Nest Box Audit

2025

Port of Brisbane

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Cover shot - Brushtail Possum and joey in Nest Box 575

EXECUTIVE SUMMARY

The Port of Brisbane Pty Ltd is engaged in a long-term project which provides nest boxes at strategic locations across the buffer zones around the Port.

These nest boxes provide additional artificial hollows to complement the naturally occurring ones in the landscape. The aim is to continue to provide artificial hollows to stabilise populations of native species and attract additional hollow-dependent fauna.

The purpose of this audit was to continue to monitor the usage of the boxes to ensure the ongoing success of the program.

After the 2024 audit, new Cyplas boxes were installed, with the buffer zones then having 60 nest boxes across three sites.

At this audit, these boxes were checked, with two of the old timber boxes and one Cyplas box having been lost to either disrepair or damage. There are currently 49 Cyplas and 8 Timber nest boxes, bringing the total to 57. Additionally, six of the Timber range and one Cyplas will need to be replaced as soon as possible.

The habitation rate from the 60 boxes was 57%, which is an increase from the 52% in 2024, but still well short of the 65% in 2023. This is possibly due to the time it takes for the native fauna to re-establish themselves after nest box replacements the previous year.

At this 2025 audit, six species of native fauna were identified. Three separate species of mammals were recorded in the boxes – gliders, possums and microbats.

There were twelve documented sightings of colonies of Common Brushtail Possums, with an additional three boxes with evidence of use. There were two sightings of Gliders, although six other boxes showed signs of use. The Possums and Gliders were at the Pritchard Street and Wynnum North Road sites, similar to last year.

EXECUTIVE SUMMARY, contd.

There was one box with Microbats and one with use by Pale-headed Rosellas at Pritchard Street, one box at Lucinda Drive with a Carpet Python and Undetermined native fauna in eight boxes across the three sites. Lucinda Drive had all four boxes being used by native fauna unlike last year's result of none.

Again this year, there was limited evidence of occupancy or habitation by native bird species, and this remains a concerning sign for the diversity of the site.

The nest boxes have been monitored for feral European Bees as there were three active hives discovered at the 2024 Audit. In 2025 there was only one active hive in a newly replaced Cyplas box at Wynnum North. Research shows that bees are unable to sustain hives in the new Cyplas boxes, which appears to be supported by their reduction across the sites.

Ongoing replacement of the Plywood boxes as they become unserviceable will be required, with another seven boxes needing replacement this year, and the three missing ones also needing to be replaced. Overall 50 of the 60 nest boxes are still in serviceable condition.

The establishment and auditing of the program, combined with updated maintenance and replacement programs, has allowed for the continuation of suitable habitat for native wildlife. The current results show that mammals and other native species are in the area and have established colonies and breeding patterns.

This important, long-term sustainability project may need further enhancements to the surrounding native vegetation to ensure its ongoing success.

This year's results are an encouraging improvement after previous years replacement programs. This 57% overall habitation rate of the site is still providing hollow dependent fauna with suitable shelter and breeding sites. There are promising signs of ongoing recovery with the recording of both possum and glider joeys.

Recommendations include the ongoing yearly assessment of nest box use, with replacement of dilapidated nest boxes as soon as practicable.

INTRODUCTION

This report outlines the December 2025 audit findings of the nest box inspection program at three sites - Pritchard Street (41 boxes); Wynnum North Road (15 boxes); and Lucinda Drive (4 boxes) – all within the buffer zones at the Port of Brisbane Pty Ltd (POB), Queensland.

This is a follow-up audit for fauna monitoring/box inspection, continuing the long-term monitoring that commenced in 2008 and has occurred annually since 2010. This aligns with POB's 2030 Target Goal within their Sustainability Strategy to improve the quality of designated environmental areas across Port land, supported by external assessment.

The previous 2024 Audit Report detailed the follow up work that was performed by Hollow Log Homes (HLH) to install 20 new Cyplas boxes allowing for 60 nest boxes across three sites to be used by native fauna.

At this 2025 audit, 60 boxes were audited, with 57 being located, and their contents analysed for native fauna use and nesting.

Further analysis of the occupancy, evidence of use and overall habitation rates of the nest boxes is detailed in the Results section, noting there has been an increase of use by native fauna.

There is some replacement of nest boxes required, and a recommendation is that POB engages HLH to perform this work as soon as practicable.

Pritchard Street site with Possum Box 922 and Boobook/Wood Duck Box 892 nestled in the trees. Possums were using both boxes.

NEST BOX AUDITING

The audit was undertaken by Hollow Log Homes personnel on 17 December 2025, with data recorded via excel spreadsheet.

The weather for the audit was fine with a maximum temperature of 27.4°C. The winds were predominantly south-easterly at up to 19kph with relative humidity averaging in the high 60% range.

This audit covers 60 nest boxes (of diverse types) installed across the site on existing tree species including Blue Gum, Casuarina, Moreton Bay Ash and Spotted Gum.

The audited boxes are 4-8 metres above the ground allowing for ease of monitoring and maintenance whilst situating them within an arboreal habitat.

Each nest box's information is recorded (example below) including GPS datum, box type, material, occupying species or evidence of use/nesting, pest species, and other observations.

Site	GPS ID	Box Type	Box Condition	Material	Photo Time (hhmm)	Occupancy 1=Yes 0=No	Species (nil if not occ)	Usage 1=Yes 0= No	Evidence of Use by	Notes
Pritchard	178	Possum	Good	Cyplas	10:56	1	Possum	occ	occ	Mammal skeleton, leaves brought in, dual use is noted
Pritchard	209	1 Bat	Replace	Plywood	10:27	0	nil	0	nil	No evidence of vertebrate use

The following process was used at the audit:

- Checking the GPS datum for nest box locations
- Checking for signs of current or past use by native wildlife (60 nest boxes)
- Check for pest species or evidence of pest species such as rats and feral bees
- Photographing and/or video recording fauna observations
- Noting any major box repairs or replacements required
- Evaluating surrounding tree growth to ensure that access points are clear
- Providing a report on the audit

NEST BOX INSPECTION PROCESS

Condition monitoring involved conducting a visual inspection of 60 nest boxes, with those remaining intact in good condition.

To minimise disturbance to fauna, nest boxes and their contents were carefully inspected using a ground-based technique using an extendable pole.

The mounted blue-tooth camera was used to remotely view the condition of the nest boxes from the ground, assess internal signs of nest box use (nesting materials, live fauna) and wirelessly control the capture of images.

During the field inspection, findings were recorded using a pro-forma field data app. The images and recordings were later processed on the ground and animals encountered within the boxes identified. Where possible, documents and data were reviewed while on-site and verified.

Further identification and statistical analyses were conducted offsite to clarify occupancy and habitation rates per species per box type.

For this report, occupancy is defined as an animal which is present inside the box at the time of audit.

Evidence of use is the presence of an animal's recent use of the box such as nesting material, feathers, oil stains, scat and eggshells. When there was evidence of two separate species using a nest box, the most recent occupant was recorded.

NEST BOX FUNCTION AND TYPES

All boxes are specifically designed to replicate the function of a nesting site usually provided by a tree hollow.

All designs are based on research that shows that the species named will use the nest box types if they are in the area. Most are suitable for multiple species and as such the name of the nest box should serve as an indication of the design rather than guaranteeing which species will use the nest box at this specific site.

