
Black Cockatoo Research Project



WESTERN
AUSTRALIAN
MUSEUM

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Former nest tree #014

Progress Report for Housing Authority 2018

— Amended, available for public distribution —

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Objectives of Project

Key objectives of the Museum's cockatoo research activities are:

- Undertake targeted surveys for breeding, feeding and roosting sites to map critical breeding, feeding and roosting habitat.
- Develop artificial nest hollows and protocols for their use and installation.
- Conduct studies on current population numbers and distribution of Black Cockatoos including identifying isolated populations.
- Determine patterns of migration, movements and changes in foraging ecology.
- Develop and implement ways to remove feral species, including European honeybees, from nesting hollows.
- Regularly monitor important Black Cockatoo sites.
- Update information on the breeding biology, ecology and conservation of Black Cockatoos.

Approach – Methods

Survey methodology and techniques

In 2018 we carried out field investigations throughout the south-west corner of Western Australia covering the entire range of Carnaby's, Baudin's and Forest Red-tailed Black Cockatoos. This included some targeted surveys for breeding, feeding and roosting sites in important regions including southern Swan Coastal Plain and Perth Hills. Birds were located by stopping at regular intervals along the road network to listen for calls and search for signs of feeding activity such as chewed Marri nuts and evidence of cockatoo grubbing for insects. Birds were also recorded opportunistically. We also recorded the number of activities of all birds sighted, i.e. feeding, flight direction and breeding calls. The locality of all sightings was made with a GPS unit and the date, time of day and habitat details were also noted (including forest type, e.g. Karri *Eucalyptus diversicolor*, Jarrah *Eucalyptus marginata* / Marri *Corymbia calophylla*, Wandoo *E. wandoo* and *Banksia* woodlands.

A number of roost sites used by cockatoos are being monitored especially a number used by Baudin's Cockatoos during the autumn-winter non-breeding season as these give a good indication of the health of the population. Most roosts are located by following the birds returning to the roost in the evening or by listening for the calls of large numbers of birds at dawn on windless mornings when their high-pitched calls travel greater distances. Birds were counted at roosts by locating a good position in the flight path that birds will cross, preferably with an open skyline. Counts were made at dawn and dusk which involved, where possible, the pairs, family groups and small flocks as they departed or returned. We used photographs at a number of sites to obtain accurate counts of individuals. At roost sites we also noted details of roost trees including species, height, circumference at breast height (CBH) and distance between trees. On a few occasions flocks were followed from roost sites to feeding locations in early morning and back to roost sites in late afternoon.

In most cases nests were located by ground-truthing surveys by experienced workers, combined in many cases with observations of breeding behaviour. About 95% of nests and potential nests (i.e. hollows prospected and chewed but not used) could be located using this method. This involves following lone males suspected of breeding back to nest sites in the late evening when they would return to, or near the nest tree, and call to an incubating female. She would then leave the nest hollow to preen, feed, and be fed by the male, before returning to the nest hollow just before dark. The male would then return to the roost site. Once located, nest trees were tagged and the position recorded using a GPS. Tree data were collected firstly at ground level then, if possible and safe, climbed using aluminium extension ladders, wire cave ladders or ropes. For checking dangerous or unstable trees we used a pole camera to determine if the hollow was in use. For each nest tree we recorded tree species, circumference at breast height (CBH), tree height, height of hollow entrance above ground, position of hollow in the tree, aspect of hollow i.e. direction towards which it opens, width and height of hollow entrance, depth of hollow from lowest point of entrance to floor, maximum and minimum width of floor space, tree health scored using the Whitford Senescence

Scale type or, if dead, the Whitford Stag Class (Dead Branch Order) and details of tree position in landscape, slope and surrounding vegetation type (Whitford 2002).

Trials on the use and effectiveness of artificial nest hollows have been carried out for Carnaby's Cockatoo in the mid-western wheatbelt and for the forest cockatoos at Bungendore Park, Serpentine hills, Whicher Range, Albany and Binningup. Since 2000 we have been conducting ongoing experimentation with timber nest boxes and polypipe (PE pipe) or tubes at a number of sites in the south-west. The development of artificial nest hollows that were suitable for cockatoos, but unsuitable for feral bees and invasive native competitor species *viz.* Galahs and Corellas, was a high priority as was the development of protocols for the use and installation of these hollows. The installation of timber nest boxes and polytubes was done in conjunction with repairing sub-standard and damaged hollows in study areas.

Recordings of the calls of all three species were made at various sites throughout their ranges and at nest sites.

Species Background Information

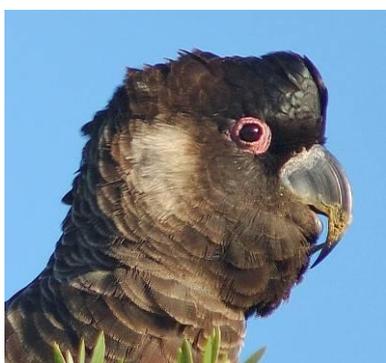
Two species of white-tailed black cockatoo – Baudin's Cockatoo (*Calyptorhynchus baudinii* Lear, 1832) and Carnaby's Cockatoo (*Calyptorhynchus latirostris* Carnaby, 1948) and the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso* Gould, 1837) – are endemic to the south-west of Western Australia (Johnstone and Storr 1998). They form a very distinctive part of the avifauna, with their conspicuous, often large flocks and raucous behaviour. The two white-tailed species can be extremely difficult to separate, even for experienced observers, and were only recognised as separate species in 1979 (Saunders 1979). Bill size and shape and calls are the most reliable means of identification. Baudin's Cockatoo has the bill or culmen more laterally compressed than in Carnaby's with the upper mandible significantly longer and finer (i.e. with the tip tapering well beyond the lower mandible when closed).



Male Carnaby's Cockatoo



Female Carnaby's Cockatoo



Male Baudin's Cockatoo



Female Baudin's Cockatoo

Figure 1. Bill shape of Carnaby's Cockatoo (top) and Baudin's Cockatoo (bottom). (TK)

Baudin's Cockatoo also has a much shorter "whicha-whicha" contact call compared to the longer "wee-looo wee-looo" of Carnaby's. Due to the great similarity between the two species many of the historical observational records and indeed even much of the recent literature is misleading and requires careful interpretation because of the high degree of error in recording the two species. All three of these black cockatoos have suffered a substantial decline in numbers and breeding distribution in the past 50 years (Johnstone and Storr 1998). The ability of both Carnaby's and Baudin's cockatoos to exploit resources provided by humans, especially in apple, pear, persimmon and nut orchards and pine plantations, and their habit of forming large feeding flocks, has in the past brought them into conflict with orchardists and foresters (Long 1985). Direct causes of population decline include the large numbers shot by orchardists (mainly with Baudin's Cockatoo), clearing and fragmentation of habitat (especially the loss of breeding hollows), the impact of hollow competitors including the Galah (*Cacatua roseicapilla*), corellas including Butler's Corella (*Cacatua pastinator butleri*), Australian Shelduck (*Tadorna tadornoides*), Australian Wood Duck (*Chenonetta jubata*), the feral European honey bee (*Apis mellifera*) and also vehicle strikes.

The south-west region is now a severely fragmented landscape and the further loss of foraging habitat, the lack of suitable breeding sites, climate change, alterations in the landscape, changing forest structure with almost every part of the Jarrah-Marri forest logged in the past and with most trees too young to form hollows, and competition with exotic species all exacerbate the future conservation of Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo. Recent studies (Johnstone and Kirkby 2007) have revealed the devastating impact feral European honeybees are having on cockatoos and other hollow-nesting birds in this region.

These recent studies have encompassed a range of conservation issues including the identification of threats, helped with the establishment of recovery and management plans, the identification of critical habitat and an improved understanding of their breeding biology, movements and changes in distribution and status. Based on this recent work and the Storr-Johnstone Bird Data Bank, all three taxa have changed their distribution patterns in the past 50 years. On the Swan Coastal Plain, Carnaby's Cockatoo has changed its migration and foraging patterns in response to ongoing habitat destruction and the discovery of new food sources. In addition to changes in distribution of all three cockatoos, the roosting sites and localities where birds forage is often subject to change from year to year.

More recently, targeted surveys for breeding, feeding and roosting sites have been undertaken at a number of locations in the mid-west including Eneabba, Badgingarra, Cataby and sections of the Great Northern Highway; on the Swan Coastal Plain at sites including around Lancelin, Gingin, Bindoon, Wanneroo, Armadale, Serpentine, Mandurah, Lake Clifton, sections of the Perth-Bunbury Highway (Forrest Highway) and Capel; and in areas on or near the western edge of the Darling Scarp including east of Bindoon, Mundaring, Bedfordale, Serpentine hills and Whicher Range. The Swan Coastal Plain has been identified as an important region for cockatoos especially Carnaby's Cockatoo and in certain areas the Forest Red-tailed Black Cockatoo however, there has been little research carried out to determine the potential impacts of current and future urban expansion and habitat loss. Accurate mapping of both the historical and current range of these birds will assist planners to make informed decisions and help develop a policy in relation to land usage for the future conservation of black cockatoos within the region.

Distribution

Carnaby's Cockatoo (*Calyptorhynchus latirostris*)

Carnaby's Cockatoo is endemic to the south-west of Western Australia, north to the lower Murchison River and east to Nabawa, Wilroy, Waddi Forest, Nugadong, Manmanning, Durokoppin, Noogar (Moorine Rock), Lake Cronin, Ravensthorpe Range, head of Oldfield River, 20 km ESE of Coondingup and Cape Arid; also casual on Rottnest Island (Johnstone and Storr 1998).

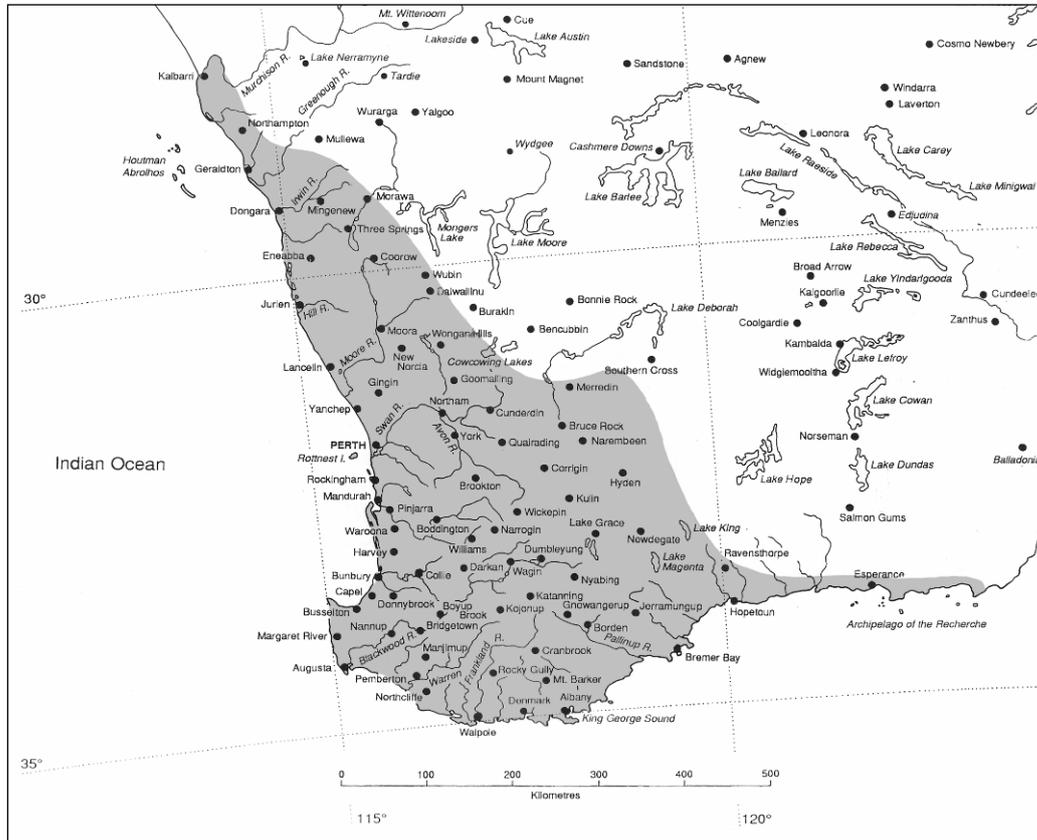


Figure 2. Distribution map of Carnaby's Cockatoo.

Baudin’s Cockatoo (*Calyptorhynchus baudinii*)

This cockatoo is confined to the south-western humid and subhumid zones (areas with average rainfall of 600 mm or more). It ranges north to Gidgegannup and Hoddy Well and east to Clackline, Wundowie, the lower Darkin River, Boyagin Rock, Wandering, Williams, Kojonup and the King River also west to the eastern strip of the Swan Coastal Plain including West Midland, Armadale, Byford, Mundijong, Serpentine, North Dandalup and further west to the coast at Lake Clifton, Australind, Bunbury, Busselton, Dunsborough, Leeuwin-Naturaliste National Park and Augusta, also the Stirling and Porongurup Ranges and east along the south coast to Waychinicup National Park.

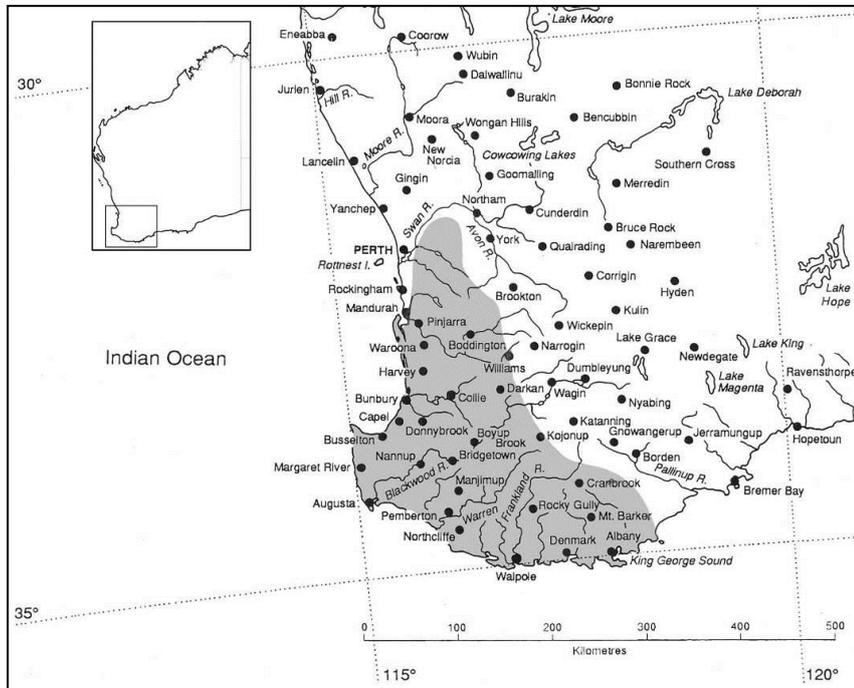


Figure 3. Distribution map of Baudin’s Cockatoo *Calyptorhynchus baudinii*

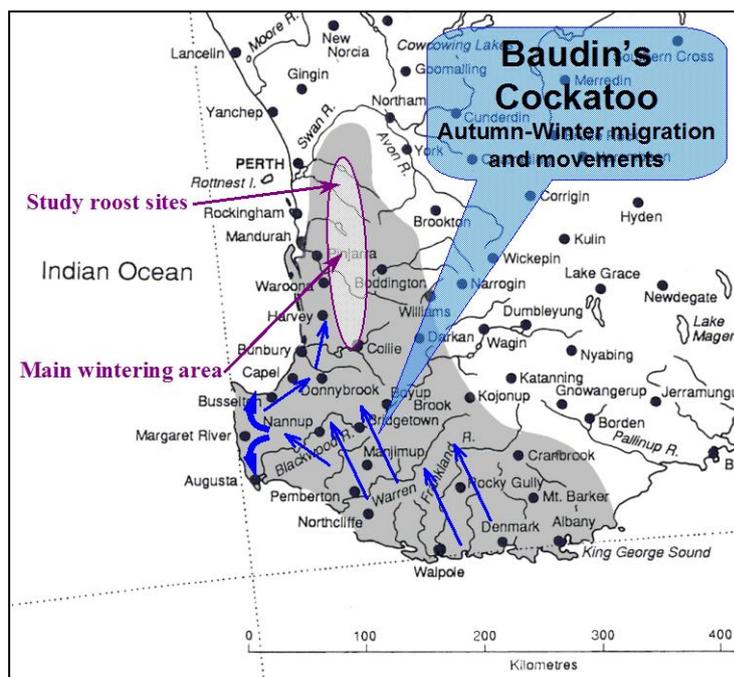


Figure 4. Map of south-western Australia showing migration and movements of Baudin’s Cockatoo including main wintering range.

Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*)

The Forest Red-tailed Cockatoo is endemic to the south-west of Western Australia. This subspecies occurs in the humid and subhumid south-west mainly the hilly interior, north to Gingin (formerly to Dandaragan), Gidgegannup, and east to Mt Helena (formerly Toodyay), Chidlow, Wooroloo, Wundowie, The Lakes, Christmas Tree Well, near Brookton, Bannister (formerly to Wandering), Mt Saddleback, Kojonup, Rocky Gully, the upper King River and Porongurup Range. On Swan Coastal Plain it is currently resident (although patchily distributed) at Murdoch, Mundijong, Baldivis, Karnup, Stakehill, near Lake McLarty, Pinjarra, Coolup, Meelup, Goodale Sanctuary, Lake Clifton area, Dawesville and Wokalup and also a casual visitor mainly in search of Cape Lilac (*Melia azedarach*) to most Perth suburbs (e.g. Mosman Park, Belmont, Kensington, Murdoch, Kewdale, Bentley, Queens Park, Lynwood, Gosnells, Forrestdale and Armadale). In recent years there has been a very dynamic expansion of foraging from the Darling Range, both west onto the Swan Coastal Plain and to a lesser extent east into the wheatbelt.

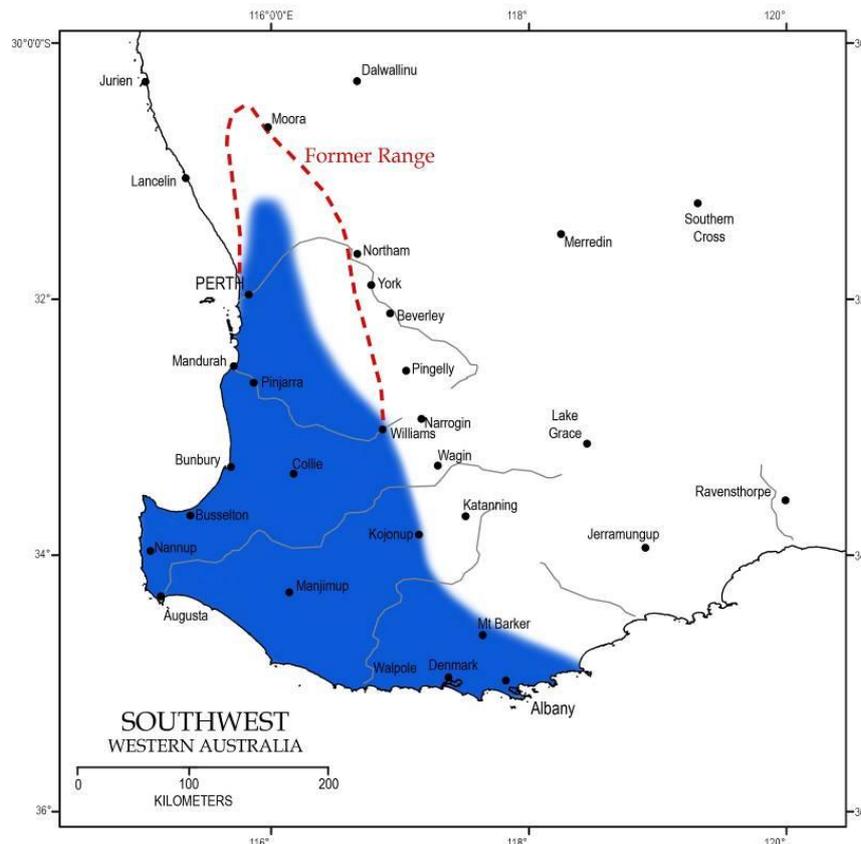


Figure 5. Map of South-western Australia showing distribution of Forest Red-tailed Black Cockatoo.

Results of 2018 Surveys and Monitoring

Fieldwork

Visits were carried out in the mid- western wheatbelt at Dandaragan, Bindoon, The Lakes, the northern and southern Swan Coastal Plain regions, and in the northern Jarrah-Marri forest (in Wungong-Bedforddale areas) between April and October 2018. During these surveys Forest Red-tailed Black Cockatoos were recorded breeding at Myara and at Bedforddale. Also a putative nest tree was inspected and photographed at a site in Kenwick (Swan Coastal Plain).

Noteworthy also were flocks of 115 Baudin's Cockatoos observed in the northern Jarrah forest at Wungong roost and a flock of 257 observed at Myara on 3 April 2018. Over the past eleven years there has been a dramatic drop (over 90%) in numbers of Baudin's Cockatoos returning to traditional autumn-winter roost sites in the northern Darling Range. A flock of 60 was recorded at the Admiral Road roost site in Wungong on 12 June 2018, but did not remain in the area for very long and well below numbers recorded at this roost in previous years. Over the past year there have also been few records of large flocks of this species in the south-west. In 2018, flocks of 100 were recorded at

Harvey on 10 April; 80 at Bedforddale on 4 June but most records were of small flocks of between 10–50 birds. Several pairs of Baudin’s Cockatoos were also recorded breeding at Myara in 2018.

Migration, Movements and Breeding Biology

As part of this project, three important studies are in progress; one on the distribution, status, movements and diet of the Forest Red-tailed Black Cockatoo in the south-west with emphasis on the greater Perth region and the southern Swan Coastal Plain and the other on the breeding biology of Baudin’s Cockatoo.

Perth Region

Since 1995 there has been a very dynamic change in the foraging ecology of many Forest Red-tailed Black Cockatoos in the northern Darling Range (adjacent to the metropolitan area). This began as a slow expansion of foraging range from the Darling Range, west onto the Swan Coastal Plain (mainly south of Perth) to foothill localities. Prior to this, sightings of banded birds (banded as nestlings) were within three km of banding site (natal tree). In the late 1990s small flocks and family groups began to alter their daily routine from foraging in relatively small home ranges within Jarrah-Marri forest to become at first only casual visitors to the base of the escarpment mainly exploiting fruiting Cape Lilac (*Melia azedarach*) in some of Perth’s southern suburbs e.g. Byford, Armadale, Kelmscott and Gosnells. By early 2000 this had extended further north and west as other feeding sites or opportunities were found in other suburbs including Thornlie, Lynwood, Queens Park, Cannington, Kewdale, Bentley, Belmont, Kensington and by 2005 this had extended further west and north to Murdoch and Kardinya, by 2007 north to Nedlands and west to Medina, by 2009 north to City Beach, Woodlands, Hamilton Hill and Mosman Park also Kwinana and Henley Brook and by 2010 north to Carine, Joondalup and the Upper Swan.

