 46,	37, 39, 58, 60
	Native bees	34,	
	Carpet Python	48	

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	20	10

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 56. Brushtail possum in a Cyplas galah box.



Box 54. Typical evidence of use by possum

3.3.2 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Squirrel Gliders	<i>Petaurus norfolcensis</i>	Common	11	2

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 favourite 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 51. Colony of squirrel gliders



Box 04. Typical glider eucalypt leaf nest.

3.3.3 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Could's Wattled bat	<i>Chalinolobus gouldii</i>	Common	1	7

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. Could's wattled bat, *Chalinolobus gouldii*.



Box 20. Copious amounts of microbat scat, and rainbow lorikeet scat.

3.3.4 Common Name	Scientific Name	Status	Total Boxes used	# Boxes with animals present
Carpet Python	<i>Morelia spilota variegata</i>	Common	I	I

Habitat: Rainforest, wet or dry eucalypt forest, heathland, pasture, agricultural and urban areas. Very common especially in areas retaining good tree cover.

Indications: Can leave their shed skin behind. Scats are large and often containing hair from digested prey.



Box 48. A carpet python in a rear entry Cyplas glider box.

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

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.

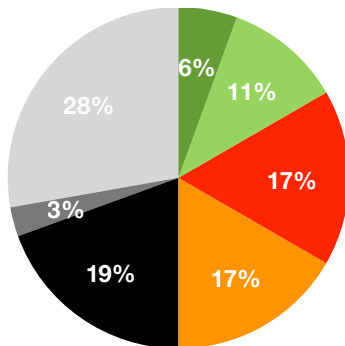


Box 34. Australian Native Bees, *Trigona carbonaria*, have been using this same box for 8 years.

4.Result Graphs

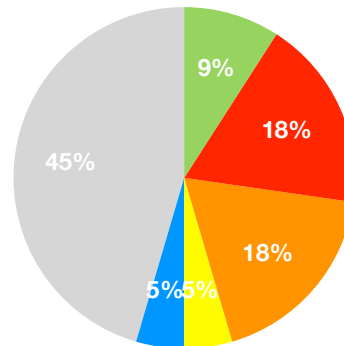
4.1 Habitation Rates 2017

4.1.1 Pritchard Road



- Glider colony - 2 boxes
- Glider nest - 4 boxes
- Possum - 6 boxes
- Possum den - 6 boxes
- Micro bat colony - 7 box
- Micro bat use - 1 boxes
- No signs - 10 boxes