Cyplas Nest Box – Possum/Galah

The **Cyplas** ® range are constructed from food grade, UV stabilised, 100% Recycled HDPE (High Density Polyethylene) and Queensland Cypress.

Research has indicated that there is no habitation difference compared with traditional plywood boxes, and that European bees cannot sustain hives in the Cyplas nest boxes. These materials are expected to have a lifespan in excess of thirty years in situ.

The **Timber** range are constructed from ethically sourced exterior grade plywood with structural grade Cypress hardwood. These materials are expected to have a lifespan in excess of ten years in situ.

The **Habisure**™ wiring system is utilised, as it adapts to tree growth up to 1 metre in diameter.

49 nest boxes are now from the Cyplas range, with 8 remaining from the Timber range.

Timber Nest Box – Rear Entry Glider

SITE DETAILS

The Port of Brisbane (POB) operates in an industrial area that is at the mouth of the Brisbane River, immediately adjacent to the Moreton Bay Marine Park and protected RAMSAR wetlands. The port has buffer zones between the industrial site and the residential areas located to its south

POB is managed and developed by the Port of Brisbane Pty Ltd under a 99-year lease from the Queensland Government and has 29 operating berths and facilitates more than 2600 ships each year.

POB have three sites with artificial hollows installed to provide safe places for local wildlife. The following sites were audited, and all have a variety of nest boxes installed to ensure maximum use by native species, see Lucinda Drive (p.21); Pritchard Street (p.22); and Wynnum North Road (p.23).

POB is a heavily developed site, where most regional ecosystem types have been removed, but with pockets of native vegetation as remnants in the buffer zones where the nest boxes are located.

SITE DETAILS, contd.

This site contains regional ecosystems:

- 12.1.2 Saltpan vegetation including grassland
- 12.1.3 Mangrove shrubland to low closed forest
- 12.3.5 *Melaleuca quinquenervia* open forest to woodland with additional species including *Eucalyptus sp., Corymbia sp.,* and *Casuarina sp.*

These are listed as a Biodiversity Status of 'No concern at present'

- 12.3.8 Swamps with *Cyperus spp., Schoenoplectus spp.* and *Eleocharis spp.* This RE has a Biodiversity Status "Of concern".

This is potential habitat for *Nature Conservation Act 1992 (Qld)* listed species including:

- Critically Endangered – Swift Parrot (*Lathamus discolor)*; Coxen's Fig Parrot (*Cyclopsitta diophthalma coxeni)*
- Endangered – Central Greater Glider (*Petauroides armillatus);* Koala (*Phascolarctos cinereus)*; land plant *Melaleuca irbyana*
- Vulnerable – Grey-headed Flying-fox (*Pteropus poliocephalus)* and White-throated Needletail (*Hirundapus caudacutus)*
- It is also home to many migratory bird species and plays an important role in the balance of ecosystems and habitat for these.

Brushtail Possums were found across the POB sites, with these two being in Nest Box 1141 at Wynnum North Road site.

NEST BOX POSITIONING ACROSS SITE

There are now 60 nest boxes across the three POB site's environmental areas, with the coloured pins denoting the location of each type of nest box (map previously supplied in high quality for functional viewing).

Lucinda Drive - 4 Nest Boxes – Glider (2), Barn Owl (2).

Wynnum North Rd – 15 Nest Boxes - Boobook Owl/Wood Duck (1); Glider (4); Kookaburra (3); Microbat (1); Owlet-nightjar (2); Possum (2); Small Parrot (2).

NEST BOX POSITIONING ACROSS SITE, contd.

Pritchard Street – 41 Nest Boxes: Boobook Owl/Wood Duck (4); Glider (13); Kookaburra (1); Microbat (9); Owlet-nightjar (4); Pardalote (1); Small Parrot (2); Possum (7).

A Wood Duck mother was protecting this nest which was found on the ground near the nest boxes at Pritchard St site.

RESULTS FROM 2025 AUDIT

The results of the audit across the 60 boxes showed an overall habitation rate of 57% which included Possums, Gliders, Microbats, Bird species and Reptiles.

Of the sixty boxes, there were eight boxes that had evidence of use by native wildlife including nesting materials and animal scat, but the type of species was unable to be determined. This is recorded in the table as one 'Undetermined' species.

The results show an overall increase of 5% from the previous year where the 2024 audit revealed an overall habitation rate of 52% compared with the current rate of 57%. The occupancy rate increased from 25% to 27% and the Evidence of Use rate also increased from 27% to 30%.

2025 Native Species' Occupancy and Evidence of Use

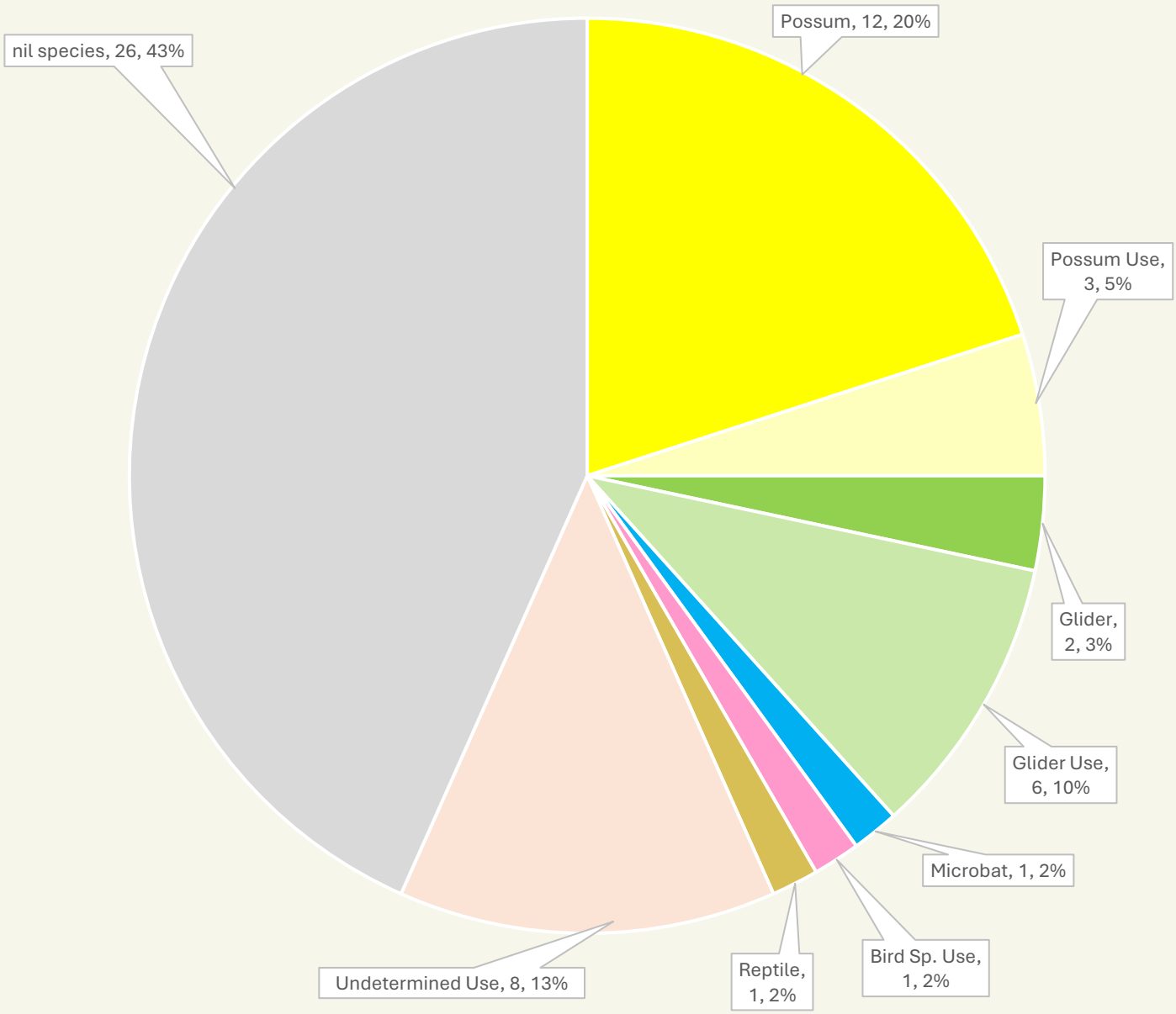
Number of boxes	Boxes in good condition	Occupancy Rate	Evidence of Use Rate	Overall Habitation Rate	Number of native species
60	50 83% **3 boxes were not found from previous audit**	16 27%	18 30%	34 57%	6 Mammal 3 Bird 1 Reptile 1 Undetermined 1