By 2013 birds were regularly flying out from the scarp and visiting fruiting Cape Lilac trees as far west as Fremantle and Kwinana around 32 km from the Darling Scarp. Since 2010 there has also been some vagrancy of flocks (probably driven by a lack of surface water in home ranges) east into the wheatbelt to areas where there was previously no historic records of Forest Red-tailed Black Cockatoos e.g. near Brookton and Boyagin Rock, see Figure 6. This incredible change in foraging ecology has continued and small flocks and family groups move daily onto the coastal plain from the Darling Scarp to forage on the coastal plain.

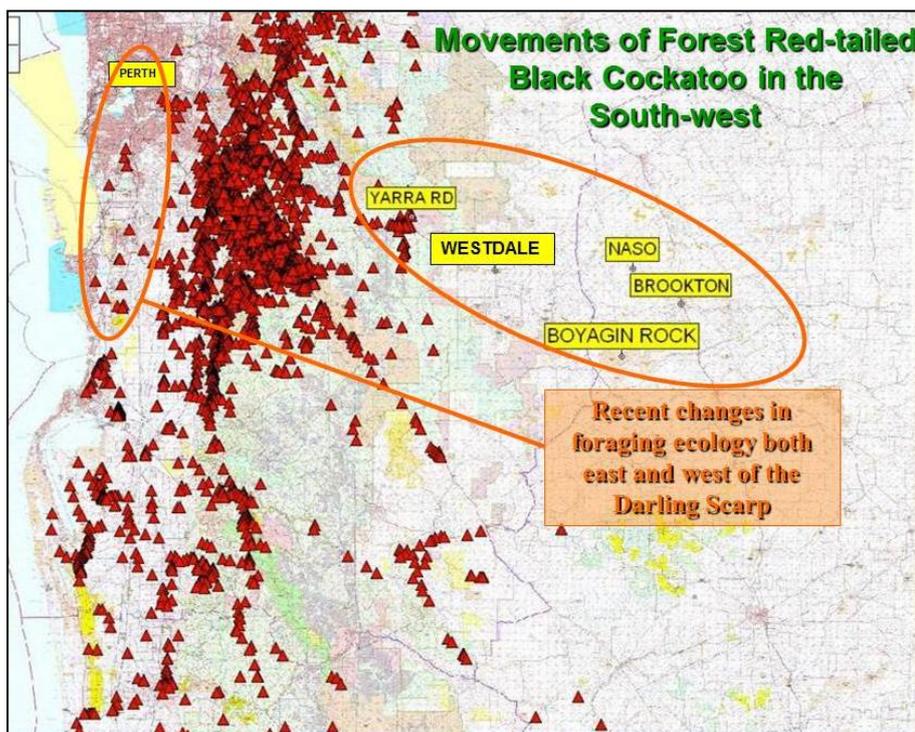


Figure 6. Occasional movements eastwards into the wheatbelt from the Darling Range.

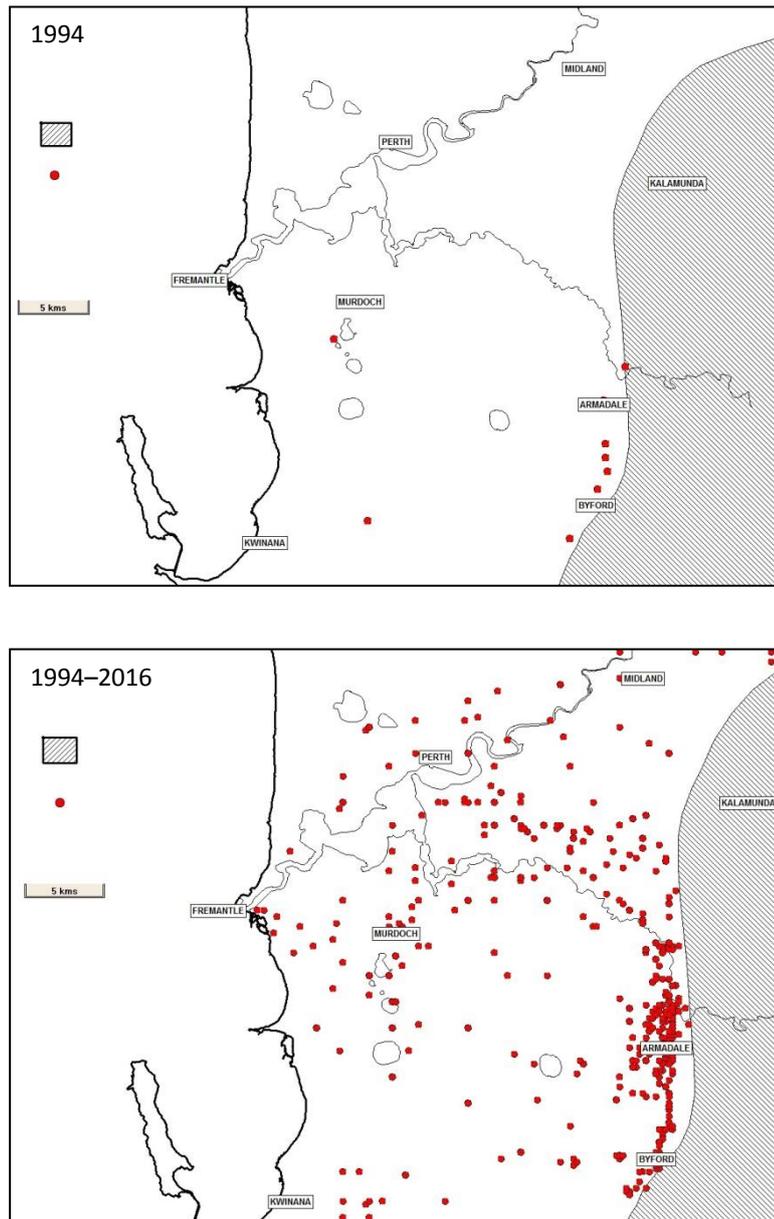
Slow foraging expansion.

Figure 7. Records of foraging expansion on to the Swan Coastal Plain from 1994 to 2016.

This change in foraging expansion has continued in 2018 along the edge of the Darling Scarp with birds foraging north from Upper Swan area to Bullsbrook, Muchea and Bindoon area mainly feeding on nutting Marri in verges and in paddocks between August and November. Noteworthy also are the first records of birds prospecting for nest hollows and odd pairs breeding at Muchea (our northernmost breeding records).

In 2018 in the Perth metropolitan area, large numbers of birds (pairs, family groups, flocks (up to 100) and large loose aggregations (up to 610) were recorded at feeding (mainly on Cape Lilac) and roost sites in the Perth region at Leederville, Wembley, Subiaco, around Perry Lakes and in the Gosnells-Kenwick area. Numbers in the Perth area began to decrease between May and September with the end of the fruiting cycle of Cape Lilac and by late September most trees had been stripped of berries and flocks began returning to forested Perth hills areas. However, small numbers of birds continued to forage along the western edge of the Darling Scarp and adjacent coastal plain on Marri seed. The extensive nutting of Marri in 2016–2017 has enabled many birds originally feeding mainly on Cape Lilac on the coastal plain to locate other foraging sites especially nutting Marri in road verges and paddocks and facilitated expansion of foraging range northwards. In January 2017 birds

were observed in the Armadale-Kelmscott area foraging on the new green berries of Cape Lilac. In March 2018 pairs and small flocks were observed feeding on Cape Lilac berries at Bindoon the northern-most record of this subspecies feeding on this food. Evidence of birds feeding on Cape Lilac was also found as far south as Bunbury in April 2018.

Of interest also are records of Carnaby's Cockatoos breeding in PE tubes erected in road verges in the Bindoon Bindi Bindi area in 2008–2009 and at Albany in 2013. The take up of these artificial nest tubes in some areas has been interesting especially in areas where natural hollows are scarce or have been severely depleted.

Figure 8. PE tube installed in a Wandoo stump – used in 2018 by Carnaby's Cockatoo (KS).



Figure 9. Banded Carnaby's Cockatoo nestling from nest tube above (KS).



Figure 10. Cape Lilac feeding debris on road verge, Kelmscott 2019 (TK).

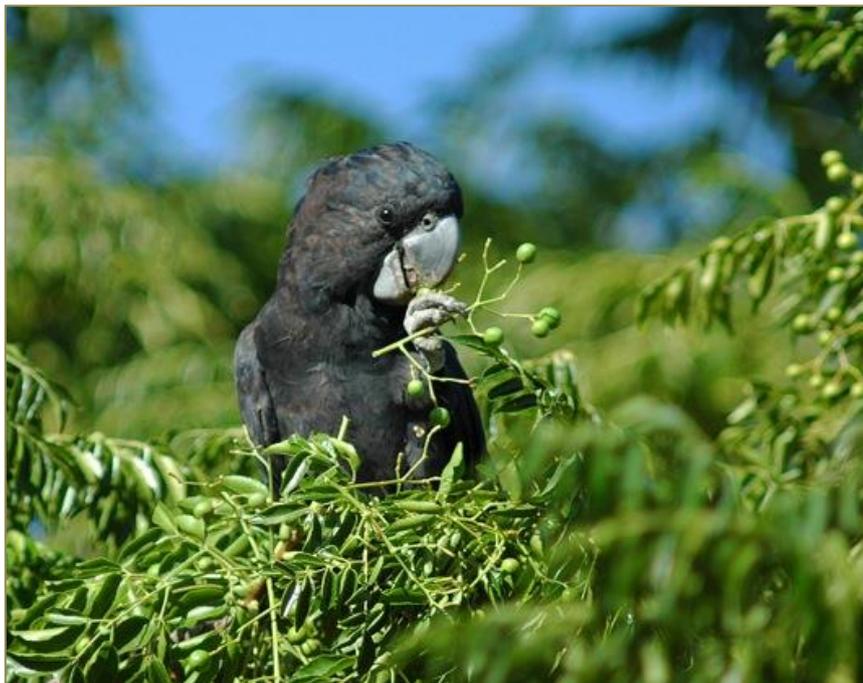


Figure 11. Immature male feeding on Cape Lilac, Kelmscott (TK).

The movement onto the coastal plain was initially very slow. Small flocks and family groups moving in early morning from roost sites near the western side of the Darling Range to areas at the foot of the range where they could forage on Cape Lilac and if the food resources were suitable discovering new sites often close by moving in a mosaic pattern. This opportunistic movement in populations that generally exhibit strong site fidelity was quite exceptional for this subspecies. This could be correlated with the decline in the availability or nature of Jarrah and Marri in the northern forest block or possibly an increase in the number of birds moving west to the edge of the escarpment from the drier eastern parts of the Darling Range. In the past we have recorded birds feeding on ripe Cape Lilac throughout the year in the Perth metropolitan area. This was due to smaller numbers of birds foraging in this area which resulted in some trees retaining berries all year. In 2018, however, there was a large increase in the numbers of birds foraging on Cape Lilac in the metropolitan area

and that most trees had been stripped of fruit by mid-August and many birds began returning to the adjacent Darling Scarp to forage on Jarrah-Marri. Few birds were observed in the Perth region between September 2018 and January 2019. By early February 2019, birds were again recorded foraging on green Cape Lilac berries at Armadale, Kelmscott, Welshpool, Carlisle and Upper Swan.

In 2018 we commenced mapping the distribution of Cape Lilac in some Perth suburbs to document the movement of birds to and from the Perth Hills as they move onto the Swan Coastal Plain.

Southern Swan Coastal Plain

Transect maps

Our main aim and focus between April and October 2018 was to repeat the series of mostly east-west transects carried out in 2015, 2016 and 2017 on the southern Swan Coastal Plain between Byford and Harvey to determine habitat use by cockatoos especially Forest Red-tails in roadside verges. These targeted surveys were to search for evidence of feeding both old and recent evidence to determine if there was a change in the status of birds during different times of the year and from year to year (see Table 1).

Since 1995 there has been a very dynamic change in the foraging ecology of many Forest Red-tailed Black Cockatoos in the northern Darling Range mainly exploiting fruiting Cape Lilac (*Melia azedarach*). There was a very extensive flowering of Marri (*Corymbia calophylla*) in 2014–2015 resulting in a massive nut crop on many trees especially those in road verges on the Swan Coastal Plain.



Figure 12. Marri nut specimens showing bite marks of Baudin’s Cockatoo (top left), Carnaby’s Cockatoo (top right), Forest Red-tailed Black Cockatoo (bottom left) and Red-capped Parrot (bottom right)(KS).

These targeted surveys between Byford and Harvey have highlighted habitat use during the year for Forest Red-tailed Black Cockatoos and also highlighted areas that had little feeding habitat. Between May and August 2015 there was very little evidence of recent foraging and indeed few sightings of birds within the region. This is in stark contrast to surveys in September–October 2015 where there was extensive evidence of birds foraging within that region. While there were still some birds

observed foraging within the adjacent hills Jarrah-Marri forest there was obviously considerable movement of birds from the hills onto the coastal plain to take advantage of the extensive nutting of the Marri in these road verges. This appears to be the case and birds have continued to forage on Marri on the coastal plain throughout 2016. This study highlighted how birds used the landscape and took advantage of the extensive Marri nut crop in 2016. There was very little flowering of Marri in 2015–16.

In April and May 2017 there was an obvious decline in the number of birds feeding on Marri in northern areas surveyed (between Serpentine and Yarloop) but an increase in birds feeding on Jarrah in this region. On 29 May 2017 very little recent evidence of foraging was found in this area of the coastal plain and no birds were observed. This is in contrast with many birds still feeding on Marri along the western edge of the Darling Scarp (e.g. at Gobby Road and Scarp Road) during April, May and June. By the July 2017 numbers of birds were again back on the coastal plain around Serpentine foraging mainly on Marri.

In 2018 there was little evidence of birds foraging on Marri throughout the study area (between Byford and Harvey) during the autumn-winter period, but with a large increase in the August and October surveys (see Figure 13 to Figure 16).

Mapping the available food resources throughout this region to show how birds use the landscape (including which areas are not used) could or will, have useful applications for future urban planning.

Some large flocks of Carnaby's Cockatoos were also recorded in the Perth area (e.g. 350 at Morangup on 13 September 2018).

Forest Red-tailed Black Cockatoo

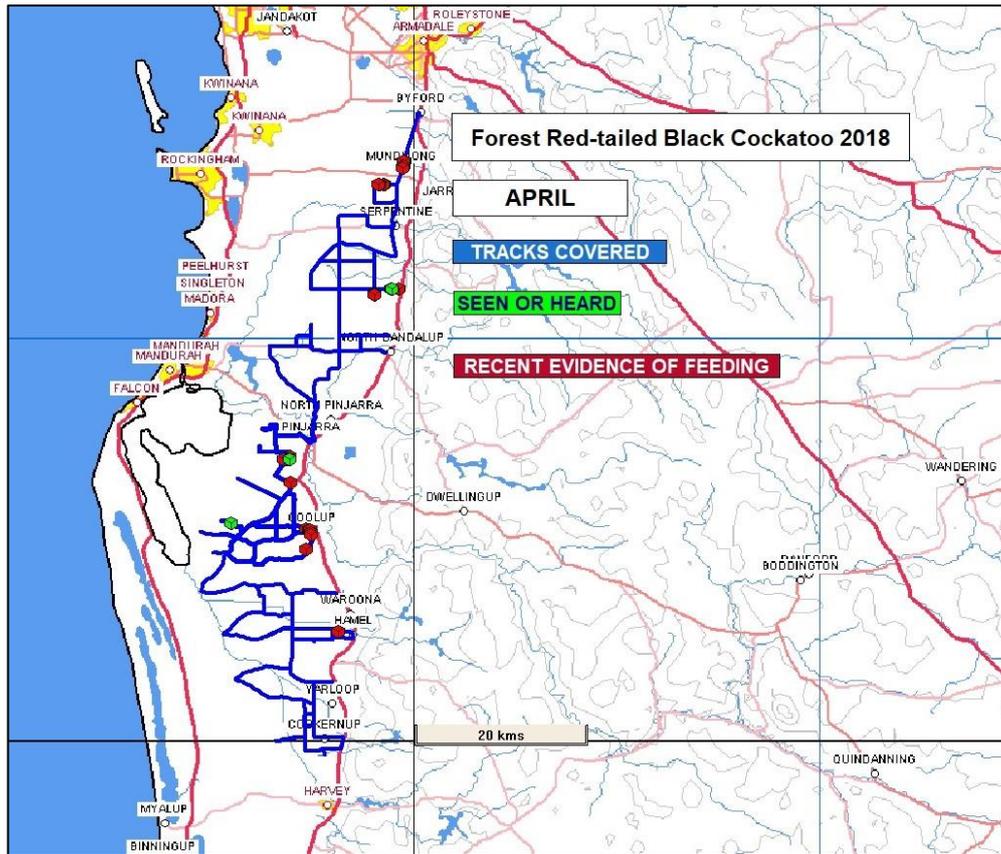


Figure 13. Transects showing recent evidence of FRTBC feeding, April 2018

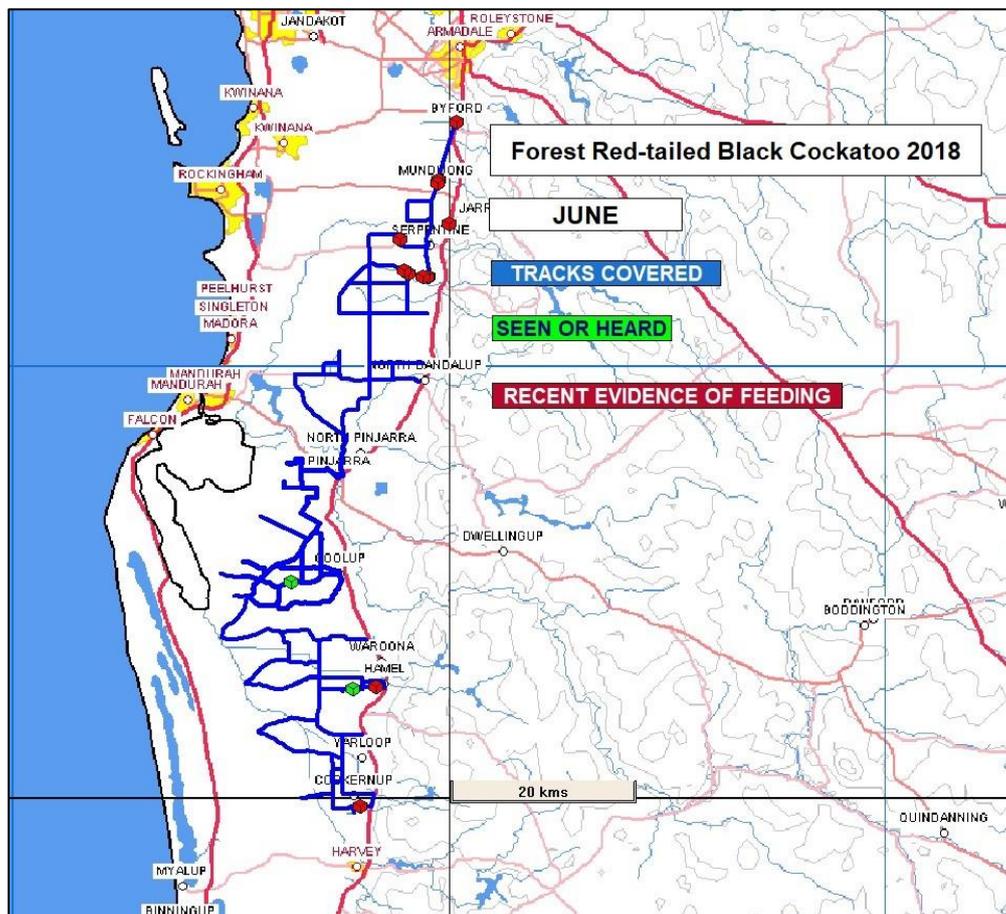


Figure 14. Transects showing recent evidence of FRTBC feeding, June 2018

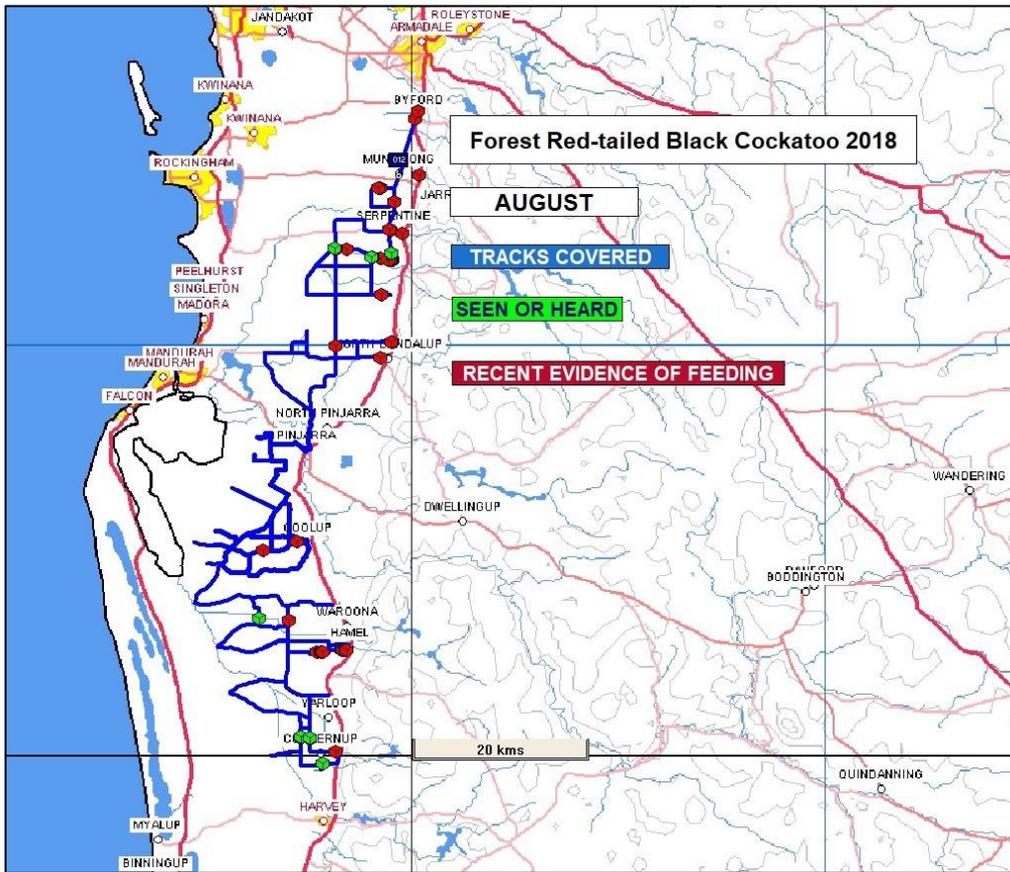


Figure 15. Transects showing recent evidence of FRTBC feeding, August 2018

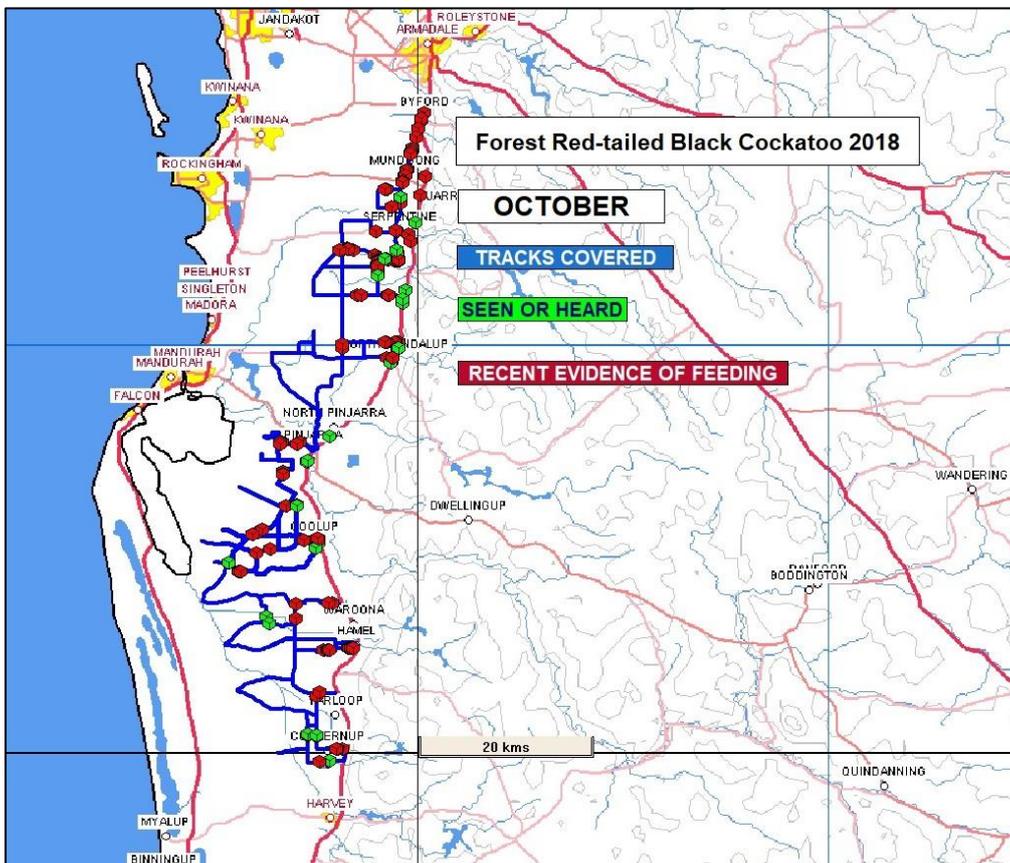


Figure 16. Transects showing recent evidence of FRTBC feeding, October 2018

Baudin's Cockatoo

There has been a recent decline in the numbers of Baudin's Cockatoos returning to traditional roost sites in the northern Darling Range during the autumn-winter period.