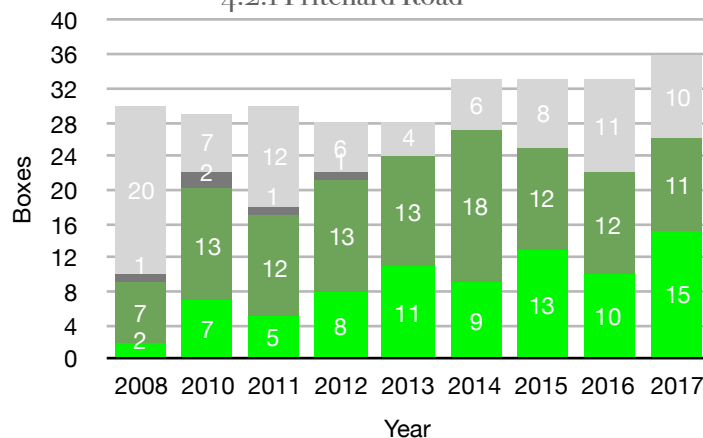
4.1.2 Wynnum North Road



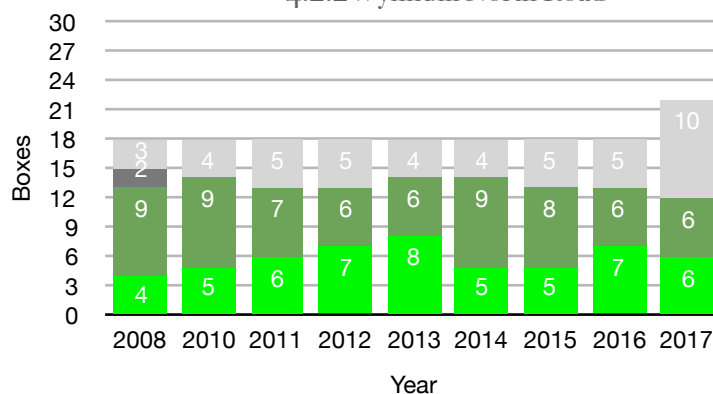
- Glider nest - 2 boxes
- Possum - 4 boxes
- Possum den - 4 boxes
- Native bees - 1 box
- Carpet python - 1 box
- No sign - 10 boxes