There were six species using 34 of the 60 boxes across the site, with sighted occupancy in 16 of the boxes at the audit. This is the same as the 2024 audit, with the difference being there were no native bees found, and one box with evidence of use by a bird species.

For the 2025 audit, the species type, percentage of boxes attributed to each species either as occupied or evidence of use, are shown in the following chart.

RESULTS FROM 2025 AUDIT, contd.

2025 NATIVE SPECIES' OCCUPANCY AND EVIDENCE OF USE
3 sites – Lucinda Drive, Pritchard Street, Wynnum North Rd



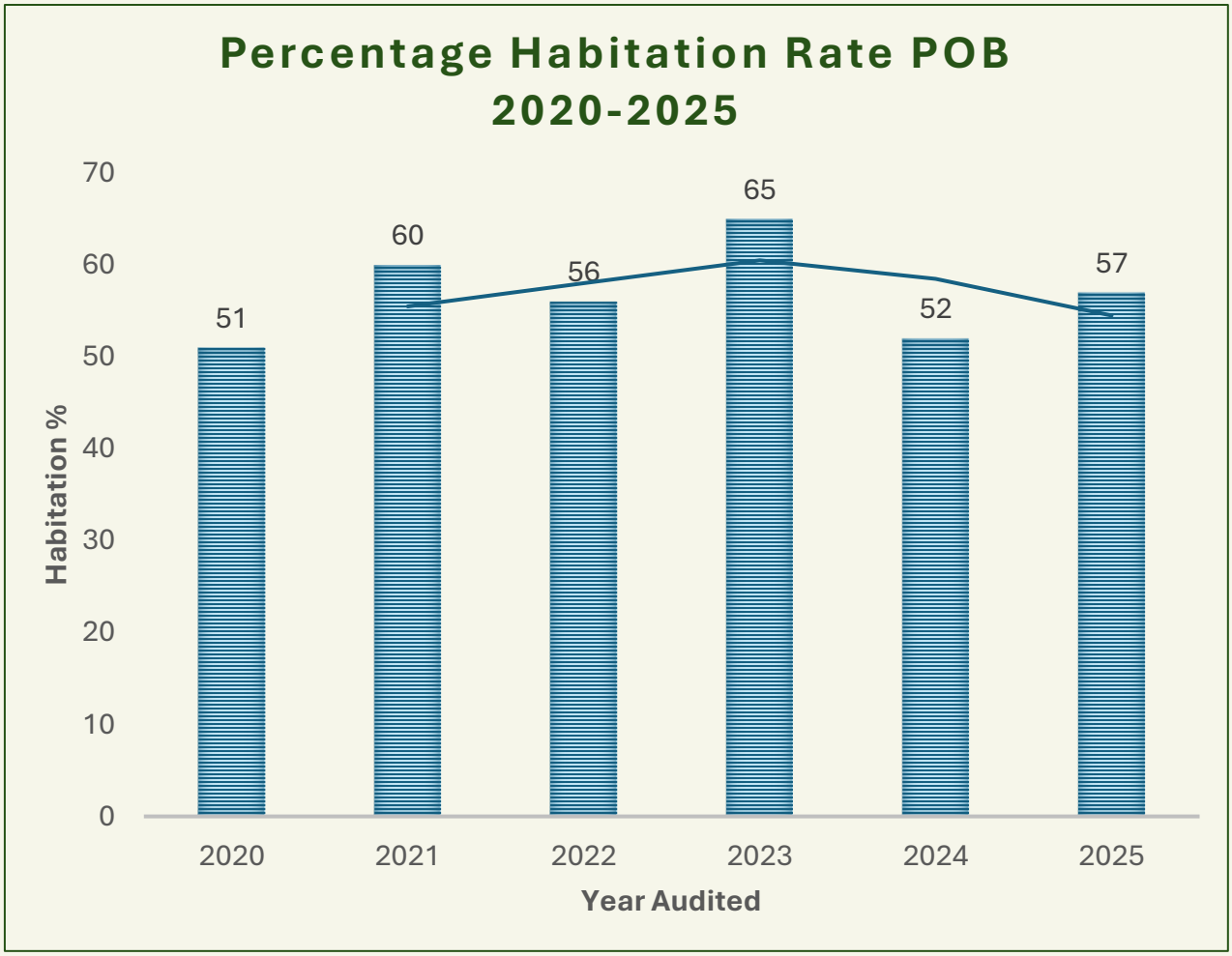
The overall habitation rate of 57% of nest boxes suggests that the overall number of native wildlife is increasing, and the placement of boxes is still beneficial to the species utilising them. It also reassures that the nest boxes are being sought out by native fauna seeking hollows as a den resource.

These results show that the program is successful, and annual monitoring should continue.

RESULTS FROM 2025 AUDIT, contd.

The figure below highlights the trend of changes in habitation rates (expressed as a percentage) across the past six years of audits, 2020-2025.

The marked decline from 2021 to 2022 improved significantly at the 2023 audit, but at this 2025 audit it still has not fully recovered. This could be attributed to the renewal of nest boxes, with fauna taking a while to re-establish, and also the lack of returning bird species.



During this inspection, 16 of the 60 boxes were found to contain native wildlife (27%) and a further 18 had evidence of use (30%), providing an overall habitation rate of 34 which is 57% of nest boxes.

Of these, one box had evidence of two distinct species with Gliders utilising a nest box that had the remains of a Possum (box 178 at Pritchard St).

One other box also had the remains of two possums (box 1191 at Wynnum North Rd).