In 2017 we provided evidence to the Department of the Environment to support the listing of Baudin's Cockatoo for inclusion on the EPBC Act threatened species list in the Endangered category. Counts at traditional roost sites between 1998 and 2018 show a trending decline in population numbers. Based on recent surveys and roost counts, the current population size would be considerably less and further declining. Our current population estimate is between 5,000–8,000.

The geographic distribution appears not to have changed, but may have along the eastern portion of its range. It is noteworthy that Marri, the main food source of Baudin's Cockatoo, is in decline in this same area (i.e. along the eastern edge of Darling Range). The future effect of climate change, the impacts on Marri from the pathogens *Phytophthora dieback*, Marri Canker and the Leaf and Shoot Blight *Quambalaria* spp.; the impact of hollow competitors, especially European Honey bees, corellas and recent expansion of Galahs, will increase competition on obligate hollow-nesting species. The impact of fire will lead to further losses in food availability and nesting sites. The clearing of southern WA forests for mining and agriculture is ongoing.

Based on our current research, the breeding population is disjunct with most birds breeding in the deep south-west and small isolated breeding population near the northern limit of its range. Breeding recorded at Myara and Wungong in 2017 and in December 2018.

In February 2018 the Minister for the Environment and Energy transferred Baudin's Cockatoo from the 'Vulnerable' category to the 'Endangered' category based on our research (Department of the Environment and Energy 2018).

Wungong Roost

Judging from our records this year, flocks were aggregating and moving north from their breeding areas in the deep south-west in February and by about April-May some birds were back in their winter quarters in the northern Darling Range. A flock of 115 was recorded at Bungendore Park on 1 April and a flock of 100 near Harvey on 10 April 2018.

Pairs, family groups and small flocks (up to 80) were recorded in the Bedforddale area between February and late October 2018. Some of these are probably local resident birds.

On 18 February a flock of 120–130 were observed foraging and slowly moving north in Jarrah-Marri forest at Bedforddale.

Pairs and small groups were recorded in the Bedforddale area in March–October 2018. Numbers at the traditional Wungong roost site were well down on previous years with flocks of 6-80 using the roost site for only a few nights between April and October. For example, a flock of 6 birds was recorded at the roost on 7 March; 40 on 20 March; 40 on 6 April; 15 on 8 April; 20 on 21 May; 80 on 1 June; 60 on 12 June; 10 on 9 July and 15 on 25 October.

Myara Roost

In 2018 a flock of 257 was recorded at the Myara Gobby Road roost on 3 April.

Observations of Baudin's Cockatoos detailing both sightings and foraging evidence are given in Figure 17 and Table 2 and show a decline in numbers from previous years.

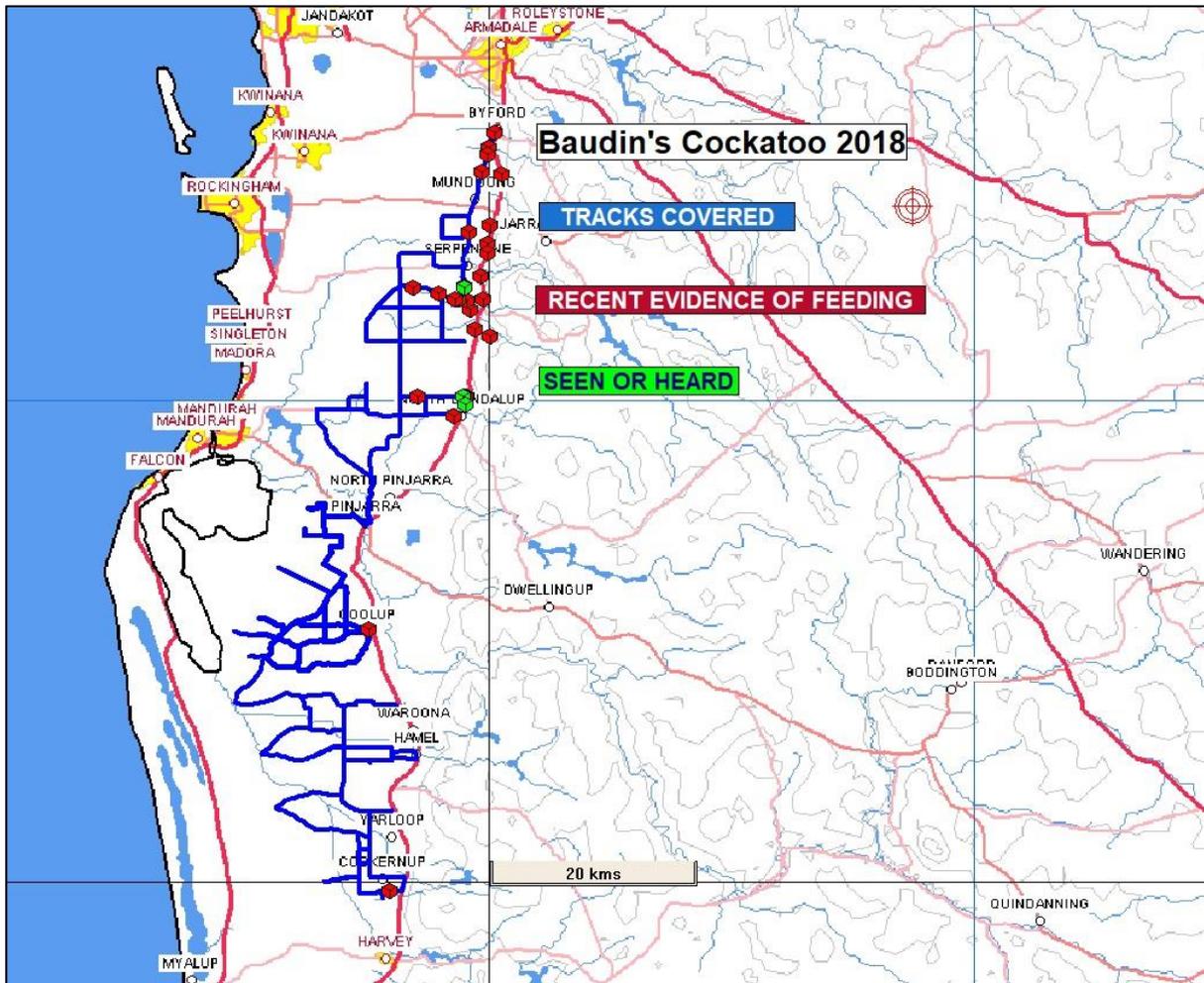


Figure 17. Locations of Baudin's Cockatoo feeding evidence and sightings in 2018.

Baudin's Cockatoo breeding

Three nests of Baudin's Cockatoo *Calyptorhynchus baudinii* were located and studied in the northern Jarrah forest of Western Australia, (two in the Wungong Dam Catchment and one in Serpentine Dam catchment at Myara) between 2009–2012 and monitoring of these nests has been ongoing and were used in 2018. Several nests are also being monitored in the Mount Solus area with some nest hollows used very irregularly, but one has been used on a regular basis in late November since 2014.



Figure 18. Female Baudin's Cockatoo at nest hollow, Myara (TK).

Carnaby's Cockatoo

Along with Baudin's Cockatoos there was also a decrease in numbers of Carnaby's Cockatoos foraging on the Southern Swan Coastal Plain in 2018 compared to the previous year (see Figure 19). Also greatly reduced numbers were recorded in the Lake Clifton region

Noteworthy also is a number of nests and probable nest hollows were located in the Lake Clifton and Bunbury region in August 2016 and one at North Dandalup in September 2016.

Surveys in 2017 and 2018 indicate that numbers of Carnaby's Cockatoos on the Southern Swan Coastal Plain are lower than in previous years. Decline in numbers of birds foraging in this region are no doubt partly due to the impact of the 2016 Yarloop fire.

In 2018, birds were flushed from PE tubes erected in road verge of Great Northern Highway in 2008 between Muchea and Bindoon. In 2017–2018, a pair also nested in a PE tube erected at Millbrook, Albany in 2013.

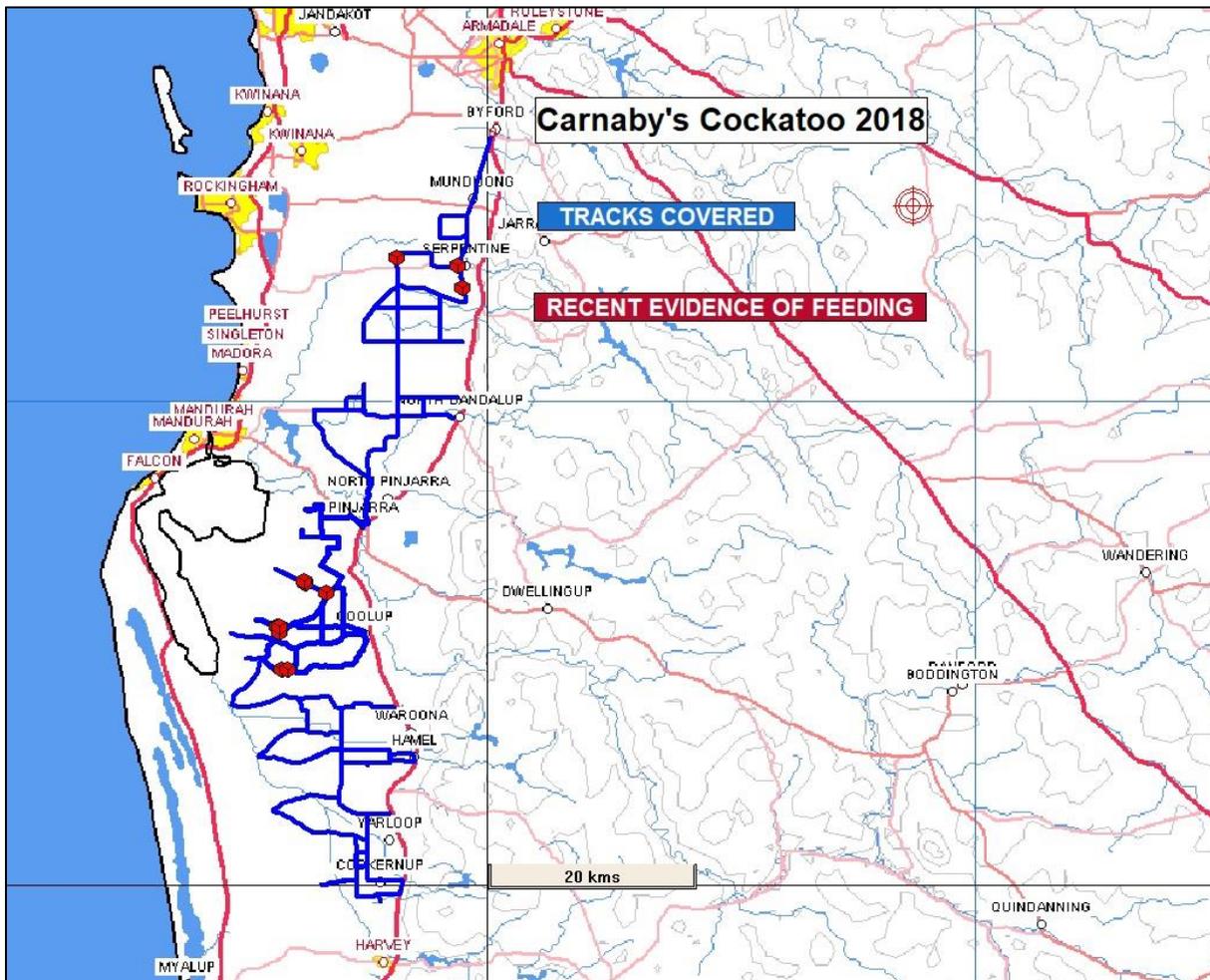


Figure 19. Locations of old and recent evidence of feeding by Carnaby's Cockatoo in 2018.

Cockatoo Contact Calls

For more than 15 years we have been studying the breeding biology of Baudin's Cockatoo and from this work some interesting details of their contact calls have emerged. Early in 2015 we began to analyse the vocalisations of both Baudin's and Carnaby's Cockatoos. From these it was evident that Baudin's Cockatoo has a much shorter contact call compared to Carnaby's Cockatoo. Furthermore there are distinct differences between male and female contact calls of Baudin's Cockatoo in contrast to the contact calls of Carnaby's Cockatoo where both male and female contact calls are identical (see Contact Calls Of Baudin's Cockatoo *Calyptorhynchus baudinii*, R. E. Johnstone and T. Kirkby, 2015). This work has important implications in showing that Baudin's Cockatoo and Carnaby's Cockatoo are indeed separate species and must be managed as separate entities. As part of this project, further study on cockatoo vocalisations continued throughout 2018.

Noteworthy also is the fact that we have noticed some regional dialects with female Baudin's Cockatoos in the Wungong Catchment with birds from this most northern breeding population making a much higher pitched call.

Artificial Nest Hollows

Trials on the use and effectiveness of artificial nest hollows for black cockatoos began in 2000 and is also ongoing and monitoring of both wooden nest boxes and PE pipe tubes has continued at a number of sites in the south-west. A paper dealing with trials of nest boxes for Carnaby's Cockatoo at Dandaragan was published in February 2015 (see Trials On The Use And Effectiveness Of Artificial Nest Hollows For Carnaby's Cockatoo At Cataby, Western Australia, R.E. Johnstone, T. Kirkby and M. Mannion). This work clearly showed that the PE polytubes specifically designed for black cockatoos, provide an extremely effective nest hollow and improve breeding success in areas of wheatbelt where there is lack of suitable hollows due to competition with feral bees and

superabundant pest birds. Study on the effectiveness of artificial nest hollows for the forest species (Forest Red-tail and Baudin's cockatoos) is continuing. In 2018, Forest Red-tailed Black Cockatoos were recorded breeding in a wooden nest box and in a PE tube at Bedforddale and young were fledged from both nests. Carnaby's Cockatoos were also recorded breeding in PE tubes near Bindoon and Mandurah.



Figure 20. Forest Red-tailed Black Cockatoo nestling being banded July 2018, Bedforddale (TK).



Figure 21. Female Forest Red-tailed Black Cockatoo at a wooden nest box, Bedforddale (TK).

Mortality

Fire

The loss of nest trees through logging, fire (including prescribed burns) and post-fire clean up, and weather is of concern, especially fire. Fire is acknowledged as a significant factor in the fall of hollow trees (Parnaby *et al.* 2010). Many veteran and stag Marri (the favoured nest tree) are particularly susceptible to fire. Most of these trees have only an outer living shell around rotten heartwood. A fire at the base of these trees quickly burns through the outer shell creating a chimney stack that destroys the tree.

The January 2005 Perth Hills fire for example, destroyed four out of five known nest trees with hollows leaving only a burnt stump or the tree completely burnt to ground. In May 2011 another three out of five known nest trees in the Wungong catchment were destroyed during a controlled “biodiversity management burn” and it was noteworthy that these trees burnt from the top down indicating a fairly intense fire.

The January 2016 Waroona-Yarloop wildfire had a devastating impact on the flora and fauna of the area. The fire burnt an estimated 69,000 ha including extensive areas of Jarrah-Marri forest and road verges. This fire was extremely intense with the entire canopy, understorey and ground layers being burnt. The loss of about 80–90% of foraging habitat for the small resident flocks in that region means that these birds would have needed to forage well outside their normal home range to survive. The two resources most likely to limit their continual survival in the area are in the short term, the food supply and in the longer term, nest hollows.

Overall this fire was an extremely significant ecological event in that region and we plan to monitor the response of black cockatoos to determine where these populations forage and adapt to change after the burn. Five months after the fire and the widespread presence of basal resprouting and fresh ground growth suggests that some areas of both forest and verge were regenerating rapidly. Nevertheless, there will be a gap in the available food supply chain causing them to forage elsewhere. The loss of many large veteran Marri that are required for breeding hollows, and which are already scarce in the landscape, is concerning. Moderate fires, through damage, often help create large hollows suitable for cockatoos in old trees, however, wildfires tend to destroy all old or veteran trees that could provide future hollows. The same January 2016 Waroona wildfire also swept through the nearby Larego forest block and destroyed a total of 19 of 41 known cockatoo hollows.

In September 2017, controlled burns in the Wungong catchment destroyed two known nesting trees with hollows, leaving only part of the main trunk. These trees had been cleared around the base but burnt from the top down with the fire moving through the canopy. Burning during cooler conditions would have almost certainly preserved these nest trees and hollows.



Figure 22. Impact of fire on potential nest trees, Armadale hills (KS).



Figure 23. Nest tree 049 lost through a controlled burn in September 2017

Nest tree mortality

The Jarrah-Marri forests of south-western Western Australia occupy about 1.6 million hectares (Whitford and Williams 2001). Logging of these forests since the 1860s has preferentially removed the larger trees that are most likely to provide nesting hollows suitable for Forest Red-tailed Black Cockatoo and Baudin's Cockatoo. Tree hollows tend to occur in mature, senescent and dead (stag) trees and the useful habitat life of these trees is limited by natural factors such as fire, decay, wind throw or storm damage and purposeful destruction by further clearing.

To reduce the impact of hollow loss, standing trees that are likely to produce hollows are selected prior to logging and retained as Habitat trees. These trees are specified as being mature to senescent, with a diameter greater than 70 cm, and with intermediate crown structure categories. After logging, as the forest regrows, a proportion of these Habitat trees will fall from natural causes and the rate of tree fall of 1,880 Habitat trees was observed by Whitford and Williams (2001) over periods ranging from 5–77 years on 61 logged sites and 18 sites that had never been logged. Only 8.9% of the trees fell giving a mean rate of tree fall of 2.0% per decade. Whitford and Williams found that there was no significant difference between the rate of Marri tree fall (1.6% of Habitat trees per decade) and the rate of Jarrah tree fall (2.0% of Habitat trees per decade). Hollowing out of the tree base by fire was the most frequent occurrence of tree fall. When they considered only Habitat trees with diameters of 70 cm or greater, the mean rate of tree fall was 2.4% of trees per decade. Based on their estimate, 96 of the 400 Habitat trees retained after logging of 100 ha of Jarrah forest will fall in a 100-year period.

This estimate was in stark contrast to Lindenmayer *et al.* (1990) in Ash forests of eastern Australia that he observed the loss of potential nest trees at 36% per decade.

These studies stimulated us to look at the loss of **actual** nest trees of Forest Red-tailed Black Cockatoo that we had located in the Jarrah-Marri forest between 1992 and 2008. This would provide an indication of the number of actual nest trees lost per decade, the cause of the loss, as this may help

illustrate the lag effects (time needed for trees to be old and large enough to replace nest hollows) and in managing potential nest trees for large hollow-dependent cockatoos. The value of nest hollows for cockatoos is influenced by many factors, including tree species and also the size and position of the hollow.

Forest Red-tailed Black Cockatoos nest in tree hollows from 6.5–33 m above ground and most nests are in very large and very old, mature Marri *Corymbia calophylla*. Marri is a long-lived endemic tree species and is the most important nesting tree throughout the Forest Red-tail Black Cockatoo range. Details of nest trees from surveys carried out between 1993 and 2010 had a mean circumference at breast height (CBH) of 2.76 m, a mean estimated age of 220 years and an average overall height of 20.04 m (Johnstone, R.E., Kirkby, T. and Sarti, K. 2013).

Nest tree survey methods

Between 1993 and 2018 we have been carrying out field investigations into the breeding biology of the Forest Red-tailed Black Cockatoo throughout the south-west of Western Australia mainly in the Jarrah-Marri forest (Johnstone, Kirkby and Sarti 2013). Most nest trees were located by ground-truthing surveys as described in Approach and Methods on page 3.

All trees and hollow entrances were photographed and in 2018 we revisited and re-photographed some 83 nest trees that had been located in Jarrah-Marri forest from 1992 to 2008 (see Appendix 1 and Table 3 and Table 4). This allowed us to investigate which trees and hollows were still extant and where trees or hollows had been lost, to document the causes of the loss.