4.2 Habitation Rates 2008 - 2017

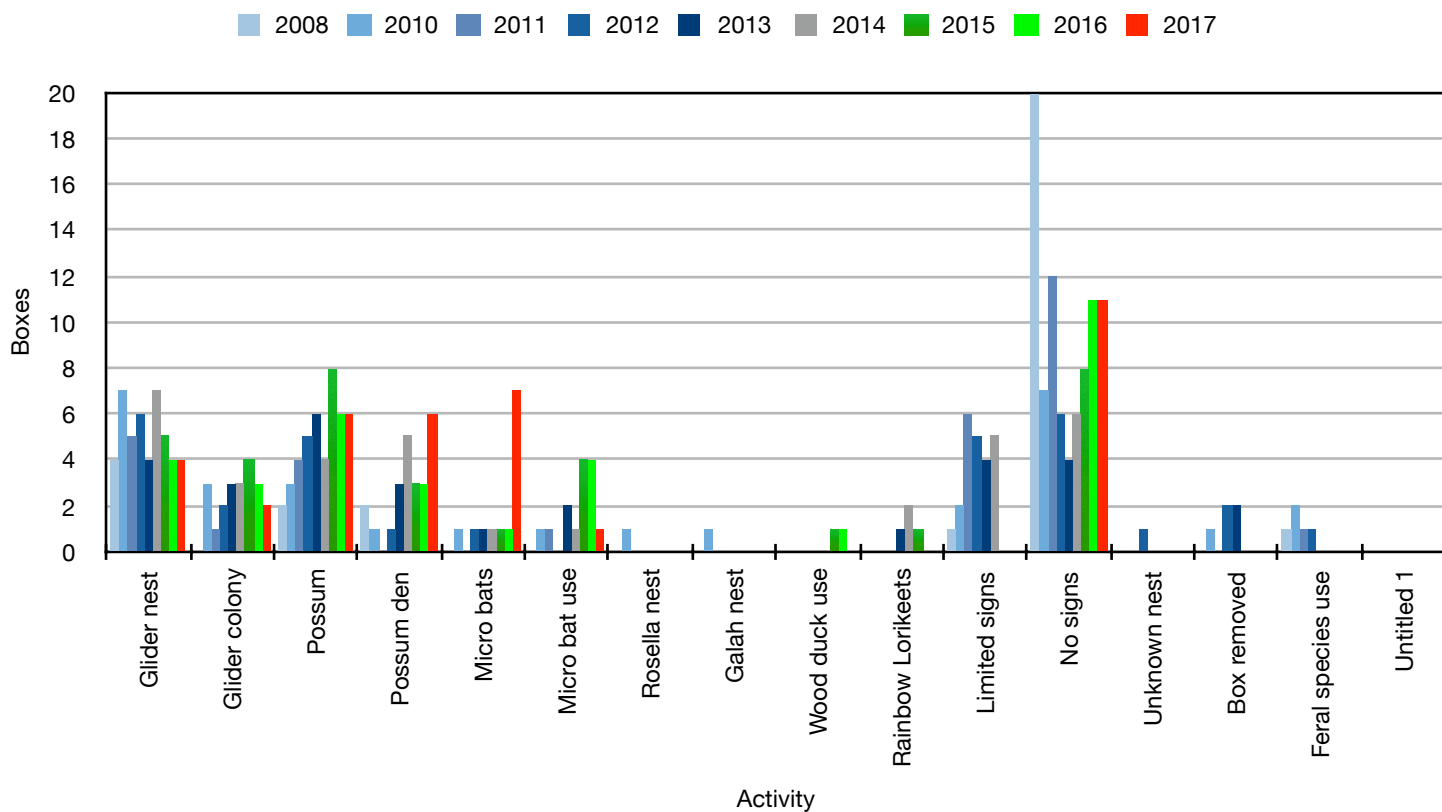
4.2.1 Pritchard Road



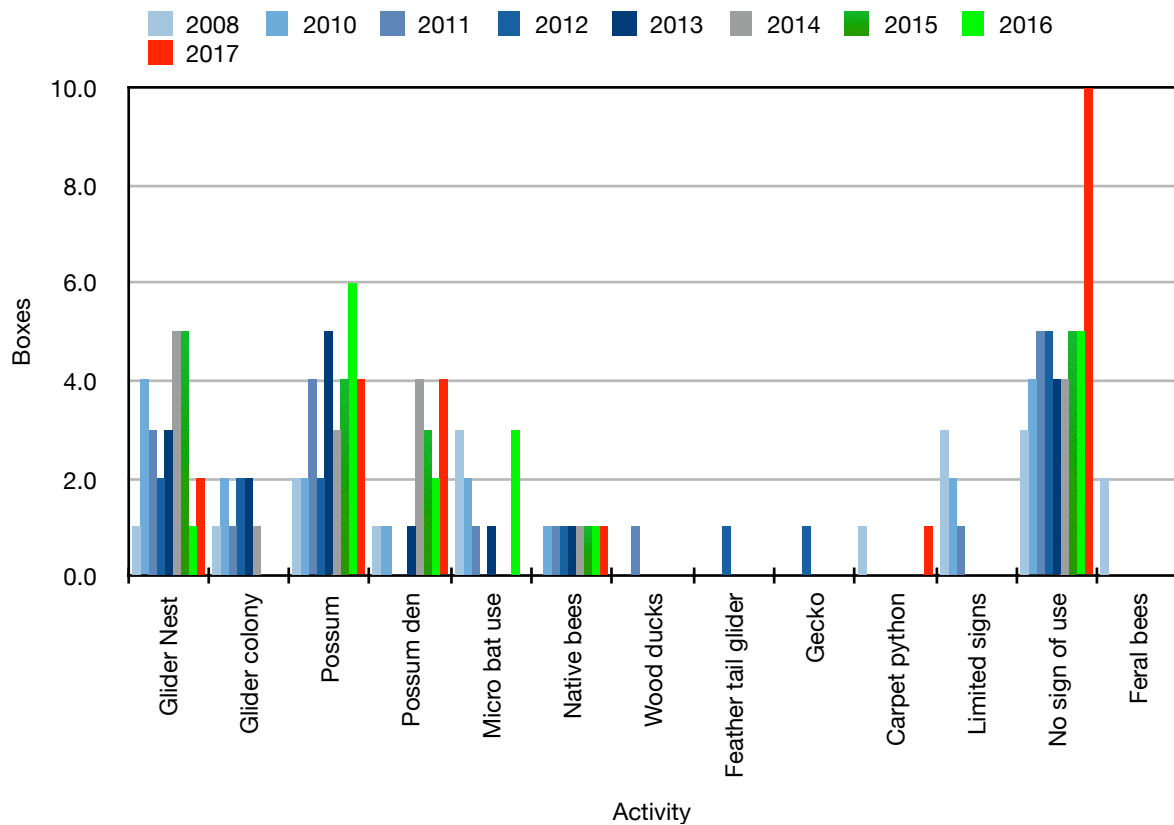
4.2.2 Wynnum North Road



4.3.1 Activity: Pritchard Road 2008-2017



4.3.2 Activity :Wynnum Road North 2008-2017



5. Field Notes

5.1 Pritchard Road

Box Number	Box Type	GPS Co-ordinates		Observations 2017
POB01	Glider	S27 25.558	E153 09.558	Glider leaf nest, micro bat flew out. Could not catch on camera.
POB02	Parrot	S27 25.563	E153 09.561	About 12 Micro bats exited box. Could not catch on camera.
POB03	Owlet	S27 25.557	E153 09.568	2 micro bats flew out. Could not catch on camera.
POB04	Glider	S27 25.549	E153 09.569	Glider leaf nest
POB05	Bat	S27 25.569	E153 09.578	No sign of use
POB06	Owlet	S27 25.559	E153 09.589	Micro bats flew out, glider use
POB07	Parrot	S27 25.554	E153 09.582	Possum use
POB08	Boobook owl	S27 25.563	E153 09.588	Brush tail possum
POB09	Glider	S27 25.560	E153 09.581	Needs lid
POB10	Parrot	S27 25.558	E153 09.593	Needs lid
POB11	Boobook owl	S27 25.562	E153 09.599	Needs lid
POB12	Bat	S27 25.563	E153 09.580	Micro bats present
POB13	Glider	S27 25.565	E153 09.593	Glider leaf nest
POB14	Possum	S27 25.561	E153 09.600	Possum use needs lid
POB15	Bat	S27 25.561	E153 09.600	No sign of use
POB16	Owlet	S27 25.568	E153 09.609	Micro bats
POB17	Glider	S27 25.565	E153 09.605	Brushtail possum ran out of box. Needs new lid
POB18	Bat	S27 25.571	E153 09.620	No sign of use
POB19	Kookaburra Cyplas C16-268	S27 25.572	E153 09.629	Possum use
POB20	Parrot	S27 25.568	E153 09.632	Micro bat droppings and use by rainbow lorikeet
POB21	Possum	S27 25.578	E153 09.649	Possum use
POB22	Bat	S27 25.579	E153 09.648	Cobwebs
POB23	Glider	S27 25.577	E153 09.632	Squirrel Gliders