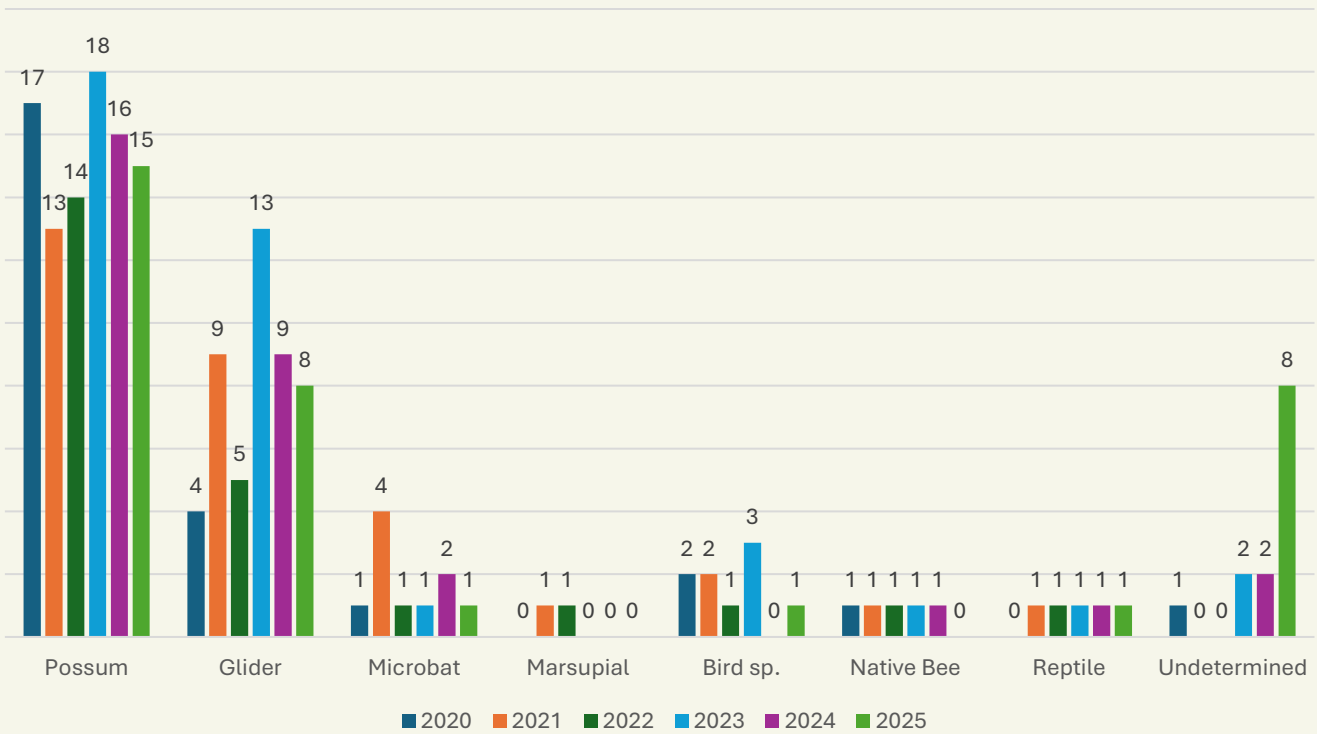
NEST BOX CONTENTS AT 2025 AUDIT

Occupancy, Evidence of Use, Habitation by Species - 2025

Species Present	Occupancy	Evidence of Use	Overall Habitation	Habitation Rate 2025	Habitation Rate 2024	Increase/ Decrease from 2024
Possum	12	3	**15**	25.0%	27.1%	-2.1%
Glider	2	6	**8**	13.4%	15.3%	-1.9%
Microbat	1	0	**1**	1.6%	3.4%	-1.8%
Native Bee	0	0	**0**	0%	1.7%	-1.7%
Bird species	0	1	**1**	1.6%	0%	+1.6%
Reptile	1	0	**1**	1.6%	1.7%	similar
Undetermined	0	8	**8**	13.4%	3.4%	+10%
Nil species				43.4%	47.4%	-4.1% (less unused boxes)
TOTAL	**16**	**18**	**34**			

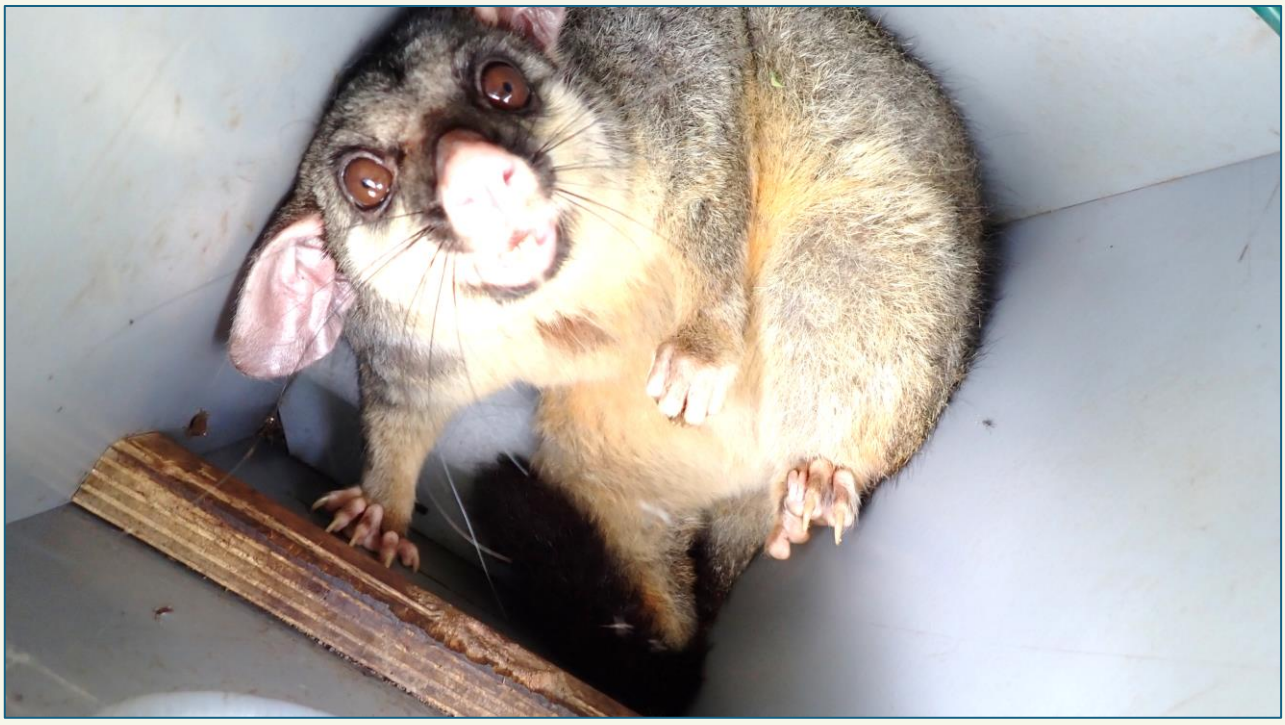
A comparison of native species' habitation at six audits between 2020-2025 is useful as there is a similar number and types of nest boxes installed across the three sites. The bar graph below shows the habitation numbers in the nest boxes, a combination of confirmed occupancy and evidence of use by native species.