Results

Of the 53 trees revisited in 2018 that were located in the period 1992–2003, a total of 25 trees with nest hollows were lost completely and 4 nest hollows were lost through falling limbs and fire, but the tree was still standing giving an overall loss of 29 trees giving a loss rate of 54.7% (see Figure 24 and Table 1).

Of the 25 trees lost completely, 1 was lost from fire (prescribed burn or wildfire); 2 were lost from prescribed burns; 4 from wildfire; 1 pushed over in post-fire clean-up; and 17 fallen by natural decay or storm damage etc. (see Figure 25 and Table 1).

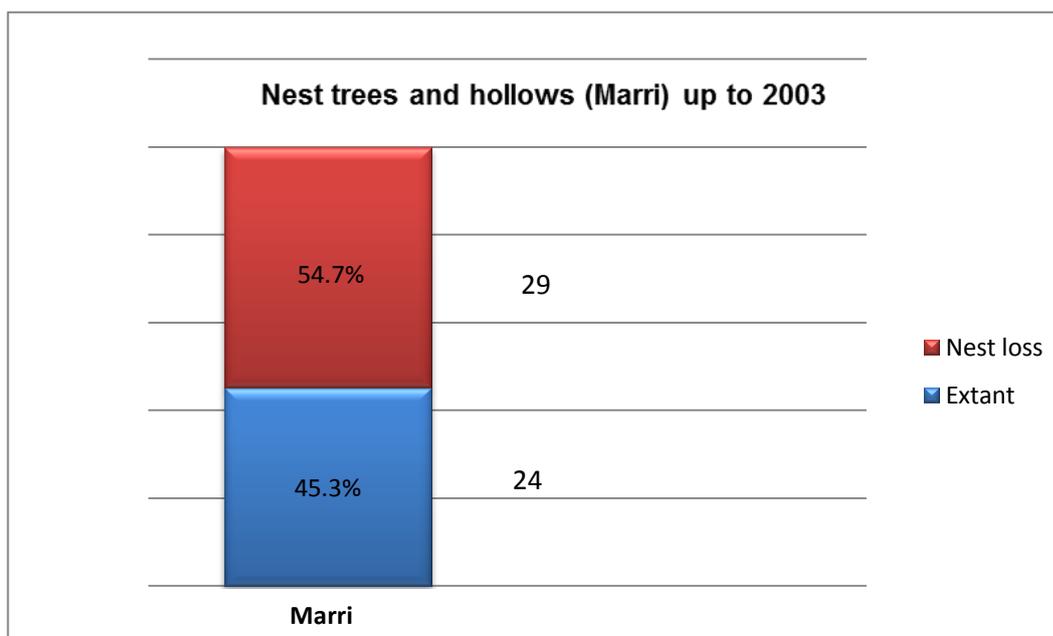


Figure 24. Marri nest trees and hollows revisited up to year 2003

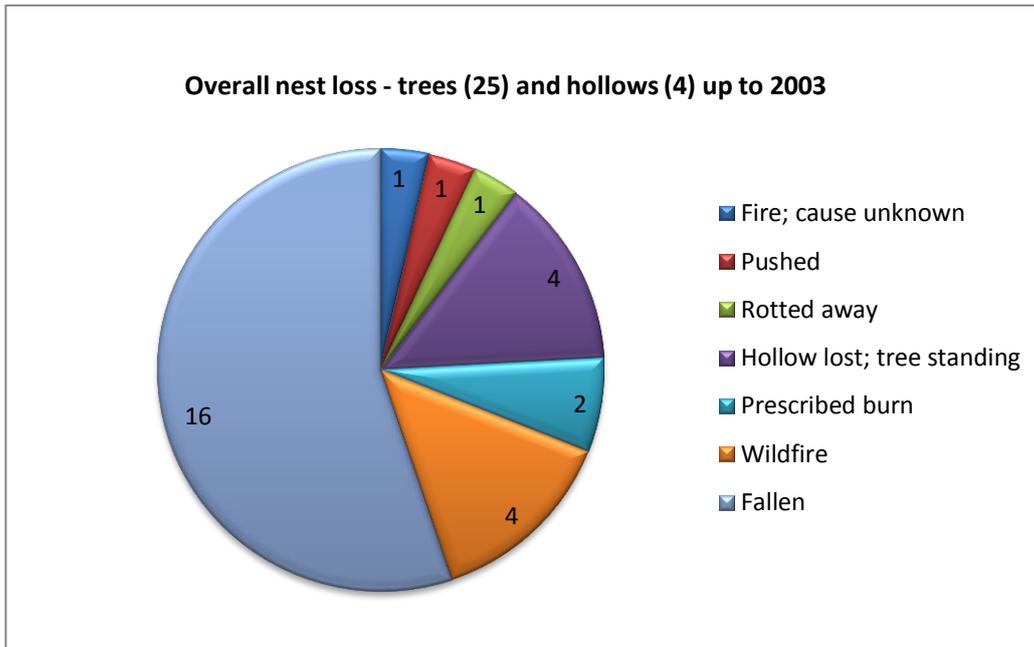


Figure 25. Overall nest loss up to year 2003

Of the 83 trees revisited in 2018 that were located in the period 1992–2008, a total of 32 trees with nest hollows were lost completely and 6 nest hollows were lost through falling limbs and fire, but the tree was still standing giving an overall loss rate of 46% (see Figure 26 and Table 1).

Of the 32 trees lost completely, 2 were lost from fire (prescribed burn or wildfire); 4 were lost from prescribed burns; 4 from wildfire; 1 pushed over in post-fire clean-up; 1 cleared for development; and 20 fallen by natural decay or storm damage etc. (see Figure 27 and Table 1).

Of the 6 trees that lost nest hollows from still-standing trees, 4 could possibly form a new hollow (1 had a large hole at the nest chamber, 2 that lost a nest hollow in prescribed burns could also possibly form new hollows and 1 tree had a nest entrance in burl that had grown over) and 2 trees that had fallen limbs could possibly form new hollows.

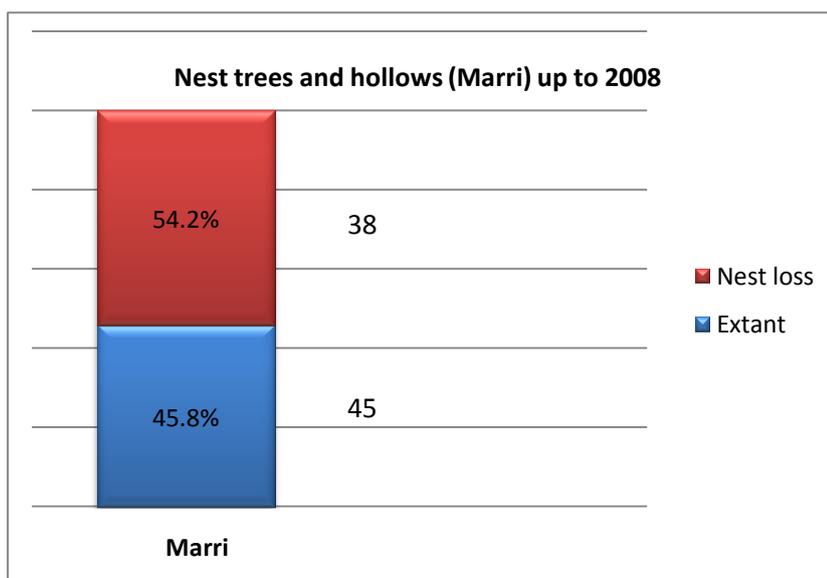


Figure 26. Marri nest trees and hollows revisited up to year 2008

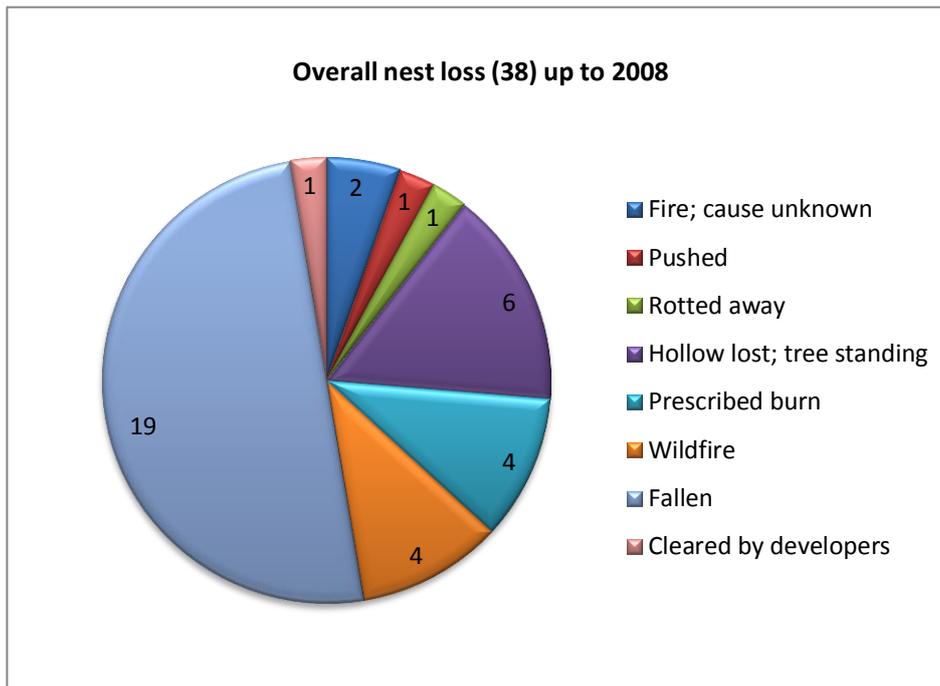


Figure 27. Overall nest loss up to year 2008

Looking at the key ecological processes involved, fire is by far the most critical and without the impact of frequent fire the fall rate of nest trees would, we believe, be fairly natural. The overall loss rate of 46% of nest trees per-decade has profound implications for the relative number of hollows available and for population sustainability of both the Forest Red-tailed Black Cockatoo and the forest-inhabiting Baudin’s Cockatoo. The loss of 11 nest trees per-decade through prescribed burns and wildfire highlights the fact that in many areas of forest there will be future dilemmas of limited hollows. Long-term veteran Marri tree decline will result as old potential nest trees, that are also greatly affected by fire, will not recover to current levels within 150–200 years to provide new nest hollows. Judging from our study, the habitat of burnt hollow-bearing trees is often short-lived because of their reduced lifespan due often to successive fires. It can take many decades before new hollows develop in post-fire habitats. Veteran and stag Marri trees are particularly susceptible to fire as in many cases the trees have only an outer living shell around rotted heartwood. A fire at the base of these trees hollows out the butt of the tree and this quickly becomes a chimney stack that destroys the tree. Anecdotally it has been assumed that fire creates hollows in tree trunks, however, our study seems to show that in the case of these hardwoods, frequent fires actually decreases the number of available hollows. Certainly there appears to be no nest hollow gain as a result of fires.

Fire is obviously the major cause of tree fall of actual nest trees and of future or potential nest trees and hence the retention of the right type and number of hollow-bearing trees is essential to prevent the rapid collapse of hollow-bearing trees in the Jarrah-Marri forest.

The continuing net loss of actual and potential nest trees by fire should be considered as a Key Threatening Process in the Jarrah-Marri forest.

Conclusion

The combined impact of tree mortality and nest competitors on Forest Red-tailed Black Cockatoo and Baudin's Cockatoo needs immediate action especially to reduce tree mortality and enhance tree regeneration within the Jarrah-Marri forest to avoid serious impact on hollow availability for the next 200 years. It would appear that managing fire in a way that maintains habitat resources for these large hollow-dependent cockatoos requires long fire-free intervals including both the length of time since the most recent fire, and between successive fires.

Long term studies are needed to look at the impact of different fire regimes of varying intensity, frequency and season. Diverse burning patterns may prove to be the most effective to ensure the future conservation of avian species in Jarrah-Marri forest. A strategy that includes areas left unburnt (especially areas of old growth Marri) as well as areas burnt regularly to reduce fuel loads should be investigated.

Considering the frequency and impact of fires, both wildfire and prescribed burns, there is remarkably little information about the effects of fire on fauna and the long term consequences. Given the rapid degradation of old growth Marri in the Jarrah-Marri forest there is an urgent need to concentrate some resources on problems associated with fire before it is too late to reverse this trend.

Nest competitors

During the course of this study we also noted many instances of nest hollows once used by Forest Red-tailed Black Cockatoos subsequently occupied by another species. The most significant of these was the European Honey Bee *Apis mellifera*. We also noted nest hollows of Forest Red-tailed Black Cockatoo later occupied by Carnaby's Cockatoo *Calyptorhynchus latirostris* and by Baudin's Cockatoo *C. baudinii*. As well as these an unexpected competitor in the Serpentine Hills area was the Regent Parrot *Polytelis anthopeplus*, a species not usually encountered in the Jarrah-Marri forest.

Acknowledgement

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Table 1 Southern Swan Coastal Plain transect records for 2018

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115									
4301	19/04/2018		Soldiers Rd	Mundijong	-32			115					Marri - seeds				
4302	19/04/2018		Soldiers Rd	Mundijong	-32			115					Marri - seeds				
4303	19/04/2018		Soldiers Rd	Mundijong	-32			115					Marri - seeds				
4304	19/04/2018		Soldiers Rd	Mundijong	-32			115					Jarrah - seeds				
4305	19/04/2018		Bancell Rd	Mundijong	-32			115					Marri - seeds				
4306	19/04/2018		Bancell Rd	Mundijong	-32			115					Marri - seeds				
4307	19/04/2018		Bancell Rd	Mundijong	-32			115					Marri - seeds				
4308	19/04/2018		Bancell Rd	Mundijong	-32			115					Swamp Sheoak - seeds				
4313	20/04/2018		Elliot Rd	Keysbrook	-32			115					Marri - seeds				
4309	20/04/2018		Karnup Rd	Serpentine	-32			115					Pinus - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4322	20/04/2018		Paull Rd	Pinjarra	-32			115					Pinus - seeds				Verge trees
4323	20/04/2018		Paull Rd	Pinjarra	-32			115					Pinus - seeds				Verge trees
4325	20/04/2018		Birchmont Rd	Pinjarra	-32			115						Banksia menziesii - nectar			
4310	20/04/2018		Westcott Rd	Keysbrook	-32			115					Jarrah - seeds				
4311	20/04/2018		Elliot Rd	Keysbrook	-32			115					Jarrah - seeds				
4312	20/04/2018		Elliot Rd	Keysbrook	-32			115					Marri - seeds				
4314	20/04/2018		Elliot Rd	Keysbrook	-32			115			2		Marri - seeds				
4315	20/04/2018		Elliot Rd	Keysbrook	-32			115					Marri - seeds				
4316	20/04/2018		Sutters Lane	Pinjarra	-32			115					Marri - seeds				
4317	20/04/2018		Sutters Lane	Pinjarra	-32			115			2		Marri - seeds				
4318	20/04/2018		Sutters Lane	Pinjarra	-32			115					Marri - seeds				
4319	20/04/2018		Sutters Lane	Pinjarra	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4320	20/04/2018		Sutters Lane	Pinjarra	-32			115					Marri - seeds				
4321	20/04/2018		Caris Park Rd	Pinjarra	-32			115					Marri - seeds				
4324	20/04/2018		Birchmont Rd	Pinjarra	-32			115			3						
4326	20/04/2018		Hart Rd	Coolup	-32			115					Marri - seeds				
4327	20/04/2018		Coolup South Rd	Coolup	-32			115					Marri - seeds				
4328	20/04/2018		Coolup South Rd	Coolup	-32			115					Marri - seeds				
4329	20/04/2018		Coolup South Rd	Coolup	-32			115					Marri - seeds				
4330	22/04/2018		South Western Hwy	Keysbrook	-32			115					Marri - seeds			Very high	
4331	22/04/2018		Coolup South Rd	Coolup	-32			115					Marri - seeds				
4332	22/04/2018		Coolup South Rd	Coolup	-32			115					Marri - seeds				
4333	22/04/2018		Coolup South Rd	Coolup	-32			115					Marri - seeds				
4334	23/04/2018		James Rd	Hamel	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments			
4447	26/06/2018		Soldiers Rd	Mundijong	-32			115				FRTBC					Jarrah - seeds		Moderate	
4448	26/06/2018		Soldiers Rd	Mundijong	-32			115				FRTBC					Jarrah - seeds		Moderate	
4454	27/06/2018		Utley Rd	Serpentine	-32			115				Baudin's					Marri - seeds			
4449	27/06/2018		Utley Rd	Serpentine	-32			115				FRTBC					Marri - seeds			
4450	27/06/2018		Utley Rd	Serpentine	-32			115				FRTBC					Marri - seeds			
4451	27/06/2018		Utley Rd	Serpentine	-32			115				FRTBC					Marri - seeds			
4452	27/06/2018		Utley Rd	Serpentine	-32			115				FRTBC					Marri - seeds			
4453	27/06/2018		Utley Rd	Serpentine	-32			115				FRTBC					Marri - seeds			
4455	27/06/2018		Rapids Rd	Serpentine	-32			115				FRTBC					Marri - seeds			
4456	27/06/2018		South Western Hwy	Serpentine	-32			116				FRTBC					Jarrah - seeds			
4457	27/06/2018		South Western Hwy	Byford	-32			116				FRTBC					Marri - seeds			
4458	27/06/2018		Albany Hwy	Armadale	-32			116				FRTBC	3							Overhead

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments		
4465	28/06/2018		South Western Hwy	Cardup	-32			116					Baudin's				Marri - seeds		
4466	28/06/2018		South Western Hwy	Serpentine	-32			116					Baudin's				Marri - seeds		
4467	28/06/2018		South Western Hwy	Serpentine	-32			116					Baudin's				Marri - seeds		
4468	29/06/2018		Readheads Rd	Serpentine	-32			115					Baudin's				Marri - seeds		>100
4469	29/06/2018		Paull Rd	Pinjarra	-32			115					Carnaby's				Pinus - seeds		Low
4471	29/06/2018		Mounsey Rd	Coolup	-32			115					Carnaby's				B. ilicifolia		Low
4470	29/06/2018		Fishermans Rd	Coolup	-32			115			5		FRTBC				Marri - seeds		Massive amount at verge
4472	29/06/2018	11:15	McLure Rd	Hamel	-32			115			2		FRTBC						
4473	29/06/2018		McLure Rd	Hamel	-32			115					FRTBC				Marri - seeds		
4474	29/06/2018		Thompson Rd	Cookernup	-33			115					FRTBC				Marri - seeds		
4599	15/08/2018		South Western Hwy	Byford	-32			116					Baudin's				Marri - seeds		
4600	15/08/2018		South Western Hwy	Cardup	-32			115					Baudin's				Marri - seeds		

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115									
4601	15/08/2018		South Western Hwy	Mundijong	-32			115					Marri - seeds				
4606	15/08/2018		Richardson Rd	Mundijong	-32			115					Marri - seeds				
4609	15/08/2018		Hall Rd	Mundijong	-32			115					Marri - seeds				
4610	15/08/2018		Hall Rd	Keysbrook	-32			115					Marri - seeds				
4611	15/08/2018		Hall Rd	Keysbrook	-32			115					Marri - seeds				
4616	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4617	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4622	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4627	15/08/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				
4629	15/08/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				
4631	15/08/2018		Readheads Rd	North Dandalup	-32			115		6		Marri - seeds					
4632	15/08/2018		Lakes Rd	North Dandalup	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4635	15/08/2018		Coolup Rd East	Coolup	-32			115					Marri - seeds				
4636	15/08/2018		Mounsey Rd	Coolup	-32			115					B. attenuata - grubs				
4637	15/08/2018		Dutchman Rd	Coolup	-32			115					B. attenuata - grubs				
4638	15/08/2018		Dutchman Rd	Coolup	-32			115					B. attenuata - grubs				
4639	15/08/2018		Dutchman Rd	Coolup	-32			115					B. attenuata - grubs				
4640	15/08/2018		Dutchman Rd	Coolup	-32			115					B. attenuata - grubs				
4641	15/08/2018		Dutchman Rd	Coolup	-32			115					B. attenuata - grubs				
4642	15/08/2018		Dutchman Rd	Coolup	-32			115					B. attenuata - grubs				
4598	15/08/2018		South Western Hwy	Byford	-32			116					Marri - seeds				
4602	15/08/2018		South Western Hwy	Mundijong	-32			115			2						
4603	15/08/2018		Randell Rd	Mundijong	-32			115					Marri - seeds				
4604	15/08/2018		Randell Rd	Mundijong	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115									
4605	15/08/2018		South Western Hwy	Mundijong	-32			115				Marri - seeds					
4607	15/08/2018		Richardson Rd	Mundijong	-32			115					Marri - seeds				
4608	15/08/2018		Hall Rd	Mundijong	-32			115			2		Marri - seeds				
4612	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4613	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4614	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4615	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4618	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4619	15/08/2018		Utley Rd	Serpentine	-32			115			2		Marri - seeds				
4620	15/08/2018		Utley Rd	Serpentine	-32			115			3		Marri - seeds				
4621	15/08/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4623	15/08/2018		Hall Rd	Serpentine	-32			115			2						Overhead

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4624	15/08/2018		Hopeland Rd	Serpentine	-32			115									
4625	15/08/2018		Hopeland Rd	Serpentine	-32			115					Marri - seeds				
4626	15/08/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				
4628	15/08/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				
4630	15/08/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				
4633	15/08/2018		Lakes Rd	North Dandalup	-32			115					Marri - seeds				
4634	15/08/2018		Hopeland Rd	North Dandalup	-32			115					Marri - seeds				
4643	15/08/2018		Fishermans Rd	Coolup	-32			115					Marri - seeds				
4644	15/08/2018		Fishermans Rd	Coolup	-32			115					Marri - seeds				
4645	15/08/2018		South Western Hwy	Serpentine	-32			115					Marri - seeds				
4646	15/08/2018		South Western Hwy	Mundijong	-32			116					Marri - seeds				
4647	15/08/2018		South Western Hwy	Byford	-32			116					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4651	16/08/2018		Thompson Rd	Cookernup	-33			115			Baudin's	3					
4648	16/08/2018		Eckersley Rd	Cookernup	-32			115			FRTBC		2	Marri - seeds			
4649	16/08/2018		Eckersley Rd	Cookernup	-32			115			FRTBC			Marri - seeds			
4650	16/08/2018	13:45	Thompson Rd	Cookernup	-33			115			FRTBC		2				
4652	16/08/2018		Riversdale Rd	Cookernup	-32			115			FRTBC			Marri - seeds			
4653	16/08/2018		Brockman Rd	Cookernup	-32			115			FRTBC			Marri - seeds			
4654	16/08/2018		Brockman Rd	Cookernup	-32			115			FRTBC		2	Marri - seeds			
4655	16/08/2018		McLure Rd	Hamel	-32			115			FRTBC			Marri - seeds			
4656	16/08/2018		McLure Rd	Hamel	-32			115			FRTBC			Marri - seeds			
4657	16/08/2018		McLure Rd	Hamel	-32			115			FRTBC			Marri - seeds			
4658	16/08/2018		McLure Rd	Hamel	-32			115			FRTBC			Marri - seeds			
4659	16/08/2018		South Western Hwy	Hamel	-32			115			FRTBC			Marri - seeds			