POB24	Wood Duck	S27 25.578	E153 09.653	Needs lid
POB25	Bat	S27 25.580	E153 09.645	Microbat
POB26	Bat	S27 25.575	E153 09.668	Missing
POB27	Bat	S27 25.575	E153 09.668	Missing
POB29	Glider	S27 25.566	E153 09.617	Micro bats flew out. Gliders nest

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

5.2 Wynnum North Road

Box Number	Box Type	GPS Co-ordinates		Observations 2016
POB31	Glider	S27 25.401	E153 09.898	Needs lid
POB32	Bat	S27 25.402	E153 09.898	No use box is deteriorating
POB33	Bat	S27 25.384	E153 09.900	No sign of use
POB34	Owlet	S27 25.390	E153 09.885	Native bee hive, box is deteriorating
POB35	Glider	S27 25.388	E153 09.884	Ants
POB36	Glider	S27 25.390	E153 09.877	Needs lid
POB37	Possum	S27 25.395	E153 09.873	Brushtail possum ran out needs lid
POB38	Glider	S27 25.392	E153 09.885	Old gliders nest
POB39	Wood Duck	S27 25.393	E153 09.887	Possum use
POB40	Boobook Cyplas C16-744	S27 25.395	E153 09.871	Brushtail possum
POB41	Glider	S27 25.396	E153 09.872	Box needs replacing no lid or bottom
POB42	Owlet	S27 25.402	E153 09.863	Brushtail possum box is deteriorating
POB43	Bat	S27 25.420	E153 09.854	No sign of use
POB44	Parrot	S27 25.423	E153 09.905	No sign of use
POB45	Bat	S27 25.423	E153 09.905	Clear no sign of use
POB46	Parrot	S27 25.425	E153 09.887	Needs lid. Brushtail possum
POB47	Parrot	S27 25.418	E153 09.889	Gliders nest
POB48	Glider Cyplas C16-594	S27 25.398	E153 09.904	Carpet Python and spider
POB57	ONJ Cyplas C16-740	S27 25.390	E153 09.877	No sign of use
POB58	Possum Cyplas C16-742	S27 25.395	E153 09.873	Possum use
POB59	Kookaburra Cyplas C16-270	S27 25.402	E153 09.863	No sign of use
POB60	Kookaburra Cyplas C16-274	S27 25.423	E153 09.905	Possum use