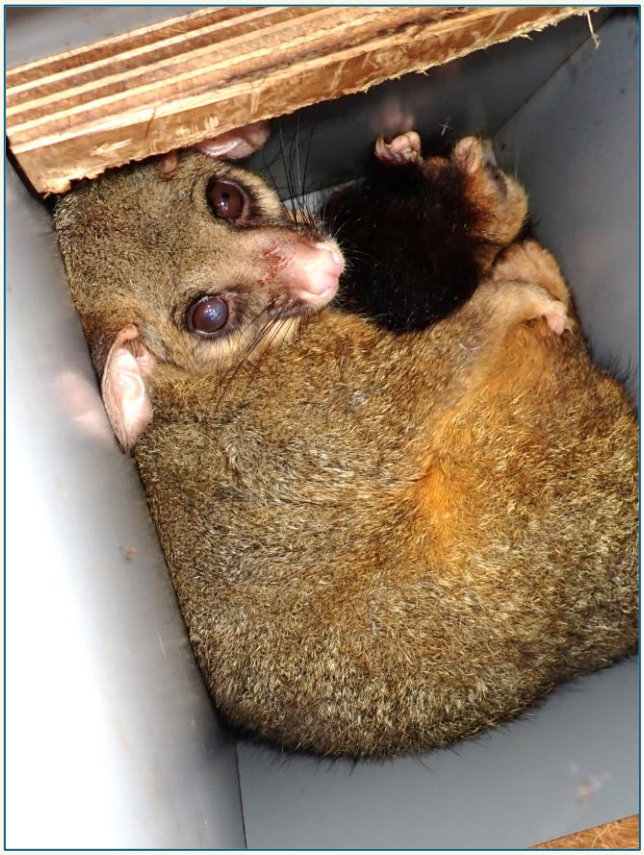
Comparison of Habitation Numbers for native species across three sites, POB 2020-2025



NEST BOX CONTENTS AT 2025 AUDIT, contd.

Possums have the greatest representation with sighted occupancy in 12 boxes and evidence of use in another three. This result is 2% down on the 2024 audit. The overall habitation of 15 accounts for 25% of nest boxes being utilised. It was pleasing to see the joeys in residence with their families in some boxes.





Brushtail Possums and joeys in Nest Boxes 1137, 2731, and 892.

NEST BOX CONTENTS AT 2025 AUDIT, contd.

Gliders were identified in eight boxes, represented by sighted occupancy in two boxes and evidence of use in another six.

This gives Gliders the second highest representation across the site at 13%. This is a decrease of almost 2% on the 2024 audit.

Colonies of Gliders in Nest Box 3030 at Wynnum Nth Rd and Nest Box 5301 at Pritchard St.

NEST BOX CONTENTS AT 2025 AUDIT, contd.

Microbats were identified in one nest box (2632) at Pritchard Street. This is one less than at the 2024 audit. Continued monitoring at future audits is needed as Microbat populations are highly mobile and require a large number of nesting sites within their radius of habitation.

Microbats were present in Nest Box 2632, which was an ONJ box. The rest of the site has dedicated bat boxes such as this bat box 5271.

The presence of a Carpet Python in Box 742 is not unexpected as they are arboreal and have been documented using nest boxes at POB sites previously. Native Bees that were occupying box 1211 at Wynnum North Road in the previous audits in 2023 and 2024 had abandoned the box, which was found dilapidated at the bottom of the tree.

Carpet Python in Box 742 at Lucinda Drive, and Native Sugar Bag Bees had abandoned this dilapidated Box 1211 at Wynnum North Rd.

NEST BOX CONTENTS AT 2025 AUDIT, contd.

Eight nest boxes had evidence of native fauna use, with two boxes having the entrance chewed as if to widen it and the others with leaves, twigs and droppings. As the evidence did not positively identify a particular species, these have been recorded as “Undetermined”.

Undetermined use in Nest Boxes 2033 at Pritchard St and 752 at Lucinda Drive.

Again this year, there was only one box with evidence of habitation by native bird species, and this remains a concerning sign for the diversity of the site.

Remnant Pale-headed Rosella nest, with blue feathers and eggshell fragments in Nest Box 1933 at Pritchard Street.

NEST BOX CONTENTS AT 2025 AUDIT, contd.

❖ Lucinda Drive site

Lucinda Drive has four nest boxes installed in the buffer zone, comprised of: 2 Barn Owl and 2 Glider. All of the nest boxes inspected were found to be in good condition.

There was recorded occupancy in one box with a Carpet Python, and three boxes were being used by Undetermined native wildlife. This is a major improvement from 2024 when there were no signs of habitation in any of the boxes. The table below shows the increase from 2024 to be from no habitation up to 100%.

Occupancy, Evidence of Use, Overall Habitation by species – 2025 Lucinda Drive

Species Present	Occupancy	Evidence of Use	Overall Habitation	Habitation Rate 2025	Habitation Rate 2024	Increase/ Decrease from 2024 Audit
Reptile	1	--	1	25%	0%	+25%
Undetermined	0	3	3	75%	0%	+75%
Nil species				0%	100%	fully utilised
TOTAL	**1**	**3**	**4**	**4 boxes**	**4 boxes**	

Cluster of nest boxes at Pritchard Street site. Nest box in the middle of photo is a Possum box, with a Small Parrot to the right and a Wood Duck above that. There are seven boxes in this photo.

NEST BOX CONTENTS AT 2025 AUDIT, contd.

❖ Pritchard Street site

Pritchard Street has 41 nest boxes installed in the buffer zone, comprised of: 4 Boobook Owl/Wood Duck; 13 Glider; 1 Kookaburra; 9 Microbat; 4 Owlet-nightjar; 1 Pardalote; 2 Small Parrot; and 7 Possum.

The occupancy and habitation rates can be seen in the table below. Habitation rates have increased for Possums, Bird species and Undetermined arboreal native animals. There were small decreases across Gliders and Microbats. Overall there was a decrease by native wildlife at this site of 1%.

Occupancy, Evidence of Use, Overall Habitation by species – 2025 Pritchard Street

Species Present	Occupancy	Evidence of Use	Overall Habitation	Habitation Rate 2025	Habitation Rate 2024	Increase/ Decrease from 2024 Audit
Possum	8	3	11	27%	25%	+2%
Glider	1	5	6	15%	20%	-5%
Microbat	1	0	1	2%	5%	-3%
Bird sp.	0	1	1	2%	0%	+2%
Undetermined	0	3	3	7%	2%	+5%
Nil species				46%	47%	-1% (similar box uptake)
TOTAL	**10**	**12**	**22**	**41 boxes**	**40 boxes**	

It is interesting to note that the Possums and Gliders predominantly return to the same nest boxes that they had used in 2024, with the Undetermined smaller arboreal animals taking up new smaller boxes.

NEST BOX CONTENTS AT 2025 AUDIT, contd.

❖ Wynnum North Road site

Wynnum North Road has 15 nest boxes installed in the buffer zone, comprised of: 1 Boobook Owl/Wood Duck; 4 Glider; 3 Kookaburra; 1 Microbat; 2 Owlet-nightjar; 2 Possum and 2 Small Parrot.

The occupancy and habitation rates can be seen in the table below. Habitation rates have increased across the sites by 7%, with the undetermined native species increasing significantly which is likely to be the smaller native arboreal mammals.

Occupancy, Evidence of Use, Overall Habitation by species – 2025 Wynnum North Rd

Species Present	Occupancy	Evidence of Use	Overall Habitation	Habitation Rate 2025	Habitation Rate 2024	Increase/ Decrease from 2024 Audit
Possum	4	1	5	33%	40%	-7%
Glider	1	1	2	13%	7%	+6%
Native Bee	0	0	0	0%	7%	-7%
Carpet Python	0	0	0	0%	7%	-7%
Undetermined	0	2	2	13%	7%	+6%
Nil species				40%	33%	+7% (less unused boxes)
TOTAL	**5**	**4**	**9**	**15 boxes**	**15 boxes**	

Similar to Pritchard Street, the Possums and Gliders are predominantly returning to the same nest boxes that they had used in 2024.

PEST STATUS

The feral pest species European Bee was identified as being active in only one nest box at this audit (1102, Wynnum North Rd). There were four inactive hives. There is no requirement to move the bees or remnant hives as they do not impede the use by native wildlife, but it should be monitored at next audit.