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4660	16/08/2018		South Western Hwy	Hamel	-32			115					Marri - seeds				
4661	16/08/2018		South Western Hwy	Hamel	-32			115					Marri - seeds				
4662	16/08/2018		South Western Hwy	Hamel	-32			115					Marri - seeds				
4663	16/08/2018		South Western Hwy	Hamel	-32			115					Marri - seeds				
4664	16/08/2018	15:00	Dorsett Rd	Waroona	-32			115			2						Overhead
4665	16/08/2018		Dorsett Rd	Waroona	-32			115					Jarrah - seeds				
4666	16/08/2018		Somers Rd	Waroona	-32			115					Jarrah - seeds				
4937	11/10/2018		Soldiers Rd	Byford	-32			116					Marri - seeds				
4938	11/10/2018		Soldiers Rd	Cardup	-32			116					Marri - seeds				
4993	12/10/2018		Hall Rd	Serpentine	-32			115			33		Marri - seeds				
4996	12/10/2018		Hall Rd	Serpentine	-32			115					Marri - seeds				
4954	12/10/2018		Hopeland Rd	Serpentine	-32			115					B. menziesii - grubs				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115									
4955	12/10/2018		Hopeland Rd	Serpentine	-32			115					B. menziesii - grubs				
4995	12/10/2018		Hall Rd	Serpentine	-32			115			2						
4939	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4940	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4941	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4942	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4943	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4944	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4945	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4946	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4947	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4948	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4949	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4950	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4951	12/10/2018		Soldiers Rd	Cardup	-32			115					Marri - seeds				
4952	12/10/2018		Wright Rd	Cardup	-32			115		7		Marri - seeds					
4953	12/10/2018		Punrak Rd	Serpentine	-32			115					Marri - seeds				
4956	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4957	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4958	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4959	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4960	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4961	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4962	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4963	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4964	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4965	12/10/2018		Utley Rd	Serpentine	-32			115					Marri - seeds				
4966	12/10/2018		Utley Rd	Serpentine	-32			115			3						Perched in Marri
4967	12/10/2018		Westcott Rd	Serpentine	-32			115					Marri - seeds				
4968	12/10/2018		Westcott Rd	Serpentine	-32			115					Marri - seeds				
4969	12/10/2018		Westcott Rd	Serpentine	-32			115					Marri - seeds				
4970	12/10/2018		Westcott Rd	Serpentine	-32			115					Marri - seeds				
4971	12/10/2018		Westcott Rd	Serpentine	-32			115					Marri - seeds				
4972	12/10/2018		Henderson Rd	Serpentine	-32			115					Marri - seeds				
4973	12/10/2018		Henderson Rd	Serpentine	-32			115					Marri - seeds				
4974	12/10/2018		Punrak Rd	Serpentine	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115									
4975	12/10/2018		Elliot Rd	Serpentine	-32			115					Marri - seeds				
4976	12/10/2018		Elliot Rd	Serpentine	-32			115					Marri - seeds				
4977	12/10/2018		Elliot Rd	Serpentine	-32			115					Marri - seeds				
4978	12/10/2018		Elliot Rd	Serpentine	-32			115					Marri - seeds				
4979	12/10/2018	11:05	Westcott Rd	Serpentine	-32			115			10						
4980	12/10/2018		Westcott Rd	Serpentine	-32			115			3		Marri - seeds				
4981	12/10/2018		Westcott Rd	Serpentine	-32			115					Marri - seeds				
4982	12/10/2018		Westcott Rd	Serpentine	-32			115					Marri - seeds				
4983	12/10/2018		South Western Hwy	North Dandalup	-32			115					Marri - seeds				
4984	12/10/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				
4985	12/10/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				
4986	12/10/2018		Readheads Rd	North Dandalup	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4987	12/10/2018		Readheads Rd	North Dandalup	-32			115			FRTBC			Marri - seeds			
4988	12/10/2018		Readheads Rd	North Dandalup	-32			115			FRTBC			Marri - seeds			
4989	12/10/2018		Hopeland Rd	North Dandalup	-32			115			FRTBC			Marri - seeds			
4990	12/10/2018		Hopeland Rd	North Dandalup	-32			115			FRTBC			Marri - seeds			
4991	12/10/2018		Hall Rd	Serpentine	-32			115			FRTBC			Marri - seeds			
4992	12/10/2018		Hall Rd	Serpentine	-32			115			FRTBC			Marri - seeds			
4994	12/10/2018		Hall Rd	Serpentine	-32			115			FRTBC	2					
4997	16/10/2018		Clackline Nature Reserve	Serpentine	-31			116			Carnaby's	2					
5011	24/10/2018		South Western Hwy	Mundijong	-32			115			Baudin's	4					
5013	24/10/2018		South Western Hwy	North Dandalup	-32			115			Baudin's	3					
5008	24/10/2018		Albany Hwy	Monadnock s	-32			116			FRTBC			Marri - seeds			
5009	24/10/2018		Scarp Rd	Myara	-32			116			FRTBC			Marri - seeds			

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
5010	24/10/2018		South Western Hwy	Mundijong	-32			116					Marri - seeds				
5012	24/10/2018		South Western Hwy	Keysbrook	-32			115									
5014	24/10/2018		South Western Hwy	Pinjarra	-32			115									
5015	24/10/2018		South Western Hwy	Coolup	-32			115									
5016	24/10/2018		South Western Hwy	Coolup	-32			115									
5017	24/10/2018		South Western Hwy	Coolup	-32			115									
5054	25/10/2018		South Western Hwy	Byford	-32			116					Marri - seeds from fallen nuts				
5035	25/10/2018			Wagerup	-32			115			2		Marri - seeds				
5036	25/10/2018			Wagerup	-32			115			2		Marri - seeds				
5037	25/10/2018		Riversdale Rd	Cookernup	-32			115					Marri - seeds				
5038	25/10/2018		Riversdale Rd	Cookernup	-32			115					Marri - seeds				
5039	25/10/2018		Thompson Rd	Cookernup	-33			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
5040	25/10/2018		Brockman Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5041	25/10/2018		Hayes Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5042	25/10/2018		Mclure Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5043	25/10/2018		Mclure Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5044	25/10/2018		Mclure Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5045	25/10/2018		Mclure Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5046	25/10/2018		Mayfield Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5047	25/10/2018		Mayfield Rd	Yarloop	-32			115			FRTBC			Marri - seeds			
5048	25/10/2018		Mayfield Rd	Coolup	-32			115			FRTBC			Marri - seeds			
5049	25/10/2018		South Western Hwy	Coolup	-32			115			FRTBC			Marri - seeds			
5050	25/10/2018		South Western Hwy	Pinjarra	-32			115			FRTBC	1					
5051	25/10/2018		South Western Hwy	Pinjarra	-32			115			FRTBC	2					

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115									
5052	25/10/2018		South Western Hwy	North Dandalup	-32			115					Marri - seeds				
5053	25/10/2018	17:20	South Western Hwy	North Dandalup	-32			115			1						Heading east
5055	25/10/2018		South Western Hwy	Serpentine	-32			115			2						
5056	25/10/2018		South Western Hwy	Serpentine	-32			115					Marri - seeds				
5082	26/10/2018		South Western Hwy	North Dandalup	-32			115			25						Overhead
5070	26/10/2018		Dutchman Rd	Pinjarra	-32			115					Clippings from B. ilicifolia				
5057	26/10/2018		Pinjarra Rd	Pinjarra	-32			115					Marri - seeds				
5058	26/10/2018		Pinjarra Rd	Pinjarra	-32			115					Marri - seeds				
5059	26/10/2018		Pinjarra Rd	Pinjarra	-32			115					Marri - seeds				
5060	26/10/2018		Pinjarra Rd	Pinjarra	-32			115					Marri - seeds				
5061	26/10/2018		Pinjarra Rd	Pinjarra	-32			115					Marri - seeds				
5062	26/10/2018		Pinjarra Rd	Pinjarra	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
5063	26/10/2018		Pinjarra Rd	Pinjarra	-32			115					Marri - seeds				
5064	26/10/2018		Sutters Lane	Pinjarra	-32			115					Marri - seeds				
5065	26/10/2018		Sutters Lane	Pinjarra	-32			115					Marri - seeds				
5066	26/10/2018		Sutters Lane	Pinjarra	-32			115				Marri - seeds					
5067	26/10/2018		Old Bunbury Rd	Pinjarra	-32			115				Marri - seeds					
5068	26/10/2018		Old Bunbury Rd	Pinjarra	-32			115				Marri - seeds					
5069	26/10/2018		Old Bunbury Rd	Pinjarra	-32			115				Marri - seeds					
5071	26/10/2018		Mounsey Rd	Coolup	-32			115		2			Marri - seeds				
5072	26/10/2018		Mounsey Rd	Coolup	-32			115					Marri - seeds				
5073	26/10/2018		Mounsey Rd	Coolup	-32			115					Marri - seeds				
5074	26/10/2018		Fishermans Rd	Coolup	-32			115					Marri - seeds				
5075	26/10/2018		Fishermans Rd	Coolup	-32			115					Marri - seeds				

Rec. No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates					Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115									
5076	26/10/2018		Fishermans Rd	Coolup	-32			115					Marri - seeds				
5077	26/10/2018		Coronation Rd	Coolup	-32			115			2						
5078	26/10/2018		Coolup South Rd	Coolup	-32			115			2						
5079	26/10/2018		Old Bunbury Rd	Coolup	-32			115					Marri - seeds				
5080	26/10/2018		Boar Swamp Rd	Pinjarra	-32			115		9		Marri - seeds					
5081	26/10/2018		Boar Swamp Rd	Pinjarra	-32			115					Marri - seeds				
5107	29/10/2018		South Western Hwy	Coolup	-32			115									
5108	29/10/2018		South Western Hwy	North Dandalup	-32			115									
5130	30/10/2018		South Western Hwy	Keysbrook	-32			115		3							

Table 2 South-western opportunistic records for 2018

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115								
17068	1/08/2017		Alton St	Kenwick	-32			115	FRTBC							Chewed and worn hollow. Date may be incorrect
4136	30/11/2017		Albany Hwy	Armadale	-32			116	FRTBC	2						Head west
4137	30/11/2017		South Western Hwy	Mundijong	-32			116	FRTBC	2						Head east
4138	30/11/2017		Nanga Brook Rd	Nanga	-32			116	FRTBC			Marri - seeds				
4139	30/11/2017		Nanga Brook Rd	Nanga	-32			116	FRTBC			Marri - seeds				
4140	30/11/2017		Nanga Brook Rd	Nanga	-32			116	FRTBC			Marri - seeds				
4141	30/11/2017		Nanga Brook Rd	Nanga	-32			116	FRTBC			Marri - seeds				
17076	30/12/2017	16:30	Oban Loop	Bedforddale	-32			116	FRTBC	38						Drinking from trough
17077	2/01/2018	9:20	Oban Loop	Bedforddale	-32			116	FRTBC	17						Drinking from trough
11175	5/01/2018	16:00	Oban Loop	Bedforddale	-32			116	Carnaby's	15						Heading south
17078	5/01/2018		Oban Loop	Bedforddale	-32			116	FRTBC	33						Drinking from trough
17079	6/01/2018	12:00	Albany Hwy	Kelmscott	-32			116	FRTBC	2		Cape Lilac - seeds				
11176	8/01/2018	08:00	Oban Loop	Bedforddale	-32			116	Carnaby's	14						
17080	8/01/2018	8:00	Oban Loop	Bedforddale	-32			116	FRTBC	23						Drinking from trough
7943	10/01/2018	08:20	South Western Hwy	Keysbrook	-32			115	Baudin's	8						In Marri verge
11177	10/01/2018	08:00	Feast Rd	Serpentine	-32			116	Carnaby's	2		Marri - seeds				
11178	11/01/2018	19:10	Oban Loop	Bedforddale	-32			116	Carnaby's	11						Perched in Jarrah before heading south
17081	11/01/2018	15:15	Oban Loop	Bedforddale	-32			116	FRTBC	3		Sheoak - seeds				Drinking from trough
7944	16/01/2018		Kelvin Rd	Kenwick	-32			116	Baudin's	11						Feeding on ground
10601	17/01/2018		Kingsbury Dve	Karnet	-32			116	Carnaby's	2		Pinus sp. - seeds				
10602	17/01/2018		Kingsbury Dve	Karnet	-32			116	Carnaby's				Pinus sp. - seeds			
17023	17/01/2018		South Western Hwy	Karnet	-32			116	FRTBC	1						Overhead
17082	19/01/2018	17:00	Carradine Rd	Bedforddale	-32			116	FRTBC	17		Cape Lilac - seeds				Still feeding at 18:30
11179	20/01/2018	08:00	Oban Loop	Bedforddale	-32			116	Carnaby's	12						Perched in dead Jarrah

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
11181	21/01/2018	09:00	Oban Loop	Bedforddale	-32		116		Carnaby's	4						Heading west
17083	22/01/2018		Page Rd	Kelmscott	-32		116		FRTBC	3		Cape Lilac - seeds				
17084	22/01/2018		Albany Hwy	Armadale	-32		116		FRTBC			Cape Lilac - seeds				
17367	23/01/2018		South Western Hwy	Greenbushes	-33		116		FRTBC				Marri - seeds			
11180	24/01/2018	17:00	Oban Loop	Bedforddale	-32		116		Carnaby's	50						Heading SW
17085	24/01/2018		Albany Hwy	Armadale	-32		116		FRTBC	3						Heading west
17086	24/01/2018		Albany Hwy	Armadale	-32		116		FRTBC	3		Cape Lilac - seeds				
11182	27/01/2018	19:00	Oban Loop	Bedforddale	-32		116		Carnaby's	75						Heading south
7951	28/01/2018		Scarp Rd	Keysbrook	-32		116		Baudin's				Marri - seeds			
7951	28/01/2018		Scarp Rd	Keysbrook	-32		116		Baudin's				Marri - seeds			
7952	28/01/2018		Scarp Rd	Keysbrook	-32		116		Baudin's				Marri - seeds			
7952	28/01/2018		Scarp Rd	Keysbrook	-32		116		Baudin's				Marri - seeds			
17024	28/01/2018		South Western Hwy	Mundijong	-32		116		FRTBC				Jarrah - seeds			
17025	28/01/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
17026	28/01/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
17027	28/01/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
17028	28/01/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
17029	28/01/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
17306	28/01/2018		South Western Hwy	Mundijong	-33		115		FRTBC	2						Head west
17306	28/01/2018		South Western Hwy	Mundijong	-33		115		FRTBC				Marri - seeds			
17307	28/01/2018		South Western Hwy	Mundijong	-32		116		FRTBC	3						Head west
17307	28/01/2018		South Western Hwy	Mundijong	-33		116		FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
17308	28/01/2018		South Western Hwy	Mundijong	-32		116		FRTBC			Marri - seeds				
17308	28/01/2018		South Western Hwy	Mundijong	-32		116		FRTBC			Marri - seeds				
17311	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17311	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17313	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17313	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC	20						Overhead
17314	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17314	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17315	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17315	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17316	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17316	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17317	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17317	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17318	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17318	28/01/2018		Gobby Rd	Myara	-32		115		FRTBC			Marri - seeds				
17319	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17319	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17320	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17320	28/01/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
17324	28/01/2018		South Western Hwy	Mundijong	-32		115		FRTBC			Marri - seeds				
17324	28/01/2018		South Western Hwy	Mundijong	-32		115		FRTBC			Marri - seeds				
17338	28/01/2018		South Western Hwy	Kirup	-33		115		FRTBC			Marri - seeds				
17338	28/01/2018		South Western Hwy	Kirup	-33		115		FRTBC			Marri - seeds				
17350	28/01/2018		South Western Hwy	Kirup	-33		115		FRTBC			Marri - seeds				
17352	28/01/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17358	28/01/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17358	28/01/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17359	28/01/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17359	28/01/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
7945	2/02/2018	17:30	Oban Loop	Bedforddale	-32		116		Baudin's	2						
11207	2/02/2018		South Western Hwy	Mullalyup	-33		115		Carnaby's			Pinus sp. - seeds				
17087	2/02/2018		Albany Hwy	Armadale	-32		116		FRTBC							Heading west
17105	2/02/2018	16:30	Albany Hwy	Armadale	-32		116		FRTBC	20						Heading east
17303	2/02/2018		South Western Hwy	Harvey	-33		115		FRTBC			Marri - seeds				
17303	2/02/2018		South Western Hwy	Harvey	-33		115		FRTBC			Marri - seeds				
17305	2/02/2018		Brookton Hwy	Kelmscott	-32		116		FRTBC			Cape Lilac - seeds				
17305	2/02/2018		Brookton Hwy	Kelmscott	-32		116		FRTBC			Marri - seeds				
17312	2/02/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17312	2/02/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17323	2/02/2018		South Western Hwy	Boyanup	-33		115		FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
17323	2/02/2018		South Western Hwy	Boyanup	-33		115		FRTBC			Marri - seeds				
17353	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17353	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17354	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17354	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17360	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17360	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17361	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17361	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17362	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17362	2/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17040	3/02/2018		Cullalla Rd	Mooliabeenee	-31		116		FRTBC	13						
17091	3/02/2018		Ecko Rd	Kelmscott	-32		116		FRTBC			Cape Lilac - seeds				
17106	4/02/2018		Albany Hwy	Kelmscott	-32		116		FRTBC	7		Cape Lilac				
17107	4/02/2018	8:30	Albany Hwy	Armadales	-32		116		FRTBC	6						Heading west
17310	6/02/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17310	6/02/2018		Boyanup Picton Rd	Dardanup	-33		115		FRTBC			Marri - seeds				
17355	6/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17355	6/02/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17363	6/02/2018		South Western Hwy	Greenbushes	-33		116		FRTBC			Marri - seeds				
17363	6/02/2018		South Western Hwy	Greenbushes	-33		116		FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
17364	6/02/2018		South Western Hwy	Greenbushes	-33		116		FRTBC			Marri - seeds				
17364	6/02/2018		South Western Hwy	Greenbushes	-33		116		FRTBC			Marri - seeds				
17365	6/02/2018		South Western Hwy	Greenbushes	-33		116		FRTBC			Marri - seeds				
17365	6/02/2018		South Western Hwy	Greenbushes	-33		116		FRTBC			Marri - seeds				
17108	7/02/2018	7:00	Albany Hwy	Kelmscott	-32		116		FRTBC	5						Heading west
17109	7/02/2018	7:30	Kew St	Welshpool	-31		115		FRTBC	4						
17321	7/02/2018		Hopeland Rd	Hopeland	-32		115		FRTBC	2						Head east
17321	7/02/2018		Hopeland Rd	Hopeland	-32		115		FRTBC	2						2 head east 13:45
17326	7/02/2018		Sevelj Rd	Pinjarra	-32		115		FRTBC			Marri - seeds				
17326	7/02/2018		Sevelj Rd	Pinjarra	-32		115		FRTBC			Marri - seeds				
17327	7/02/2018		South Western Hwy	Pinjarra	-32		115		FRTBC			Cape Lilac - seeds				
17327	7/02/2018		South Western Hwy	Pinjarra	-32		115		FRTBC			Cape Lilac - seeds				
4142	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4143	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4144	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4145	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4146	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4147	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4148	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4149	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4150	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4151	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4152	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4153	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4154	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4155	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4156	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4157	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4158	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4159	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4160	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4161	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4162	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4163	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4164	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4165	8/02/2018		Nanga Brook Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17030	8/02/2018		South Western Hwy	North Dandalup	-32		115		FRTBC			Cape Lilac - seeds				
17031	8/02/2018		South Western Hwy	North Dandalup	-32		115		FRTBC			Cape Lilac - seeds				
17032	8/02/2018		Albany Hwy	Kelmscott	-32		116		FRTBC			Cape Lilac - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
17304	8/02/2018		Albany Hwy	Kelmscott	-32			116	FRTBC				Cape Lilac - seeds			
17304	8/02/2018		Albany Hwy	Kelmscott	-32			116	FRTBC				Marri - seeds			
17322	8/02/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Cape Lilac - seeds			
17322	8/02/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Cape Lilac - seeds			
17325	8/02/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Marri - seeds			
17325	8/02/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Cape Lilac - seeds			
17329	8/02/2018		Nanga Rd	Dwellingup	-32			116	FRTBC				Marri - seeds			
17329	8/02/2018		Nanga Rd	Dwellingup	-32			116	FRTBC				Marri - seeds			
17033	9/02/2018		South Western Hwy	Mundijong	-32			116	FRTBC				Marri - seeds			
17034	9/02/2018		Albany Hwy	Kelmscott	-32			116	FRTBC				Marri - seeds			
17110	9/02/2018	7:00	Albany Hwy	Gosnells	-32			116	FRTBC	3						Heading west
17309	9/02/2018		South Western Hwy	Serpentine	-32			116	FRTBC				Marri - seeds			
17309	9/02/2018		South Western Hwy	Serpentine	-32			116	FRTBC				Marri - seeds			
17328	9/02/2018		Del Park Rd	Dwellingup	-32			116	FRTBC	2						Overhead
17328	9/02/2018		Del Park Rd	Dwellingup	-32			116	FRTBC	2						
17330	9/02/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			
17330	9/02/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			
17331	9/02/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			
17331	9/02/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			
17332	9/02/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
17332	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17333	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17333	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17334	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17334	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17335	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17335	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17336	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17336	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17337	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17337	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17339	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17339	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17340	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17340	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17341	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17341	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17342	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17342	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17343	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
17343	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17344	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17344	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17345	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17345	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17346	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17346	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17347	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17347	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17348	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17348	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17349	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17349	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17351	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17351	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17356	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17356	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17357	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17357	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
17366	9/02/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
17366	9/02/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			
4166	12/02/2018		Kingsbury Dve	Karnet	-32			116	Baudin's	20		Marri - seeds				
4167	12/02/2018		Albany Hwy	Kelmscott	-32			116	FRTBC				Cape Lilac - seeds			
4168	12/02/2018	7:10	Tonkin Hwy	Gooseberry Hill	-31			116	FRTBC	4						Head west
17111	12/02/2018	17:30	Oban Loop	Bedforddale	-32			116	FRTBC	30						Drinking from trough
4169	13/02/2018		Great Northern Hwy	Muchea	-31			116	FRTBC				Marri - seeds			
4170	13/02/2018		Great Northern Hwy	Muchea	-31			116	Carnaby's	4		Marri - seeds				Overhead
4171	14/02/2018		South Western Hwy	Mundijong	-32			116	FRTBC	3		Marri - seeds				Head west
4172	14/02/2018		South Western Hwy	Coolup	-32			115	FRTBC		2	Marri - seeds				
11186	15/02/2018		Albany Hwy	Gleneagle	-32			116	Carnaby's	8		Pinus sp. - seeds				
11185	16/02/2018	06:00	Oban Loop	Bedforddale	-32			116	Carnaby's	3	3					
17041	16/02/2018		Great Northern Hwy	Muchea	-31			116	FRTBC	2		Marri - seeds				
17092	16/02/2018		Oban Loop	Bedforddale	-32			116	FRTBC	3						
17088	17/02/2018	12:00	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
17089	17/02/2018	18:18	Oban Loop	Bedforddale	-32			116	FRTBC	15						Drinking from trough
11184	18/02/2018		Settlers Common	Bedforddale	-32			116	Carnaby's	40		Pinus sp. - seeds				
17090	18/02/2018		Kelvin Rd	Kenwick	-32			116	FRTBC	10						Heading west
4173	22/02/2018		South Western Hwy	Serpentine	-32			116	FRTBC			Marri - seeds				
4174	22/02/2018		South Western Hwy	Serpentine	-32			116	FRTBC			Marri - seeds				
4175	22/02/2018		South Western Hwy	Serpentine	-32			116	FRTBC			Marri - seeds				
4176	22/02/2018		South Western Hwy	Serpentine	-32			115	FRTBC			Marri - seeds				
4177	22/02/2018		South Western Hwy	Serpentine	-32			115	FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
11191	24/02/2018	15:00	Oban Loop	Bedforddale	-32			116	Carnaby's	40						In forest
17112	24/02/2018	15:00	Oban Loop	Bedforddale	-32			116	FRTBC	27						Drinking from trough
4178	25/02/2018		South Western Hwy	North Dandalup	-32			115	FRTBC			Marri - seeds				
4179	25/02/2018		South Western Hwy	North Dandalup	-32			115	FRTBC			Marri - seeds				
4180	25/02/2018		Hopeland Rd	North Dandalup	-32			115	FRTBC			Marri - seeds				
4181	25/02/2018		Albany Hwy	Kelmscott	-32			116	FRTBC			Marri - seeds				
4182	26/02/2018		South Western Hwy	Mundijong	-32			116	FRTBC	2						Overhead
4183	26/02/2018		South Western Hwy	Serpentine	-32			115	FRTBC		2					
4184	26/02/2018		Scrivener Rd	Serpentine	-32			115	FRTBC		2					
4185	26/02/2018		Scrivener Rd	Serpentine	-32			116	FRTBC		2					
4186	26/02/2018		Scrivener Rd	Serpentine	-32			116	Baudin's				Marri - seeds			
4187	26/02/2018		Brookton Hwy	Kelmscott	-32			116	FRTBC							
4188	27/02/2018		31 Mile Rd	Gleneagle	-32			116	FRTBC	3						
4189	27/02/2018		Hakea Rd	Gleneagle	-32			116	Carnaby's				Pinus - seeds			
4190	27/02/2018		Bee Farm Rd	Wungong Catchment	-32			116	Carnaby's				Pinus - seeds			
11192	27/02/2018	19:15	Oban Loop	Bedforddale	-32			116	Carnaby's	12						Perched in Jarrah
17113	27/02/2018	17:30	Oban Loop	Bedforddale	-32			116	FRTBC	35						Drinking from trough between 17:30 and 19:00
17114	28/02/2018	18:00	Oban Loop	Bedforddale	-32			116	FRTBC	7						Drinking from trough
17042	1/03/2018		Town centre	Bindoon	-31			116	FRTBC	2		Cape Lilac - seeds				
17043	1/03/2018		Cullalla Rd	Mooliabeenee	-31			116	FRTBC	13						
17044	1/03/2018		Great Northern Hwy	Muchea	-31			115	FRTBC				Cape Lilac - seeds			
17093	1/03/2018		Albany Hwy	Kelmscott	-32			116	FRTBC	3						Heading west
17094	1/03/2018	6:50	Welshpool Rd	Welshpool	-32			115	FRTBC	6						Heading west from scarp
17095	1/03/2018		Great Northern Hwy	Muchea	-31			115	FRTBC				Cape Lilac - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
17096	1/03/2018		Tonkin Hwy	Maddington	-32			116	FRTBC				Cape Lilac - seeds			
4191	2/03/2018		Scarp Rd	Myara	-32			116	Baudin's				Marri - seeds			
4192	2/03/2018		Albany Hwy	Armadale	-32			116	FRTBC	2						Overhead
4193	3/03/2018		South Western Hwy	Mundijong	-32			115	FRTBC				Jarrah - seeds			
4194	3/03/2018		South Western Hwy	Mundijong	-32			115	FRTBC				Jarrah - seeds			
4195	3/03/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Jarrah - seeds			
4196	3/03/2018		Hastings Rd	Mandurah	-32			115	FRTBC		2					
4197	3/03/2018		Upper Ferguson Rd	Wellington	-33			115	FRTBC	3						Overhead
4198	3/03/2018		Upper Ferguson Rd	Wellington	-33			115	Carnaby's					Pinus - seeds		Plantation
4199	3/03/2018		Upper Ferguson Rd	Wellington	-33			115	Carnaby's	28						Heading east
4200	3/03/2018		Upper Ferguson Rd	Wellington	-33			115	FRTBC				Marri - seeds			
7868	4/03/2018		Buckingham Rd	Kelmscott	-32			116	Baudin's		2					
10778	4/03/2018		Buckingham Rd	Kelmscott	-32			116	Carnaby's	50						Here most mornings for around one hour.
17045	4/03/2018	7:30	Kent St Weir	Wilson	-32			115	FRTBC	7						Head north
17046	4/03/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC							Family groups heading to plain and returning in the evening
17115	4/03/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Marri - seeds			
17116	4/03/2018		South Western Hwy	Keysbrook	-32			115	FRTBC				Marri - seeds			
10779	6/03/2018		Buckingham Rd	Kelmscott	-32			116	Carnaby's	100						Numbers increased. Here most mornings for around one hour.
17047	6/03/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC							Family groups heading to plain and returning in the evening
7869	7/03/2018		Buckingham Rd	Kelmscott	-32			116	Baudin's		2					
7892	7/03/2018		Admiral Rd	Bedforddale	-32			116	Baudin's	6		Marri - seeds				Few feeding on ground