Box 1102 with an active European Bee Hive at Wynnum North Rd.

Several nest boxes showed signs of ants, other insects and spider use, but this is usual and not considered to be detrimental to the native species occupying the nest boxes. The ants are likely the arboreal Dome-backed Spiny Ant, that make nests by webbing leaves together with the silk produced by its larvae. These ants were identified at the previous two audits, and their presence continues, but it should not detrimentally impact on native animal use.

Examples of insects include Ants (2334; Wasps (792)

IDENTIFIED SPECIES

The table below lists the identification notes and habits of the native species identified at this audit. The most common mammal species noted in this area have been included - being Common Brushtail Possum, Squirrel Glider and Gould's Wattled Bat.

Species	Scientific Name	NCA Status*	Habits
Possum	Common Brushtail *Trichosurus vulpecula*	C	Common. Nocturnal. Uses a large range/size of nest boxes for shelter/breeding up to 30 boxes per family. Possums remove the wood-chip mulch and leave a wide pair of scratch marks throughout the box and an oily resin throughout the inner walls when inhabited long enough (>6 months).
Glider	Squirrel Glider *Petaurus norfolcensis*	C	Common. Nocturnal. Each colony uses up to 5 nesting hollows. Colonies are loosely family based with up to 12 gliders in each colony, 3-5 individuals using one hollow. Boxes are lined with eucalyptus leaves. The entrance hole will be scuffed exclusively on one side because of their entry and exit. A landing pad adjacent to the nest hole is often apparent (scuff marks).
Microbat	Gould's Wattled Bat *Chalinolobus gouldii*	C	Common in southern-eastern Australia. Roosting by day, first of the nocturnal animals to alight before dusk, returning at dawn. Living in colonies of up to 30 individuals, they may use hollows/nest boxes to rest/digest food. The largest bat in the Chalinolobus genus and most common species to use nest boxes.
Birds	Pale-headed Rosella *Platycercus adscitus*	C	Common. Reside in open forest, woodland edges, regrowth, parks and gardens. Feed predominantly on seeds on the ground and in trees/shrubs. Nests in hollows and nest boxes, laying 5-7 eggs on wood dust. Nest often near water. Medium sized parrot, 35cm, with pale yellowish to white head, blue and yellow plumage.
Reptiles	Carpet Python *Morelia spilota*	C	Semi-arboreal tree snakes, largely nocturnal but can be active at daytime. Shelter in hollow tree limbs, abandoned burrows. Lays up to 47 eggs.

*NCA Status C = Least Concern

NEST BOX COMPILATION AT 2025 AUDIT

The choice of nest box type which would be most suitable to attract native species is predicated on the type of species that would usually be in a location and the ability of animals to find suitable habitat and reliable food sources. At each audit it is important to check on which type of boxes are being used by native animals and whether any adjustments to positioning may need to occur.

The table below shows the number and type of each nest box audited in December 2025. A detailed spreadsheet containing information regarding location of each nest box, the occupancy or evidence of use and further field observations are incorporated at the end of this Report.

Compilation of installed nest box types – December 2025

	Pritchard Street		Wynnum North Rd		Lucinda Drive	
BOX TYPE	**No.**	**BOX Nos.**	**No.**	**BOX Nos.**	**No.**	**BOX Nos.**
Barn Owl	0	-	0	-	2	732, 752
Boobook Owl/WD	4	892, 1137, 1833, 5201	1	1141	0	-
Glider Front Entry	1	2033	1	3030	0	-
Glider Rear Entry	12	143, 772, 782, 812, 822, 882, 972, 992, 1052, 2334, 5231, 5301	3	1171, 1221, 2830	2	742, 762
Kookaburra	1	1072	3	575, 1112, 1132	0	-
Microbat Single	1	209	0	-	0	-
Microbat Double	3	1037, 213411, 2432	0	-	0	-
Microbat Triple	5	1012, 2134, 5191, 5271, 5291	1	1092	0	-
Owlet-nightjar	4	792, 1238, 1335, 2632	2	1211, 1231	0	-
Pardalote	1	2235	0	-	0	-
Possum	7	178, 376, 802, 922, 942, 1002, 1733	2	1191, 2731	0	-
Small Parrot	2	1933, 2532	2	1102, 3130	0	-
TOTALS	**41**		**15**		**4**	
TOTAL NUMBER	**60 Nest Boxes across 3 sites**					

NEST BOX COMPILATION AT 2025 AUDIT, contd.

A year-by-year comparison of the types of nest boxes that were installed at the five audits between 2023-2025 shows the way in which next box numbers and configurations have existed since the large replacement and addition of boxes in 2022.

At the 2025 audit, there were 60 nest boxes audited, but three were missing and another seven need to be replaced due to their deteriorated condition.

This may be the reason that the 2025 results were not as high as could have been expected coming off the increased additions in 2023. This may also be due to environmental issues at the site including weed species which inhibits native food sources and other environmental factors.

Compilation of installed nest box types – 2023-2025

	2023 AUDIT			2024 AUDIT			2025 AUDIT		
BOX TYPE	**Pri**	**Wyn**	**Luc**	**Pri**	**Wyn**	**Luc**	**Pri**	**Wyn**	**Luc**
Barn Owl	0	0	2	0	0	2	0	0	2
Boobook Owl/WD	4	1	0	4	1	0	4	1	0
Galah	-	-	-	-	-	-	-	-	-
Glider Front Entry	1	1	0	1	1	0	1	1	0
Glider Rear Entry	12	3	2	12	3	2	12	3	2
Kookaburra	1	3	0	1	3	0	1	3	0
Microbat	8	1	0	8	1	0	9	1	0
Owlet-nightjar	5	2	0	4	2	0	4	2	0
Pardalote	1	0	0	1	0	0	1	0	0
Possum	7	2	0	7	2	0	7	2	0
Small Parrot	2	2	0	2	2	0	2	2	0
TOTALS	**41**	**15**	**4**	**40**	**15**	**4**	**41**	**15**	**4**
TOTAL NUMBER	**60**			**59**			**60**		

OCCUPANCY/EVIDENCE OF USE BY BOX TYPE

A further comparison of the native species' habitation of particular nest box types between 2024 and 2025 is useful as there is a similar number and types of nest boxes installed across the three sites.

The table below shows the habitation numbers in the nest boxes, a combination of confirmed occupancy and evidence of use by native species.

As noted previously, there has been an overall increase in the habitation numbers of native fauna from 2024, which has resulted in an increase in the usage of both Glider and Small Parrot nest boxes.

Occupancy, Evidence of Use, Overall Habitation by Nest Box type - 2025

Box Type	No. of Boxes	Occupied	Evidence of Use	Overall Habitation	Habitation Rate % 2025	Increase/ Decrease from 2024
Barn Owl	2	0	2	2	100%	Increase to full usage
Boobook/WD	5	5	-	5	100%	Same at full usage
Glider FE&RE	19	3	9	12	63%	Increase
Kookaburra	4	2	1	3	75%	Decrease
Microbat	10	0	0	0	0%	Decrease
Owlet-nightjar	6	1	0	1	17%	Decrease
Pardalote	1	0	0	0	0%	Same
Possum	9	5	3	8	89%	Same
Small Parrot	4	0	3	3	75%	Increase
TOTALS	**60**	**16**	**18**	**34**		

The most successful nest boxes with one hundred percent habitation rate were the Boobook Owl/Wood Duck and Barn Owl. This is a similar result as the 2024 audit.

The increase in the use of Glider boxes is an excellent result, as they make up one third of the boxes across the sites.

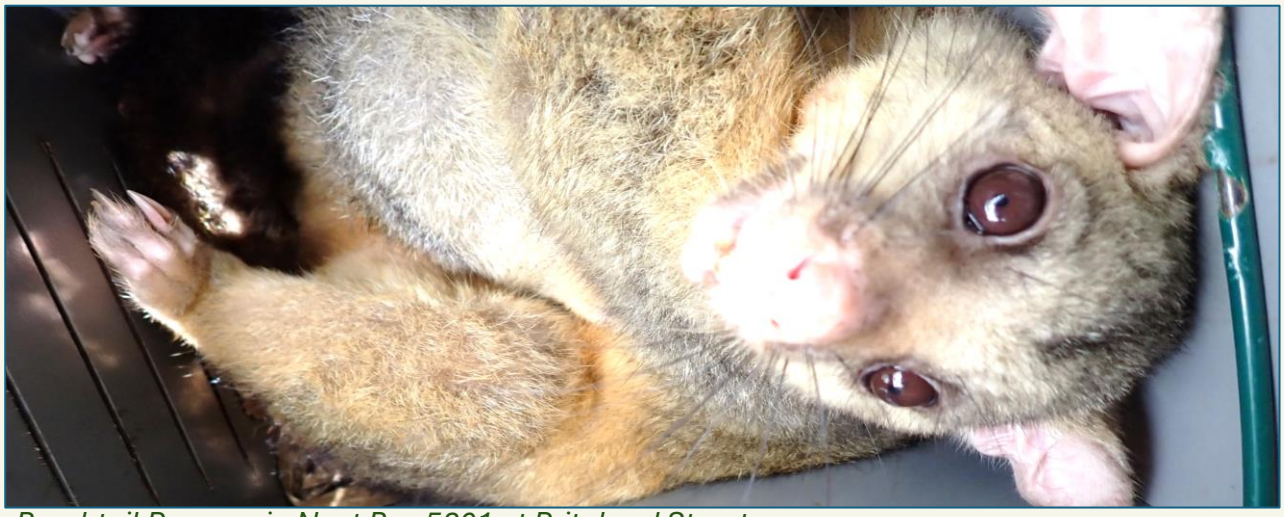
The majority of Possum boxes were very successful with all but one being utilised, bringing the habitation rate to 89%. At the 2024 audit, all nine boxes were being used, so this is a similar result.

OCCUPANCY/EVIDENCE OF USE BY BOX TYPE, contd.

The four Small Parrot boxes had a 75% habitation rate which is an improvement from the 2024 audit, and the Kookaburra boxes also had 75% habitation.

The Microbat boxes had no evidence of habitation at this audit, which either points to a limited number inhabiting the area, or more likely that the open-bottom design does not allow the collection of bat faeces to provide evidence.

This year the single Pardalote box again failed to attract any usage by native species, and this is equal to both the 2023 and 2024 results.



Brushtail Possum in Nest Box 5201 at Pritchard Street.

Brushtail Possums were noted mainly using the bigger boxes including Possum specific boxes, Boobook Owl/Wood Duck and Kookaburra.

The sighted occupancy and evidence of use by Gliders was predominantly in Glider Front and Rear Entry nest boxes, as expected.

The Microbats were sighted in an Owlet-nightjar box, and the Carpet Python was in a Glider box. The boxes that had use by undetermined native fauna were mainly in the smaller Glider and Small Parrot boxes, but were noted in Barn Owl and Kookaburra boxes.

As the boxes have now been installed for a period of three years, it should be expected to see an increasing habitation rate. The increase to 57% is therefore positive, but it would be expected to be higher.

It may be necessary for further environmental works around the three sites to be carried out to ensure optimum conditions for native vegetation and habitat.

SUMMARY

The 2025 nest box monitoring inspection and audit shows a continuing uptake by native species since the replacement of 20 nest boxes in 2023. The range of nest boxes across the three sites are offering hollow dependent fauna a suitable den resource.

This was represented by both a presence in the box and indications that boxes are being utilised, as seen by nesting leaves, feathers and other materials, presence of scratches, droppings and general interior usage.

The habitation rate of 57% at this 2025 audit represents an increase of 5% since the 2024 audit. It would be expected that there will be a further growth in the number of native fauna who are accessing the installed nest boxes over coming years as the new boxes are accepted by these animals, so this should be monitored closely.

This audit identified six species of native wildlife using 34 of the 60 nest boxes across the site, including with sighted occupancy. Whilst this is an increase from 2024, it is still lower than the 2023 habitation rate of 65%.

Further evaluation of the sites' biodiversity and wider ecosystem health could be undertaken to better inform future conservation and habitat improvement initiatives.

The overall habitation by Possums is the most prevalent, with Gliders and Microbats also being noted. With the small number of other native species, particularly the limited bird species included in the habitation rates, it suggests that there are barriers to access such as insufficient food within the surrounding habitat.

The ongoing conservation work that is being done on this site has important implications for the survival and promotion of native wildlife species in an area which has significant urban anthropogenic usage patterns.

Further annual review of the nest box project over coming years should also be complemented by additional conservation input by the Port of Brisbane.

RECOMMENDATIONS

1 Nest Box Monitoring/Auditing

Monitoring should occur annually, with scheduled reporting to check maximum effectiveness and uptake of boxes by hollow dependent fauna.

2 Maintenance

Potential maintenance should be identified during inspections alongside pruning of trees and weeding/grass removal at base to ensure accessibility.

The three missing nest boxes and the seven that are in poor condition should be replaced as soon as practicable to allow re-settling of native fauna.

3 Additional Installations

No further installation of additional nest boxes needs to be considered at this time.

Older style timber Nest Box 1221 at Wynnum North Road is dilapidated and unable to support native wildlife..