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
17117	7/03/2018		Bungendore Park	Armadale	-32			116	FRTBC	3						
17118	7/03/2018		Kelvin Rd	Kenwick	-32			116	FRTBC	3		Cape Lilac				
17119	7/03/2018		Kew St	Welshpool	-31			115	FRTBC	5		Cape Lilac - seeds				
4202	8/03/2018		Scarp Rd	Serpentine Hills	-32			116	FRTBC							Well chewed hollow
4203	8/03/2018		Scarp Rd	North Dandalup	-32			116	Baudin's				Marri - seeds			
4204	9/03/2018		Curtis Rd	Wungong Catchment	-32			116	White-tailed spp.				Dryandra sessilis			
4205	9/03/2018		Curtis Rd	Wungong Catchment	-32			116	FRTBC				Marri - seeds			
17120	10/03/2018	7:00	South Western Hwy	Byford	-32			116	FRTBC	3						Heading west in strong easterly wind
17121	10/03/2018	7:00	Albany Hwy	Bedforddale	-32			116	FRTBC	3						Heading west
4207	16/03/2018		Albany Hwy	Armadale	-32			116	FRTBC		2					
7879	16/03/2018			Millbrook	-32			116	Baudin's				Marri - seeds - green			
7880	16/03/2018			Millbrook	-32			116	Baudin's	6	10					
11187	16/03/2018			Millbrook	-32			116	Carnaby's	19						
11188	16/03/2018		Nest	Millbrook	-32			117	Carnaby's							Nest in Marri. Used this year
17097	16/03/2018			Millbrook	-34			117	FRTBC				Jarra - seeds			
17098	16/03/2018			Millbrook	-34			117	FRTBC							Nest in Marri. Used this year
17099	16/03/2018			Millbrook	-34			116	FRTBC				Jarra - seeds			
17100	17/03/2018		Albany Hwy	North Bannister	-32			116	FRTBC				Marri - seeds			
4208	18/03/2018		Brand Hwy	Muchea	-31			115	FRTBC		2					
4209	19/03/2018		Bungendore Park	Armadale	-32			116	FRTBC				Marri - seeds			
4210	20/03/2018		Bungendore Park	Armadale	-32			116	FRTBC				Marri - seeds			
7881	20/03/2018	06:30	Waterwheel Rd	Bedforddale	-32			116	Baudin's	40						
11196	20/03/2018	05:30	Oban Loop	Bedforddale	-32			116	Carnaby's	3						Drinking from trough
17101	20/03/2018	7:00	Kew St	Welshpool	-31			115	FRTBC	5						
7882	21/03/2018	06:30	Waterwheel Rd	Bedforddale	-32			116	Baudin's	10						

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
11194	21/03/2018	06:00	Bedforddale Hill Rd	Bedforddale	-32		116		Carnaby's	40						Overhead
17102	21/03/2018	6:35	Waterwheel Rd	Bedforddale	-32		116		FRTBC	20		Marri - seeds				
11189	22/03/2018	06:35	Bedforddale Hill Rd	Bedforddale	-32		116		Carnaby's	50						Overhead
17103	22/03/2018	7:00	Welshpool Rd	Welshpool	-32		115		FRTBC	3						Heading west
17122	22/03/2018	16:25	Welshpool Rd	Welshpool	-32		115		FRTBC	7						Heading east
17123	22/03/2018	16:25	Welshpool Rd	Welshpool	-32		115		FRTBC	7						Heading SE
7870	23/03/2018		Buckingham Rd	Kelmscott	-32		116		Baudin's		2					
17048	23/03/2018		Buckingham Rd	Kelmscott	-32		116		FRTBC							Few family groups head to plain but not many
7893	24/03/2018	11:15	Oban Loop	Bedforddale	-32		116		Baudin's	24						Flying over
7894	25/03/2018	12:00	Oban Loop	Bedforddale	-32		116		Baudin's	5						Drinking from trough
17124	26/03/2018	7:10	Kew St	Welshpool	-31		115		FRTBC	14						Heading west
7895	28/03/2018	17:30	Oban Loop	Bedforddale	-32		116		Baudin's	4						Drinking from trough
17125	28/03/2018		Oban Loop	Bedforddale	-32		116		FRTBC	3						Drinking from trough. Large groups have moved on since heavy rains
7896	30/03/2018		Oban Loop	Bedforddale	-32		116		Baudin's	3						Heading south
11195	30/03/2018	18:35	Oban Loop	Bedforddale	-32		116		Carnaby's	60						Heading east. Almost dark
7897	1/04/2018	08:00	Bungendore Park	Bedforddale	-32		116		Baudin's	115						Drinking from creek
4212	3/04/2018		Canning Rd	Lesmurdie	-32		116		FRTBC				Marri - seeds			
4213	3/04/2018		Canning Rd	Lesmurdie	-32		116		FRTBC				Marri - seeds			
4214	3/04/2018		Heath Rd	Kalamunda	-31		116		Carnaby's				Pinus - seeds			Verge tree
4215	3/04/2018		Railway Rd	Kalamunda	-31		116		FRTBC				Pinus - seeds			Verge tree
4216	3/04/2018		Railway Rd	Kalamunda	-31		116		FRTBC				Marri - seeds			
4217	3/04/2018		Railway Rd	Kalamunda	-31		116		FRTBC				Marri - seeds			
4218	3/04/2018		Hill St	Gooseberry Hill	-31		116									Well chewed hollow in Marri
4219	3/04/2018		Hill St	Gooseberry Hill	-31		116									Well chewed hollow in Marri
4220	3/04/2018		Hill St	Gooseberry Hill	-31		116		Carnaby's				Pinus - seeds			
4221	3/04/2018		Hill St	Gooseberry Hill	-31		116		FRTBC							Well chewed hollow in Marri

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-31		116									
4222	3/04/2018		Railway Rd	Gooseberry Hill	-31		116		FRTBC			Marri - seeds				
4223	3/04/2018		Canning Rd	Lesmurdie	-32		116		FRTBC	1						Overhead
4224	3/04/2018		South Western Hwy	Serpentine	-32		115		FRTBC	4						Overhead
4225	3/04/2018		Gobby Rd	Keysbrook	-32		115		FRTBC			Marri - seeds				
4226	3/04/2018		Gobby Rd	Keysbrook	-32		116		FRTBC			Jarrah - seeds				
4227	3/04/2018		South Western Hwy	Serpentine	-32		115		FRTBC	4						Head south
7871	3/04/2018		Roost, Gobby Rd	Myara	-32		116		Baudin's	257						
17049	3/04/2018		Gobby Rd	Myara	-32		116		FRTBC	0						None seen or heard
4232	4/04/2018		South Western Hwy	Keysbrook	-32		115		FRTBC			Marri - seeds				
4233	4/04/2018		South Western Hwy	Keysbrook	-32		115		FRTBC			Marri - seeds				
4236	6/04/2018		South Western Hwy	Keysbrook	-32		115		FRTBC	2		Marri - seeds				Overhead
4237	6/04/2018		South Western Hwy	Cardup	-32		116		FRTBC	1		Marri - seeds				Feeding on ground
7898	6/04/2018	06:38	Bedforddale Hill Rd	Bedforddale	-32		116		Baudin's	40						Perched in dead tree
17126	6/04/2018	16:35	Oban Loop	Bedforddale	-32		116		FRTBC	4						Heading east
17127	6/04/2018	16:52	Mills Rd	Gosnells	-32		116		FRTBC	3						
7899	7/04/2018	06:30	Oban Loop	Bedforddale	-32		116		Baudin's	10						
7900	7/04/2018		Bedforddale Hill Rd	Bedforddale	-32		116		Baudin's	40						
7883	8/04/2018		Oban Loop	Bedforddale	-32		116		Baudin's	20		Marri - seeds				
7884	8/04/2018		Roost, Godwit Retreat Wungong	Bedforddale	-32		116		Baudin's	42						
7901	8/04/2018	07:50	Oban Loop	Bedforddale	-32		116		Baudin's	15						In Marri
11190	8/04/2018		Oban Loop	Bedforddale	-32		116		Carnaby's	6						Drinking from trough
17104	8/04/2018		Godwit Retreat	Bedforddale	-32		116		FRTBC	2						
4238	9/04/2018		South Western Hwy	Mundijong	-32		116		Baudin's	2		Marri - seeds				Overhead

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4239	9/04/2018		South Western Hwy	Mundijong	-32		116		FRTBC	2		Marri - seeds				Feeding on ground
4240	10/04/2018		Lyalls Log Rd	Collie	-33		116		FRTBC			Jarra - seeds				
4241	10/04/2018		Collie Preston Rd	Collie	-33		116		Carnaby's			Pinus sp. - seeds				Plantation
4242	10/04/2018		Collie Preston Rd	Collie	-33		116		FRTBC	2						
4243	10/04/2018		Collie Preston Rd	Collie	-33		116		FRTBC			Jarra - seeds				
4244	10/04/2018		Collie Preston Rd	Collie	-33		116		FRTBC			Jarra - seeds				
4245	10/04/2018		Collie Preston Rd	Collie	-33		116		FRTBC			Jarra - seeds				
4246	10/04/2018		Collie Preston Rd	Collie	-33		116		FRTBC			Jarra - seeds				
4247	10/04/2018		Collie Preston Rd	Collie	-33		116		FRTBC			Jarra - seeds				
4248	10/04/2018		Coalfields Rd	Collie	-33		116		FRTBC			Marri - seeds				
4249	10/04/2018		Coalfields Rd	Collie	-33		116		FRTBC			Marri - seeds				
4250	10/04/2018		Coalfields Rd	Collie	-33		116		FRTBC			Marri - seeds				
4251	10/04/2018		Coalfields Rd	Collie	-33		116		FRTBC			Marri - seeds				
4252	10/04/2018		Coalfields Rd	Collie	-33		116		FRTBC			Marri - seeds				
4253	10/04/2018		Coalfields Rd	Collie	-33		116		FRTBC			Marri - seeds				
4254	10/04/2018		Coalfields Rd	Collie	-33		115		FRTBC			Marri - seeds				
4255	10/04/2018		Coalfields Rd	Collie	-33		115		FRTBC			Marri - seeds				
4256	10/04/2018		Coalfields Rd	Collie	-33		115		FRTBC			Marri - seeds				
4257	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC				Cape Lilac - seeds	Cape Lilac - seeds		

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
4258	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4259	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC	2		Cape Lilac - seeds				
4260	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4261	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4262	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4263	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4264	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4265	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4266	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC	5		Cape Lilac - seeds	Cape Lilac - seeds			
4267	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4268	10/04/2018		Boulters Heights	Bunbury	-33		115		FRTBC			Cape Lilac - seeds	Cape Lilac - seeds			
4269	10/04/2018		Carey Park	Bunbury	-33		115		FRTBC	5					Calling from Marri	
4270	10/04/2018		Carey Park	Bunbury	-33		115		FRTBC			Cape Lilac - seeds				
4271	10/04/2018		South Western Hwy	Brunswick Junction	-33		115		FRTBC				Cape Lilac - seeds			
4272	10/04/2018		Herbert Rd	Harvey	-33		115		FRTBC			Marri - seeds				
4273	10/04/2018		Fourth St	Harvey	-33		115		Baudin's	100		Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-33		115									
4274	10/04/2018		Fifth St	Harvey	-33		115		FRTBC			Marri - seeds				
4275	10/04/2018		Fifth St	Harvey	-33		115		FRTBC			Marri - seeds				
4276	10/04/2018	17:00	Tonkin Hwy	High Wycombe	-31		116		FRTBC	13						Head east
4277	12/04/2018	16:35	Tonkin Hwy	High Wycombe	-31		116		FRTBC	5						Head east
4284	13/04/2018		Nanga Brook Rd	Waroona	-32		115		FRTBC	2						Overhead
4285	13/04/2018		South Western Hwy	North Dandalup	-32		115		Baudin's			Marri - seeds				Massive amount from verge trees
17128	13/04/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	4						Drinking from trough
7902	14/04/2018	08:00	Oban Loop	Bedforddale	-32		116		Baudin's	15						Drinking from trough
7903	14/04/2018	07:50	Oban Loop	Bedforddale	-32		116		Baudin's	5						Heading south
7904	15/04/2018		Bedforddale Hill Rd	Bedforddale	-32		116		Baudin's	20						Heading west
4286	16/04/2018		Canning Mills Rd	Pickering Brook	-32		116		Carnaby's							
7905	16/04/2018	7:50	Oban Loop	Bedforddale	-32		116		Baudin's	5						
4298	17/04/2018		Gobby Rd	Keysbrook	-32		115		Baudin's			Marri - seeds		High		
4299	17/04/2018		Aldersyde Rd	Kalamunda	-31		116		FRTBC	15		Jarrah - seeds				
17129	17/04/2018	17:35	Oban Loop	Bedforddale	-32		116		FRTBC	2						Overhead
4300	18/04/2018		Hines Rd	North Dandalup	-32		115		FRTBC			Marri - seeds				
7906	18/04/2018	08:00	Oban Loop	Bedforddale	-32		116		Baudin's	15		Marri - seeds				
10818	20/04/2018		Buckingham Rd	Kelmscott	-32		116		Carnaby's							Small groups heard. Not many in the area at the moment
17050	20/04/2018		Buckingham Rd	Kelmscott	-32		116		FRTBC							Small groups heard. Not many in the area at the moment
17144	20/04/2018	7:19	Oban Loop	Bedforddale	-32		116		FRTBC	12						
7907	21/04/2018	07:00	Oban Loop	Bedforddale	-32		116		Baudin's	20						
7908	26/04/2018	17:00	Oban Loop	Bedforddale	-32		116		Baudin's	10						In Marri
17145	26/04/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	3						Drinking from trough
7909	27/04/2018	17:00	Oban Loop	Bedforddale	-32		116		Baudin's	5						Drinking from trough
7910	27/04/2018	17:00	Oban Loop	Bedforddale	-32		116		Baudin's	5		Marri - seeds				
7911	28/04/2018	08:00	Oban Loop	Bedforddale	-32		116		Baudin's	5						
7912	28/04/2018	08:15	Oban Loop	Bedforddale	-32		116		Baudin's	5						Drinking from trough

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
17130	30/04/2018		Bungendore Park	Armadale	-32			116	FRTBC							Checked nestboxes - no flush
4363	1/05/2018		South Western Hwy	Serpentine	-32			116	Baudin's				Marri - seeds			
4364	1/05/2018		South Western Hwy	Serpentine	-32			116	FRTBC				Jarrah - seeds		Small amount	
4365	1/05/2018		South Western Hwy	Serpentine	-32			116	FRTBC				Marri - seeds			
4366	1/05/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4367	1/05/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4368	1/05/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
17051	2/05/2018		Bunnings Store, Maddington	Maddington	-32			116	FRTBC	3						Overhead
7885	3/05/2018		Oban Loop	Bedforddale	-32			116	Baudin's	5						
7913	3/05/2018	17:37	Oban Loop	Bedforddale	-32			116	Baudin's	6						Drinking from trough
17131	3/05/2018		Oban Loop	Bedforddale	-32			116	FRTBC		3					
4376	4/05/2018		Teesdale	Dwellingup	-32			116	FRTBC	50						
7914	4/05/2018	09:25	Oban Loop	Bedforddale	-32			116	Baudin's	9						Drinking from trough
11197	5/05/2018	10:30	Esplanade	Fremantle	-32			115	Carnaby's	10		Pinus sp. - seeds				
7915	6/05/2018	08:00	Oban Loop	Bedforddale	-32			116	Baudin's	30						In Jarrah/Marri. 3 drinking from trough
7916	7/05/2018	15:00	Oban Loop	Bedforddale	-32			116	Baudin's	11						In Jarrah/Marri
10819	7/05/2018		Albany Hwy	Williams	-32			116	Carnaby's	3						On ground at verge
17132	8/05/2018		Bunnings Store	Maddington	-32			116	FRTBC	13		Cape Lilac - seeds				
17133	10/05/2018	12:30	Oban Loop	Bedforddale	-32			116	FRTBC	2						Overhead
17256	10/05/2018	7:00	Edward St	Kenwick	-32			115	FRTBC	40						In River Red Gums
17257	10/05/2018	7:00	Edward St	Kenwick	-32			115	FRTBC				Marri - seeds	Marri - seeds		
17258	10/05/2018	7:00	Roost, Grove Rd	Kenwick	-32			115	FRTBC	4		Marri - seeds from ground				
17259	10/05/2018	7:00		Kenwick	-31			115	FRTBC				Cape Lilac - seeds			
17260	10/05/2018	7:15		Kenwick	-31			115	FRTBC	2						Flew in from east

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-31			115								
17261	10/05/2018	7:15		Kenwick	-31			115	FRTBC	3						Flew in from east
17262	10/05/2018	7:15	Coldwell Rd	Kenwick	-31			115	FRTBC				Marri - seeds - brown and grey			
7917	11/05/2018	14:30	Oban Loop	Bedforddale	-32			116	Baudin's	9						In Jarrah. Flew SE
7872	12/05/2018		Buckingham Rd	Kelmscott	-32			116	Baudin's	12						
10820	12/05/2018		Buckingham Rd	Kelmscott	-32			116	Carnaby's							Small groups heard. Not many in the area at the moment
17146	12/05/2018	16:00	Oban Loop	Bedforddale	-32			116	FRTBC	1						
17147	12/05/2018	11:30	Brockman St	Midland	-31			116	FRTBC	9						
4379	13/05/2018		Scarp Rd	North Dandalup	-32			116	FRTBC	2						Head west
4382	13/05/2018		Berwick St	Victoria Park	-31			115	FRTBC				Cape Lilac - seeds			
4383	13/05/2018		Oats St	Welshpool	-31			115	FRTBC				Cape Lilac - seeds			
4384	13/05/2018		Oats St	Welshpool	-31			115	FRTBC				Cape Lilac - seeds			
4385	13/05/2018		Oats St	Welshpool	-31			115	FRTBC				Cape Lilac - seeds			
4386	13/05/2018		Oats St	Welshpool	-31			115	FRTBC				Marri - seeds			
4387	13/05/2018		Welshpool Rd	Welshpool	-31			115	FRTBC				Marri - seeds			
4388	13/05/2018		Welshpool Rd	Kenwick	-32			115	FRTBC		2					
4389	13/05/2018		Kenwick Rd	Kenwick	-32			115	FRTBC		2					
4390	13/05/2018		Albany Hwy	Kelmscott	-32			116	FRTBC				Cape Lilac - seeds			
17148	13/05/2018	17:08	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
7886	16/05/2018		Bungendore Park, near Albany Hwy entrance	Bedforddale	-32			116	Baudin's	30						Others calling. Perched
17134	16/05/2018	7:30	Kew St	Welshpool	-31			115	FRTBC	13						Heading north
17135	16/05/2018	16:35	Tonkin Hwy	Gosnells	-32			116	FRTBC	3						Heading east

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		115									
17263	16/05/2018	6:35	Edward St	Kenwick	-32		115		FRTBC	5		River Gum - seeds				
17264	16/05/2018	6:35	Grove Rd	Kenwick	-32		115		FRTBC	6		Cape Lilac - seeds				
17265	16/05/2018	6:35	Grove Rd	Kenwick	-32		115		FRTBC	4		River Gum - seeds				
7918	18/05/2018	8:00	Oban Loop	Bedforddale	-32		116		Baudin's	6						In Jarrah
7919	18/05/2018	15:21	Oban Loop	Bedforddale	-32		116		Baudin's	7						In Jarrah
17054	19/05/2018		Kent St Weir	Cannington	-32		115		FRTBC	16						
7887	21/05/2018		Bungendore Park, Admiral Rd entrance	Bedforddale	-32		116		Baudin's	20						
17136	21/05/2018		Bungendore Park	Armadale	-32		116		FRTBC				Marri - seeds			Checked nestboxes - no flush
17266	22/05/2018	7:00	Grove Rd	Kenwick	-32		115		FRTBC	10						In River Gums
17267	22/05/2018	7:00	Grove Rd	Kenwick	-32		115		FRTBC	12			Marri - seeds			
17149	23/05/2018	18:00	Oban Loop	Bedforddale	-32		116		FRTBC	2						Drinking from trough. Headed south into forest
17268	23/05/2018	7:00	Grove Rd	Kenwick	-32		118		FRTBC	10						Flock followed from Tonkin Hwy to Brook Rd area and on to Cape Lilac
17269	23/05/2018	7:00	Grove Rd	Kenwick	-32		118		FRTBC	19		Fallen Marri - seeds				
17270	23/05/2018	7:00	Grove Rd	Kenwick	-32		118		FRTBC	2						In Marri verge
17271	23/05/2018		Edward St	Kenwick	-32		115		FRTBC	5		Feeding on small nuts of similar size to Lemon-scented Gum or Sugar Gum				In River Gums
17052	24/05/2018		Buckingham Rd	Kelmscott	-32		116		FRTBC							Small groups heard. Not many in the area at the moment
17053	24/05/2018		Kent St	Kensington	-32		115		FRTBC	1						Perched on wire
17137	24/05/2018			Kensington	-31		115		FRTBC	1						Perched on wire
17138	24/05/2018			Kensington	-31		115		FRTBC				Cape Lilac - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
17139	24/05/2018		Page Rd	Kelmscott	-32		116		FRTBC	8		Cape Lilac - seeds				
17140	25/05/2018	10:25	Oban Loop	Bedforddale	-32		116		FRTBC	2						Drinking from trough
17172	25/05/2018		Nest 1370, Oban Loop	Bedforddale	-32		116		FRTBC							Used in 2011-2011, 2009-2010
17173	25/05/2018		Nest 1380, Oban Loop	Bedforddale	-32		116		FRTBC							Used in 2012
17174	25/05/2018		Nest 1357, Oban Loop	Bedforddale	-32		116		FRTBC							Used in 2014
7920	27/05/2018		Oban Loop	Bedforddale	-32		116		Baudin's	3						In Jarrah
7921	28/05/2018	16:27	Oban Loop	Bedforddale	-32		116		Baudin's	8						Drinking from trough
7922	28/05/2018	17:00	Oban Loop	Bedforddale	-32		116		Baudin's	6						Drinking from trough
7923	28/05/2018	17:20	Oban Loop	Bedforddale	-32		116		Baudin's	2						Drinking from trough
17141	29/05/2018	17:20	Oban Loop	Bedforddale	-32		116		FRTBC	15						Drinking from trough. First flock for several months
17272	29/05/2018	7:00	Roost, Grove Rd	Kenwick	-32		115		FRTBC	19		Marri - seeds				
17273	29/05/2018	7:00	Coldwell Rd	Kenwick	-32		115		FRTBC				Marri - seeds			
7924	30/05/2018	17:20	Oban Loop	Bedforddale	-32		116		Baudin's	2						Drinking from trough
17056	30/05/2018		Mt Cooke	Cooke	-32		116		FRTBC	0						None seen or heard at dusk
17274	30/05/2018	6:40	Brook Rd	Kenwick	-32		115		FRTBC	9						Heading SE
17275	30/05/2018	6:40	Grove Rd	Kenwick	-32		115		FRTBC	8		Marri - seeds				
17276	30/05/2018		Edward St	Kenwick	-32		115		FRTBC	14						In River Gums
7925	31/05/2018	17:20	Oban Loop	Bedforddale	-32		116		Baudin's	26						Drinking from trough
11198	31/05/2018	08:20	Oban Loop	Bedforddale	-32		116		Carnaby's	105						Came from SE
4395	1/06/2018		Del Park Rd	Dwellingup	-32		116		FRTBC	1						Overhead
4396	1/06/2018	15:30	Del Park Rd	North Dandalup	-32		115		FRTBC	2						Overhead
4397	1/06/2018		Del Park Rd	North Dandalup	-32		115		FRTBC							
7926	1/06/2018	17:00	Oban Loop	Bedforddale	-32		116		Baudin's	43						Drinking from trough
7927	3/06/2018	15:00	Oban Loop	Bedforddale	-32		116		Baudin's	9						Drinking from trough
7928	3/06/2018	17:30	Oban Loop	Bedforddale	-32		116		Baudin's	24						Drinking from trough
7929	4/06/2018		Oban Loop	Bedforddale	-32		116		Baudin's	80		Marri - seeds				
11200	4/06/2018	07:20	Tonkin Hwy	Gosnells	-32		116		Carnaby's	35		Pinus sp. - seeds				
17150	4/06/2018	15:00	Oban Loop	Bedforddale	-32		116		FRTBC	4		Marri - seeds				
17142	5/06/2018	17:20	Oban Loop	Bedforddale	-32		116		FRTBC	3						Drinking from trough

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
4408	6/06/2018		South Western Hwy	Byford	-32		116		FRTBC	7						
7888	6/06/2018		Oban Loop	Bedforddale	-32		116		Baudin's	5						Heading north
17143	6/06/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			
17170	6/06/2018		Feast Rd	Serpentine	-32		116		FRTBC				Marri - seeds			
17171	6/06/2018		South Western Hwy	Serpentine	-32		116		FRTBC				Marri - seeds			
4411	7/06/2018		Pinjarra-Williams Rd	Dwellingup	-32		116		FRTBC				Jarra - seeds		High	
4412	7/06/2018		Pinjarra-Williams Rd	Dwellingup	-32		116		FRTBC				Jarra - seeds		High	
4413	7/06/2018		Brookton Hwy	Dale	-32		116		FRTBC	1						Perched
7889	8/06/2018			Margaret River	-33		115		Baudin's							
7890	8/06/2018			Margaret River	-33		115		Baudin's							
17234	8/06/2018		Clydebank Way	Busselton	-33		115		FRTBC	6						Perched and flying
7930	10/06/2018	17:00	Oban Loop	Bedforddale	-32		116		Baudin's	9						Head north
17151	10/06/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	10						Drinking from trough
17169	10/06/2018	12:00	Welshpool Rd	Welshpool	-32		115		FRTBC	3						
7931	11/06/2018	10:00	Oban Loop	Bedforddale	-32		116		Baudin's	3						Drinking from trough
17058	11/06/2018		Page Rd	Kelmscott	-32		116		FRTBC	4			Eucalyptus caesia - seeds			
17059	11/06/2018		Bunnings Store, Maddington	Maddington	-32		116		FRTBC		2					
17152	11/06/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	7						Drinking from trough
17153	11/06/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	6						Drinking from trough
4421	12/06/2018		South Western Hwy	Mundijong	-32		116		Baudin's				Marri - seeds			
4422	12/06/2018		South Western Hwy	Mundijong	-32		116		Baudin's				Marri - seeds			
4423	12/06/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			
4424	12/06/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			
4425	12/06/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
7932	12/06/2018	06:35	Roost, Admiral Rd	Byford	-32			116	Baudin's	60						
10854	12/06/2018		Buckingham Rd	Kelmscott	-32			116	Carnaby's							Odd family groups, but very few now in this area
17057	12/06/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC							Odd family groups, but very few now in this area
17154	12/06/2018		Aviemore Rd	Bedforddale	-32			116	FRTBC	6	Marri - seeds					
17155	12/06/2018		Albany Hwy	Bedforddale	-32			116	FRTBC	1						Dead at verge
17156	12/06/2018		Tonkin Hwy	Welshpool	-32			115	FRTBC	6						Head east
7873	13/06/2018		Buckingham Rd	Kelmscott	-32			116	Baudin's	12						Very infrequent in this general area
7946	13/06/2018	06:25	Roost, Admiral Rd	Byford	-32			116	Baudin's	0						None at roost
17164	13/06/2018	16:50	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
17277	13/06/2018		Brook Rd	Kenwick	-32			115	FRTBC	8						Heading east
17278	13/06/2018	7:10	Edward St	Kenwick	-32			115	FRTBC	8						In River Gums
4429	14/06/2018	16:00	Del Park Rd	Dwellingup	-32			116	FRTBC		2					
7874	15/06/2018		Buckingham Rd	Kelmscott	-32			116	Baudin's		2					
17060	15/06/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC							Odd family groups, but very few now in this area
17157	15/06/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
11199	16/06/2018	10:00	Golf Course	Gosnells	-32			115	Carnaby's	45						
17158	16/06/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
17165	17/06/2018		Ranford Rd	Gosnells	-32			115	FRTBC	17						Heading SE
4437	20/06/2018		Del Park Rd	Dwellingup	-32			116	FRTBC			Jarrah - seeds				
4442	21/06/2018		South Western Hwy	North Dandalup	-32			115	Baudin's	8		Marri - seeds				
17159	21/06/2018	12:00	Oban Loop	Bedforddale	-32			116	FRTBC	8		Marri - seeds				
17160	22/06/2018	16:45	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
17161	22/06/2018	16:45	Oban Loop	Bedforddale	-32			116	FRTBC		9					
17162	22/06/2018	16:45	Oban Loop	Bedforddale	-32			116	FRTBC	2						
4443	25/06/2018	10:55	Tonkin Hwy	Maddington	-32			116	FRTBC	2						Overhead
4444	26/06/2018	11:00	Tonkin Hwy	Maddington	-32			116	FRTBC	2						Overhead
4445	26/06/2018	13:00	Kings Park	Perth	-31			115	FRTBC	9		Marri - seeds				
4446	26/06/2018		Kings Park	Perth	-31			115	FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
4457	27/06/2018		South Western Hwy	Byford	-32			116	FRTBC				Marri - seeds			
4458	27/06/2018		Albany Hwy	Armadale	-32			116	FRTBC	3						Overhead
4459	28/06/2018		High St	Fremantle	-32			115	FRTBC		1		Marri - seeds			Imm. Begging call heard
4460	28/06/2018		High St	Fremantle	-31			115	FRTBC							
4461	28/06/2018		Tonkin Hwy	Maddington	-32			116	FRTBC	3						Overhead
4462	28/06/2018		Tonkin Hwy	Maddington	-32			116	FRTBC				Marri - seeds			
4463	28/06/2018		Tonkin Hwy	Maddington	-32			116	FRTBC				Marri - seeds			
4464	28/06/2018		Tonkin Hwy	Maddington	-32			116	FRTBC				Marri - seeds			
4465	28/06/2018		South Western Hwy	Cardup	-32			116	Baudin's				Marri - seeds			
4466	28/06/2018		South Western Hwy	Serpentine	-32			116	Baudin's				Marri - seeds			
4467	28/06/2018		South Western Hwy	Serpentine	-32			116	Baudin's				Marri - seeds			
4468	29/06/2018		Readheads Rd	Serpentine	-32			115	Baudin's				Marri - seeds		>100	
4469	29/06/2018		Paull Rd	Pinjarra	-32			115	Carnaby's				Pinus - seeds		Low	
4470	29/06/2018		Fishermans Rd	Coolup	-32			115	FRTBC		5		Marri - seeds		Massive amount at verge	
4471	29/06/2018		Mounsey Rd	Coolup	-32			115	Carnaby's				B. ilicifolia		Low	
4472	29/06/2018	11:15	McLure Rd	Hamel	-32			115	FRTBC		2					
4473	29/06/2018		McLure Rd	Hamel	-32			115	FRTBC				Marri - seeds			
4474	29/06/2018		Thompson Rd	Cookernup	-33			115	FRTBC				Marri - seeds			
7891	29/06/2018		Moore St	Byford	-32			116	Baudin's	2						In Marri
7933	30/06/2018		Oban Loop	Bedforddale	-32			116	Baudin's		6					
4475	1/07/2018		Kings Park	Perth	-31			115	FRTBC	0						None heard at dawn period
4476	1/07/2018		Kings Park	Perth	-31			115	Carnaby's					Pinus - seeds		
4477	1/07/2018		Kings Park	Perth	-31			115	FRTBC	2						Head east
4478	1/07/2018		Kings Park	Perth	-31			115								Small chewed hollow

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-31		115									
4479	1/07/2018	7:55	Kings Park	Perth	-31		115		FRTBC	2	2	Sheoak - seeds				
4480	1/07/2018		Kings Park	Perth	-31		115		FRTBC				Sheoak - seeds			
4481	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Sheoak			
4482	2/07/2018		Kings Park	Perth	-31		115		FRTBC							Chewed hollow in Tuart. Duck down at entrance
4483	2/07/2018		Kings Park	Perth	-31		115		FRTBC					Marri - seeds - brown		
4484	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4485	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4486	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4487	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4488	2/07/2018		Kings Park	Perth	-31		115									Good hollow. No signs of use
4489	2/07/2018		Kings Park	Perth	-31		115		FRTBC		2					
4490	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4491	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4492	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4493	2/07/2018		Kings Park	Perth	-31		115		FRTBC				Marri - seeds			
4494	2/07/2018	9:00	Kings Park	Perth	-31		115		Carnaby's	20						Head west
7934	4/07/2018		Oban Loop	Bedforddale	-32		116		Baudin's	4						In Marri
7935	4/07/2018		Railway Ave	Kelmscott	-32		116		Baudin's	5						In Marri
4495	8/07/2018	7:05	Albany Hwy	Kelmscott	-32		116		FRTBC	4						Head south
17163	8/07/2018	17:30	Oban Loop	Bedforddale	-32		116		FRTBC	3						Drinking from trough
4496	9/07/2018		Armadale Rd	Armadale	-32		115		FRTBC		2		Marri - seeds			
7936	9/07/2018		Roost, Admiral Rd	Byford	-32		116		Baudin's	10						
4497	10/07/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			
4498	10/07/2018		South Western Hwy	Byford	-32		116		Baudin's	15		Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
4499	10/07/2018		South Western Hwy	Byford	-32			116	FRTBC				Marri - seeds			
4500	10/07/2018		South Western Hwy	Mundijong	-32			116	FRTBC				Marri - seeds			
4501	10/07/2018		South Western Hwy	Serpentine	-32			116	FRTBC				Marri - seeds			
4502	10/07/2018		South Western Hwy	Serpentine	-32			116	FRTBC				Marri - seeds			
4503	10/07/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4504	10/07/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4505	10/07/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4506	10/07/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4507	11/07/2018		South Western Hwy	Coolup	-32			115	FRTBC	2						Overhead
7947	11/07/2018	06:25	Roost, Admiral Rd	Byford	-32			116	Baudin's	0						None at roost
17279	11/07/2018	6:50	Edward St	Kenwick	-32			115	FRTBC	0						No birds seen in Grove Rd, Edward St or Brook Rd
17061	12/07/2018		Settlers Common	Armadale	-32			116	FRTBC	1						Chick banded
17062	12/07/2018		Settlers Common	Armadale	-32			116	FRTBC							Chewed hollow in Marri.
17175	12/07/2018		Settlers Common	Bedforddale	-32			116	FRTBC							Chick banded from nest box
17176	12/07/2018		Settlers Common	Bedforddale	-32			116	FRTBC							Well chewed hollow in Marri
17177	12/07/2018		Nest 1370, Oban Loop	Bedforddale	-32			116	FRTBC							No flush
17178	12/07/2018		Nest 1380, Oban Loop	Bedforddale	-32			116	FRTBC							No flush
17063	14/07/2018		Albany Hwy	Gosnells	-32			116	FRTBC	2						Overhead
17064	14/07/2018		Bunnings Store, Maddington	Maddington	-32			116	FRTBC	2						
17065	14/07/2018		Kent St Weir	Wilson	-32			115	FRTBC	0						Dawn to 10:00
4508	16/07/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
4509	16/07/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC				Marri - seeds			
4510	16/07/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC	2						Calling from Marri verge trees
4511	16/07/2018		Brookton Hwy	Dale	-32			116	FRTBC	2						
4512	16/07/2018		Brookton Hwy	Dale	-32			116	Carnaby's				Sheoak - seeds			
4513	16/07/2018		Brookton Hwy	Roleystone	-32			116	FRTBC				Marri - seeds			
4514	16/07/2018		Brookton Hwy	Roleystone	-32			116	FRTBC							
4515	16/07/2018		Brookton Hwy	Roleystone	-32			116	FRTBC							
4518	17/07/2018		Nanga Brook Rd	Waroona	-32			115	Baudin's				Marri - seeds			
4519	17/07/2018		Nanga Brook Rd	Waroona	-32			115	FRTBC				Marri - seeds			
4520	17/07/2018		Nanga Brook Rd	Waroona	-32			115	Baudin's				Marri - seeds			
4521	17/07/2018		Nanga Brook Rd	Waroona	-32			115	Baudin's				Marri - seeds			
4522	17/07/2018		Nanga Brook Rd	Waroona	-32			115	FRTBC				Marri - seeds			
4523	17/07/2018		South Western Hwy	Serpentine	-32			115	FRTBC				Marri - seeds			
4524	17/07/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4525	17/07/2018		South Western Hwy	Serpentine	-32			116	Baudin's				Marri - seeds			
4526	17/07/2018		South Western Hwy	Cardup	-32			116	Baudin's				Marri - seeds			
4527	19/07/2018		Brookton Hwy	Roleystone	-32			116	FRTBC				Marri - seeds			
4528	19/07/2018		Brookton Hwy	Dale	-32			116	FRTBC				Jarrah - seeds			
4529	23/07/2018		Gobby Rd	Keysbrook	-32			115	Baudin's	3						Perched in dead tree
4530	23/07/2018		South Western Hwy	Serpentine	-32			115	FRTBC	3						Overhead
4531	23/07/2018		South Western Hwy	Serpentine	-32			115	FRTBC				Jarrah - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		115									
4532	23/07/2018		South Western Hwy	Serpentine	-32		115		FRTBC			Jarrah - seeds				
4533	23/07/2018		Albany Hwy	Armadale	-32		116		FRTBC			Jarrah - seeds				
4534	23/07/2018		Albany Hwy	Armadale	-32		116		FRTBC			Jarrah - seeds				
4535	26/07/2018		Gobby Rd	Keysbrook	-32		115		FRTBC			Jarrah - seeds				
4536	29/07/2018		Brookton Hwy	Kelmscott	-32		116		FRTBC			Jarrah - seeds				
4537	30/07/2018		Brookton Hwy	Dale	-32		116		FRTBC			Jarrah - seeds				
4538	30/07/2018		Brookton Hwy	Dale	-32		116		FRTBC			Jarrah - seeds				
4539	30/07/2018		Brookton Hwy	Dale	-32		116		FRTBC			Jarrah - seeds				
4540	30/07/2018		Brookton Hwy	Dale	-32		116		FRTBC			Jarrah - seeds				
4541	30/07/2018		Brookton Hwy	Dale	-32		116		FRTBC			Jarrah - seeds				
4542	30/07/2018		Brookton Hwy	Dale	-32		116		Carnaby's							Head south
4543	30/07/2018		Coolgardie St	Mundaring	-31		116		FRTBC			Marri - seeds				
4544	30/07/2018	9:40	Coolgardie St	Mundaring	-31		116		Carnaby's	2		Hakea sp.				Have photo
4545	30/07/2018		Mundaring Weir Rd	Mundaring	-31		116		FRTBC			Marri - seeds				
4546	30/07/2018		Mundaring Weir Rd	Mundaring	-31		116		FRTBC			Marri - seeds				
4547	30/07/2018		Mundaring Weir Rd	Mundaring	-31		116		FRTBC			Marri - seeds				
4548	30/07/2018		Aldersyde Rd	Bickley	-31		116		FRTBC			Marri - seeds				
4549	31/07/2018		Canning Rd	Victoria Dam	-32		116		Baudin's	4		Marri - seeds				
4550	31/07/2018		Canning Rd	Victoria Dam	-32		116		Baudin's			Marri - seeds				
4551	31/07/2018		Canning Rd	Victoria Dam	-32		116		Baudin's			Marri - seeds				
4552	31/07/2018		Gardiner Rd	Araluen	-32		116		Baudin's			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
4553	31/07/2018		Croyden Rd	Araluen	-32		116		Baudin's				Marri - seeds			
4554	31/07/2018	14:05	McNess Dve	Araluen	-32		116		FRTBC		3					
4555	31/07/2018		McNess Dve	Araluen	-32		116		Baudin's				Marri - seeds			
4556	31/07/2018		McNess Dve	Araluen	-32		116		Baudin's				Marri - seeds			
4557	1/08/2018		Tonkin Hwy	Forrestfield	-32		116		FRTBC	5						Overhead
4558	1/08/2018		South Western Hwy	Serpentine	-32		116		FRTBC				Marri - seeds			
4559	2/08/2018		South Western Hwy	Serpentine	-32		116		FRTBC				Marri - seeds			
4560	2/08/2018		South Western Hwy	Serpentine	-32		115		FRTBC				Marri - seeds			
4561	2/08/2018		South Western Hwy	Serpentine	-32		115		FRTBC				Marri - seeds			
4562	2/08/2018		Sharp Rd	North Dandalup	-32		116		Baudin's							
4563	2/08/2018		Albany Hwy	Armadale	-32		116		FRTBC				Marri - seeds			
17166	2/08/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	5						Drinking from trough
17074	3/08/2018		Lease Rd	Sawyers Valley	-31		116		FRTBC							Nest in Marri
17167	3/08/2018	10:09	Oban Loop	Bedforddale	-32		116		FRTBC	7						Drinking from trough
4564	6/08/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			
4565	6/08/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			
4566	6/08/2018		South Western Hwy	Byford	-32		116		FRTBC				Marri - seeds			
4567	6/08/2018		Nettleton Rd	Byford	-32		116		FRTBC				Marri - seeds			
4568	6/08/2018		Nettleton Rd	Byford	-32		116		FRTBC				Marri - seeds			
4569	6/08/2018		Nettleton Rd	Byford	-32		116		FRTBC				Marri - seeds			
4570	6/08/2018		Old Haul Rd	Wungong Catchment	-32		116		FRTBC				Jarrah - seeds			
4571	6/08/2018		Coronation Rd	Wungong Catchment	-32		116		FRTBC				Jarrah - seeds			
4572	6/08/2018		Coronation Rd	Wungong Catchment	-32		116		FRTBC							Well chewed Marri (dead) hollow