SPREADSHEET OF COLLECTED DATA

Site	GPS ID	Box Type	Box Condition	Material	Photo Time (hhmm)	Occupancy 1=Yes 0=No	Species (nil if not occ)	Usage 1=Yes 0= No	Evidence of Use by	Notes
Lucinda	732	Barn Owl	Good	Cyplas	2:05	0	nil	1	Unknown	Leaves, twigs and dirt brought inside box. Multiple mud daubs, wasp nests
Lucinda	742	Glider Rear	Good	Cyplas	2:12	1	Python	occ	occ	Occupied by Carpet Python
Lucinda	752	Barn Owl	Good	Cyplas	2:15	0	nil	1	Unknown	Twigs and leaves brought inside box
Lucinda	762	Glider Rear	Good	Cyplas	2:20	0	nil	1	Unknown	Nesting material disturbed. Beetles present.
Pritchard	143	Glider Rear	Good	Cyplas	12:32	0	nil	1	Glider	Active ants nest. Glider nest obscured by dirt.
Pritchard	178	Possum	Good	Cyplas	10:56	1	Possum	occ	occ	Mammal skeleton, leaves brought in, dual use is noted
Pritchard	209	1 Bat	Replace	Plywood	10:27	0	nil	0	nil	No evidence of vertebrate use
Pritchard	376	Possum	Good	Cyplas	12:10	0	nil	1	Possum	Brushtail Possums remove nesting material. Scat present is likely Possum
Pritchard	772	Glider Rear	Good	Plywood	9:53	0	nil	1	Glider	Remnants of inactive European Beehive. Gliders bring gum leaves in.
Pritchard	782	Glider Rear	Missing	Plywood		0	nil	0	nil	Missing.
Pritchard	792	ONJ	Good	Cyplas	10:00	0	nil	0	nil	No evidence of vertebrate use
Pritchard	802	Possum	Good	Plywood	10:04	1	Possum	occ	occ	Occupied by two Brushtail Possums
Pritchard	812	Glider Rear	Missing	Plywood		0	nil	0	nil	Missing. Old box, no GPS flag.
Pritchard	822	Glider Rear	Replace	Plywood	10:14	0	nil	0	nil	Remnants of inactive European Beehive.
Pritchard	882	Glider Rear	Replace	Plywood	10:32	0	nil	1	Glider	Gliders bring gum leaves in to construct nests
Pritchard	892	Boobook/WD	Good	Cyplas	10:44	1	Possum	occ	occ	Occupied by Brushtail Possum
Pritchard	922	Possum	Good	Cyplas	10:53	0	nil	1	Possum	Nesting material disturbed
Pritchard	942	Possum	Replace	Plywood	11:04	0	nil	0	nil	Missing lid, debris.
Pritchard	972	Glider Rear	Good	Cyplas	12:31	0	nil	1	Glider	Gliders bring gum leaves in to construct nests. Huntsmen and spider sacs
Pritchard	992	Glider Rear	Good	Cyplas	12:24	0	nil	1	Glider	Gliders bring gum leaves in to construct nests
Pritchard	1002	Possum	Good	Cyplas	11:20	0	nil	1	Possum	Brushtail Possums remove nesting material. Brushtail Possums leave oily residue on Cyplas over time
Pritchard	1012	3 Bat	Good	Cyplas	10:39	0	nil	0	nil	No evidence of vertebrate use. Photo unclear
Pritchard	1037	2 Bat	Good	Cyplas	10:28	0	nil	0	nil	No evidence of vertebrate use
Pritchard	1052	Glider Rear	Good	Cyplas	12:13	0	nil	0	nil	No evidence of vertebrate use. Spider sacs
Pritchard	1072	Kookaburra	Good	Cyplas	11:50	1	Possum	occ	occ	Occupied by Brushtail Possum
Pritchard	1137	Boobook/WD	Good	Cyplas	10:21	1	Possum	occ	occ	Occupied by Brushtail Possum
Pritchard	1238	ONJ	Good	Cyplas	9:49	0	nil	0	nil	No evidence of vertebrate use
Pritchard	1335	ONJ	Good	Cyplas	11:00	0	nil	0	nil	Remnants of hive structure shows past use by European Bees. Ants
Pritchard	1733	Possum	Good	Cyplas	11:23	1	Possum	occ	occ	Occupied by Brushtail Possum

SPREADSHEET OF COLLECTED DATA, contd.

Site	GPS ID	Box Type	Box Condition	Material	Photo Time (hhmm)	Occupancy 1=Yes 0=No	Species (nil if not occ)	Usage 1=Yes 0= No	Evidence of Use by	Notes
Pritchard	1833	Boobook/WD	Good	Cyplas	12:18	1	Possum	occ	occ	Occupied by Brushtail Possum
Pritchard	1933	Small Parrot	Good	Cyplas	11:59	0	nil	1	PH Rosella	Remnant Pale-headed Rosella nest Blue feathers egg shell fragment
Pritchard	2033	Glider Front	Good	Cyplas	12:15	0	nil	1	Unknown	Chewing and scratching on entry hole. Nesting material disturbed
Pritchard	2134	3 Bat	Good	Cyplas	11:45	0	nil	0	nil	No evidence of vertebrate use. Spider sacs
Pritchard	2235	Pardalote	Good	Cyplas	11:26	0	nil	0	nil	No evidence of vertebrate use
Pritchard	2334	Glider Rear	Good	Cyplas	12:22	0	nil	1	Unknown	Nesting material disturbed.
Pritchard	2432	2 Bat	Good	Cyplas	11:16	0	nil	0	nil	No evidence of vertebrate use
Pritchard	2532	Small Parrot	Good	Cyplas	11:12	0	nil	1	Unknown	Chewing and scratching on entry hole.
Pritchard	2632	ONJ	Good	Cyplas	11:07	1	Microbat	occ	occ	Microbat sighted exiting box during inspection. Remnants of European bee hive.
Pritchard	5191	3 Bat	Good	Cyplas	11:52	0	nil	0	nil	No evidence of vertebrate use
Pritchard	5201	Boobook/WD	Good	Cyplas	11:57	1	Possum	occ	occ	Occupied by Brushtail Possum
Pritchard	5231	Glider Rear	Good	Cyplas	12:27	0	nil	0	nil	No evidence of vertebrate use
Pritchard	5271	3 Bat	Good	Cyplas	10:25	0	nil	0	nil	No evidence of vertebrate use
Pritchard	5291	3 Bat	Good	Cyplas	10:08	0	nil	0	nil	No evidence of vertebrate use
Pritchard	5301	Glider Rear	Good	Cyplas	10:18	1	Glider	occ	occ	Occupied by two Squirrel Gliders
Pritchard	213411	2 Bat	Good	Cyplas	11:27	0	nil	0	nil	No evidence of vertebrate use
Wynnum Nth	575	Kookaburra	Good	Cyplas	1:21	1	Possum	occ	occ	Occupied by Brushtail Possum and joey.
Wynnum Nth	1092	3 Bat	Good	Cyplas	12:46	0	nil	0	nil	No evidence of vertebrate use
Wynnum Nth	1102	Small Parrot	Good	Cyplas	12:51	0	nil	occ	occ	Active hive. European bee hives are typically unsuccessful long-term in Cyplas boxes.
Wynnum Nth	1112	Kookaburra	Replace	Cyplas	12:54	0	nil	0	nil	Box in disrepair
Wynnum Nth	1132	Kookaburra	Good	Cyplas	12:59	0	nil	1	Unknown	Nesting material removed. Leaves and twigs brought into box
Wynnum Nth	1141	Boobook/WD	Good	Cyplas	1:32	1	Possum	occ	occ	Occupied by two Brushtail Possums
Wynnum Nth	1171	Glider Rear	Good	Cyplas	1:04	0	nil	1	Glider	Circular nest constructed from gum leaves and twigs. Ants
Wynnum Nth	1191	Possum	Good	Cyplas	1:10	1	Possum	occ	occ	Multiple mammal skeletons, two Possum skulls present.
Wynnum Nth	1211	ONJ	Replace	Plywood	1:17	0	nil	0	nil	Box found at base of tree
Wynnum Nth	1221	Glider Rear	Replace	Plywood	1:17	0	nil	0	nil	Box missing base and lid, heavily deteriorated.
Wynnum Nth	1231	ONJ	Missing	Cyplas		0	nil	0	nil	Missing box
Wynnum Nth	2731	Possum	Good	Cyplas	1:12	1	Possum	occ	occ	Occupied by Brushtail Possum
Wynnum Nth	2830	Glider Rear	Good	Cyplas	1:07	0	nil	0	nil	No evidence of vertebrate use. Spider sacs
Wynnum Nth	3030	Glider Front	Good	Cyplas	1:25	1	Glider	occ	occ	Occupied by two Gliders
Wynnum Nth	3130	Small Parrot	Good	Cyplas	1:30	0	nil	1	Unknown	Nesting material disturbed, scratches on internal cleat
						16		18		

Port of Brisbane
2025 Audit

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