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
4573	6/08/2018		South Western Hwy	Armadale	-32		116		FRTBC				Marri - seeds			
4574	6/08/2018		South Western Hwy	Armadale	-32		116		FRTBC				Marri - seeds			
4575	6/08/2018		Scrivener Rd	Serpentine	-32		115		FRTBC				Marri - seeds			
4576	6/08/2018		Scrivener Rd	Serpentine	-32		115		FRTBC	2						
4577	6/08/2018		Scrivener Rd	Serpentine	-32		115		FRTBC	2						
4578	6/08/2018		Scrivener Rd	Serpentine	-32		115		Baudin's				Marri - seeds			
4579	6/08/2018		Scrivener Rd	Serpentine	-32		115		Baudin's				Marri - seeds			
4580	6/08/2018		Scrivener Rd	Serpentine	-32		115		Baudin's				Marri - seeds			
4581	6/08/2018		Scrivener Rd	Serpentine Hills	-32		116		FRTBC				Jarrah - seeds			
7875	6/08/2018		Buckingham Rd	Kelmscott	-32		116		Baudin's	28						Overhead
10919	6/08/2018		Buckingham Rd	Kelmscott	-32		116		Carnaby's							Few small groups heard - large group no longer here
17066	6/08/2018		Buckingham Rd	Kelmscott	-32		116		FRTBC							Few small groups
4582	7/08/2018		Coronation Rd	Wungong Catchment	-32		116		FRTBC							Well chewed Marri hollow
4583	7/08/2018		Canning Rd	Victoria Dam	-32		116		FRTBC							Well chewed Marri (dead) hollow
4584	7/08/2018		Canning Rd	Victoria Dam	-32		116		FRTBC	7		Jarrah - seeds				
4585	7/08/2018		Canning Rd	Victoria Dam	-32		116		Baudin's	2						
4586	7/08/2018		Canning Rd	Victoria Dam	-32		116		Baudin's				Marri - seeds			
4587	7/08/2018		Canning Rd	Victoria Dam	-32		116		Baudin's				Marri - seeds			
4588	7/08/2018		Canning Rd	Victoria Dam	-32		116		Baudin's				Marri - seeds			
4589	7/08/2018		Canning Rd	Victoria Dam	-32		116		Baudin's				Marri - seeds			
4590	7/08/2018		Canning Rd	Victoria Dam	-32		116		FRTBC				Marri - seeds			
10920	7/08/2018		Nest 016, Scrivener Rd	Serpentine Hills	-32		116		Carnaby's	2						
17168	7/08/2018	17:00	Oban Loop	Bedfordale	-32		116		FRTBC	3						Drinking from trough

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115								
17280	7/08/2018	6:50	Edward St	Kenwick	-32			115	FRTBC	20						Flew over roost area and 2 birds in River Gums at roost site
17281	8/08/2018		Edward St	Kenwick	-32			115	FRTBC	7						In River Gums
7937	9/08/2018		Oban Loop	Bedforddale	-32			116	Baudin's	13						Perched in Jarrah
4591	10/08/2018		Springfield Rd	Canning Dam	-32			116	FRTBC		1					
4592	10/08/2018		Albany Hwy	Kelmscott	-32			116	FRTBC				Marri - seeds			
4593	10/08/2018		South Western Hwy	Keysbrook	-32			116	FRTBC				Marri - seeds			
4594	10/08/2018		South Western Hwy	Keysbrook	-32			115	Baudin's				Marri - seeds			
4595	10/08/2018		South Western Hwy	Keysbrook	-32			115	Baudin's				Marri - seeds			
4596	10/08/2018		Gobby Rd	North Dandalup	-32			116	FRTBC				Marri - seeds			
10921	10/08/2018	08:30	Albany Hwy	Bedforddale	-32			116	Carnaby's	30						Possibly feeding on magnolias
4597	11/08/2018		Buckingham Rd	Kelmscott	-32			116	FRTBC	3						Head to coastal plain
11201	11/08/2018		Albany Hwy	Kelmscott	-32			116	Carnaby's	7						
17179	12/08/2018		Nest 099, near Waterwheel Rd	Armadale	-32			116	FRTBC							No flush
17180	12/08/2018		Oban Loop	Bedforddale	-32			116	FRTBC	2						Male making breeding call
17181	12/08/2018	17:20	Oban Loop	Bedforddale	-32			116	FRTBC	2						Perched in Jarrah before drinking from trough. Female bathed 3 times. Lowering body into water
17182	12/08/2018	17:41	Oban Loop	Bedforddale	-32			116	FRTBC	5						Drinking from trough
17183	12/08/2018	16:25	Oban Loop	Bedforddale	-32			116	FRTBC	7						Drinking from trough
17184	14/08/2018	17:30	Oban Loop	Bedforddale	-32			116	FRTBC	8						Drinking from trough
4598	15/08/2018		South Western Hwy	Byford	-32			116	FRTBC				Marri - seeds			
4599	15/08/2018		South Western Hwy	Byford	-32			116	Baudin's				Marri - seeds			
4600	15/08/2018		South Western Hwy	Cardup	-32			115	Baudin's				Marri - seeds			
4601	15/08/2018		South Western Hwy	Mundijong	-32			115	Baudin's				Marri - seeds			
4602	15/08/2018		South Western Hwy	Mundijong	-32			115	FRTBC		2					

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		115									
4603	15/08/2018		Randell Rd	Mundijong	-32		115		FRTBC			Marri - seeds				
4604	15/08/2018		Randell Rd	Mundijong	-32		115		FRTBC			Marri - seeds				
4605	15/08/2018		South Western Hwy	Mundijong	-32		115		FRTBC		Marri - seeds					
11202	18/08/2018		Albany Hwy	Kelmscott	-32		116		Carnaby's	8						Heading NW
11203	18/08/2018		Oban Loop	Bedforddale	-32		116		Carnaby's	3						Drinking from trough
17185	18/08/2018	17:20	Oban Loop	Bedforddale	-32		116		FRTBC	3						Drinking from trough
11204	19/08/2018		Oban Loop	Bedforddale	-32		116		Carnaby's	13						
4678	22/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Jarrah - seeds				
4679	22/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Jarrah - seeds				
4680	22/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4681	22/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4682	22/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4683	22/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4684	22/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Jarrah - seeds				
17282	22/08/2018	7:00	Roost, Edward St	Kenwick	-32		115		FRTBC	0						None recorded in the area
17295	22/08/2018	7:00	Roost, Edward St	Kenwick	-32		115		FRTBC	0						
4687	23/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4688	23/08/2018		Nanga Rd	Nanga	-32		116		FRTBC			Marri - seeds				
4689	23/08/2018		Nanga Rd	Dwellingup	-32		116		FRTBC	17						
4690	23/08/2018		Nanga Rd	Dwellingup	-32		116		FRTBC							
4691	23/08/2018	17:00	Del Park Rd	Dwellingup	-32		116		FRTBC	2						Overhead
17186	23/08/2018	18:00	Oban Loop	Bedforddale	-32		116		FRTBC	13						Drinking from trough
4692	26/08/2018		Del Park Rd	Dwellingup	-32		115		Baudin's	70		Marri - seeds				Perched in Marri
4693	26/08/2018		Nanga Rd	Dwellingup	-32		116		FRTBC			Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
4694	26/08/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			
4695	26/08/2018		Nanga Rd	Nanga	-32			116	FRTBC				Marri - seeds			
4696	26/08/2018		Nanga Rd	Nanga	-32			116	FRTBC				Jarrah - seeds			
17187	26/08/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
4697	27/08/2018		Nanga Rd	Nanga	-32			116	FRTBC				Jarrah - seeds			
7878	28/08/2018		Ambergate Reserve	Busselton	-33			115	Baudin's				Marri - seeds - green			
17188	28/08/2018	6:45	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
4698	30/08/2018		Buckingham Rd	Kelmscott	-34			117	Baudin's	7						Heading north
11205	31/08/2018		Hospital Area	Joondalup	-32			115	Carnaby's	11						Flying over Tuarts
17189	2/09/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	5						Drinking from trough
4699	3/09/2018	6:30	Del Park Rd	North Dandalup	-32			115	Baudin's	30						Overhead
4700	3/09/2018		Del Park Rd	North Dandalup	-32			116	Baudin's				Marri - seeds			
4701	3/09/2018		Hoffman Rd	Yarloop	-32			115	FRTBC				Marri - seeds			
4702	3/09/2018		Gull Rd	Serpentine	-32			115	FRTBC				Marri - seeds			
4703	3/09/2018		Gull Rd	Serpentine	-32			115	FRTBC				Marri - seeds			
4704	3/09/2018		Gull Rd	Serpentine	-32			115	FRTBC				Marri - seeds			
4705	3/09/2018		Gull Rd	Serpentine	-32			115	FRTBC				Marri - seeds			
4706	3/09/2018		Gull Rd	Serpentine	-32			115	FRTBC				Marri - seeds			
4707	3/09/2018		South Western Hwy	Mundijong	-32			115	FRTBC				Marri - seeds			
4708	3/09/2018		South Western Hwy	Mundijong	-32			116	FRTBC				Jarrah - seeds			
4709	3/09/2018		Gobby Rd	Keysbrook	-32			115	FRTBC				Marri - seeds			
4710	3/09/2018		Gobby Rd	Keysbrook	-32			116	FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
17190	3/09/2018		Oban Loop	Bedforddale	-32		116		FRTBC	2						Male with unusual call has been here all year
17191	3/09/2018		Oban Loop	Bedforddale	-32		116		FRTBC	12						Flew north after drinking
4712	5/09/2018		Fernie Rd	Morangup	-31		116		Baudin's				Marri - seeds			
4713	5/09/2018		Fernie Rd	Morangup	-31		116		Baudin's				Marri - seeds			
4714	5/09/2018		Fernie Rd	Morangup	-31		116		Baudin's				Marri - seeds			
4715	5/09/2018		Fernie Rd	Morangup	-31		116		Baudin's				Marri - seeds			
4716	5/09/2018		Fernie Rd	Morangup	-31		116		Baudin's				Marri - seeds			
4717	5/09/2018		Fernie Rd	Morangup	-31		116		Baudin's				Marri - seeds			
17192	5/09/2018	17:50	Oban Loop	Bedforddale	-32		116		FRTBC							Male with screaming call in Jarrah
17283	5/09/2018	7:00	Roost, Edward St	Kenwick	-32		115		FRTBC	0						None recorded in the area
17296	5/09/2018	6:45	Roost, Edward St	Kenwick	-32		115		FRTBC	0						
4718	6/09/2018		Great Eastern Hwy	Sawyers Valley	-31		116		Baudin's				Marri - seeds			
4719	6/09/2018		Great Eastern Hwy	Sawyers Valley	-31		116		Baudin's				Marri - seeds			
4720	6/09/2018		Great Eastern Hwy	Sawyers Valley	-31		116		Baudin's				Marri - seeds			
4721	6/09/2018		Great Eastern Hwy	Sawyers Valley	-31		116		Baudin's				Marri - seeds			
4722	6/09/2018		Tonkin Hwy	Maddington	-32		116		FRTBC				Marri - seeds			
4723	7/09/2018		Canning Rd	Pickering Brook	-32		116		Carnaby's							Overhead
11206	8/09/2018		Bedforddale Hill Rd	Armadale	-32		116		Carnaby's			Seeding acacia				
17193	8/09/2018	8:30	Oban Loop	Bedforddale	-32		116		FRTBC	7			Marri - seeds			
17194	8/09/2018	7:30	Oban Loop	Bedforddale	-32		116		FRTBC	5						Drinking from trough
17195	8/09/2018	16:30	Oban Loop	Bedforddale	-32		116		FRTBC	1						Single male drinking from trough
17196	8/09/2018	17:30	Oban Loop	Bedforddale	-32		116		FRTBC	5						Perched in Jarrah
17197	8/09/2018	7:30	Oban Loop	Bedforddale	-32		116		FRTBC							
17198	8/09/2018	8:30	Oban Loop	Bedforddale	-32		116		FRTBC	4			Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
17199	8/09/2018	8:30	Oban Loop	Bedforddale	-32		116		FRTBC	19						3 drinking from trough. Others overhead
4724	11/09/2018		Gobby Rd	North Dandalup	-32		116		FRTBC			Marri - seeds				
4725	11/09/2018		Scarp Rd	North Dandalup	-32		116		FRTBC			Marri - seeds				
4726	11/09/2018		Scarp Rd	North Dandalup	-32		116		FRTBC			Marri - seeds				
4727	11/09/2018		Scarp Rd	North Dandalup	-32		116		FRTBC			Marri - seeds				
4728	11/09/2018		Kingsbury Dve	Serpentine Hills	-32		116		FRTBC			Marri - seeds				
17284	12/09/2018		Brook Rd	Kenwick	-32		115		FRTBC	2						Heading east
17285	12/09/2018	7:00	Roost, Edward St	Kenwick	-32		115		FRTBC	0						
17297	12/09/2018		Brook Rd	Gosnells	-32		115		FRTBC	2						Heading east
17298	12/09/2018		Roost, Edward St	Kenwick	-32		115		FRTBC	0						
4730	13/09/2018		Clackline Nature Reserve	Clackline	-31		116		Baudin's				Marri - seeds - brown			
4731	13/09/2018		Clackline Nature Reserve	Clackline	-31		116		Baudin's				Marri - seeds - brown			
4732	13/09/2018		Clackline Nature Reserve	Clackline	-31		116		White-tailed spp.				Banksia menziesii			
4733	13/09/2018		Clackline Nature Reserve	Clackline	-31		116		White-tailed spp.				Banksia menziesii			
4734	13/09/2018		Clackline Nature Reserve	Clackline	-31		116		Baudin's				Marri - seeds - brown			
4735	13/09/2018		Clackline Nature Reserve	Clackline	-31		116		White-tailed spp.				Pingle - clippings			
4736	13/09/2018		Morangup Nature Reserve	Morangup	-31		116		Baudin's	10		Marri - seeds				

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-31			116								
4737	13/09/2018	15:30	Morangup Nature Reserve	Morangup	-31			116	Carnaby's	350				Pingle - nectar		
17200	13/09/2018	16:30	Oban Loop	Bedforddale	-32			116	FRTBC	8						Drinking from trough
7948	14/09/2018	08:30	Bungendore Park, Admiral Rd entrance	Armadale	-32			116	Baudin's	19						Flying over
7949	14/09/2018	08:30	Bungendore Park, Admiral Rd entrance	Armadale	-32			116	Baudin's	11						Flying north
17235	14/09/2018	14:50	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
17201	15/09/2018	6:00	Oban Loop	Bedforddale	-32			116	FRTBC	10						Drinking from trough
4738	16/09/2018		South Western Hwy	Keysbrook	-32			115	FRTBC							
4739	16/09/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Marri - seeds			
4740	16/09/2018		South Western Hwy	Waroona	-32			115	Baudin's				Marri - seeds			
4741	16/09/2018		South Western Hwy	Waroona	-32			115	FRTBC				Marri - seeds			
4742	16/09/2018		South Western Hwy	Waroona	-32			115	FRTBC				Marri - seeds			
4743	16/09/2018		South Western Hwy	Waroona	-32			115	Baudin's	6			Marri - seeds			
4744	16/09/2018		South Western Hwy	Waroona	-32			115	FRTBC				Marri - seeds			
4745	16/09/2018		South Western Hwy	Waroona	-32			115	FRTBC				Marri - seeds			
4746	16/09/2018		Logue Brook Dam Rd	Waroona	-32			115	FRTBC				Marri - seeds			
4747	16/09/2018		Logue Brook Dam Rd	Waroona	-32			115	FRTBC				Marri - seeds			
17202	16/09/2018	7:00	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
4779	17/09/2018		Waroona Rd	Nanga	-32			116	FRTBC	10			Blackbutt - seeds			
4780	17/09/2018		Nanga Rd	Nanga	-32			116	FRTBC	5						
17203	19/09/2018	17:15	Oban Loop	Bedforddale	-32			116	FRTBC	5						Drinking from trough
17286	19/09/2018	6:45	Roost, Edward St	Kenwick	-32			115	FRTBC	2						In River Gums
17299	19/09/2018	6:45	Roost, Edward St	Kenwick	-32			115	FRTBC	2						2 perched at NW corner

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
17204	20/09/2018	13:00	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
17205	20/09/2018	16:40	Oban Loop	Bedforddale	-32			116	FRTBC	5						Drinking from trough
7950	23/09/2018	07:30	Oban Loop	Bedforddale	-32			116	Baudin's	10						
17206	23/09/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
17207	23/09/2018	18:00	Oban Loop	Bedforddale	-32			116	FRTBC	14						Drinking from trough
17236	23/09/2018	19:00	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
17208	25/09/2018	18:45	Oban Loop	Bedforddale	-32			116	FRTBC	6						Drinking from trough
4838	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4839	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4840	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4841	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4842	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC				Jarrah - seeds			
4843	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4844	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4845	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4846	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4847	26/09/2018	16:45	Nanga Rd	Dwellingup	-32			116	FRTBC		2					
4848	26/09/2018	17:00	South Western Hwy	Dwellingup	-32			115	FRTBC		2					
4849	26/09/2018		South Western Hwy	Serpentine	-32			115	Baudin's				Marri - seeds			
4850	26/09/2018		South Western Hwy	Serpentine	-32			115	FRTBC				Marri - seeds			
4851	26/09/2018		South Western Hwy	Mundijong	-32			116	Baudin's				Marri - seeds			
4852	26/09/2018		South Western Hwy	Mundijong	-32			116	Baudin's				Marri - seeds			
4853	26/09/2018		South Western Hwy	Mundijong	-32			116	Baudin's				Marri - seeds			
4854	26/09/2018		South Western Hwy	Cardup	-32			116	Baudin's	1			Marri - seeds			Feeding on ground under Marri
4855	26/09/2018		South Western Hwy	Cardup	-32			116	Baudin's				Marri - seeds			
4856	26/09/2018		South Western Hwy	Cardup	-32			116	Baudin's				Marri - seeds			
17287	26/09/2018	6:30	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
17300	26/09/2018	6:40	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
4857	27/09/2018		Varis Rd	Bowelling	-33			116	FRTBC		2					

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		116									
17209	27/09/2018	14:53	Oban Loop	Bedforddale	-32		116		FRTBC	3						Drinking from trough
17210	28/09/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	8						Scream call heard from male
17211	29/09/2018		Oban Loop	Bedforddale	-32		116		FRTBC	4						Pr mating in Jarrah and female flew into forest
4920	2/10/2018		South Western Hwy	Mundijong	-32		116		Baudin's				Marri - seeds			
4921	2/10/2018		South Western Hwy	Hamel	-32		115		FRTBC				Marri - seeds			
4922	3/10/2018	7:30	Brookton Hwy	Roleystone	-32		116		FRTBC	5		Marri - seeds				
17288	3/10/2018		Roost, Edward St	Kenwick	-32		115		FRTBC	0						
4928	4/10/2018		Kulin-Holt Rock Rd	Hyden	-32		118		Carnaby's	24						Overhead
7939	4/10/2018		Larsen St	Byford	-32		116		Baudin's	2		Marri - seeds				
17212	4/10/2018	15:00	Oban Loop	Bedforddale	-32		116		FRTBC	4						Drinking from trough
17213	4/10/2018	17:30	Oban Loop	Bedforddale	-32		116		FRTBC	2						Drinking from trough
17214	4/10/2018	18:20	Oban Loop	Bedforddale	-32		116		FRTBC	6						Drinking from trough
17215	7/10/2018	17:30	Oban Loop	Bedforddale	-32		116		FRTBC	11						Drinking from trough
4929	9/10/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
4930	9/10/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
4931	9/10/2018		Gobby Rd	Keysbrook	-32		115		FRTBC		3		Marri - seeds			
4932	9/10/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
4933	9/10/2018		Gobby Rd	Keysbrook	-32		115		FRTBC				Marri - seeds			
4934	9/10/2018		Gobby Rd	Keysbrook	-32		116		FRTBC				Marri - seeds			
4935	11/10/2018		Kingsbury Dve	Myara	-32		116		FRTBC				Marri - seeds			
4936	11/10/2018		Gobby Rd	Keysbrook	-32		116		FRTBC	9		Marri - seeds				Single feeding on ground
17216	11/10/2018	17:30	Oban Loop	Bedforddale	-32		116		FRTBC	12						Drinking from trough
17217	13/10/2018	18:00	Oban Loop	Bedforddale	-32		116		FRTBC	11						Drinking from trough
17067	14/10/2018		Buckingham Rd	Kelmscott	-32		116		FRTBC	3						Head east
17218	15/10/2018	16:18	Oban Loop	Bedforddale	-32		116		FRTBC	3						Drinking from trough

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			116								
17219	15/10/2018	17:41	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
4997	16/10/2018		Clackline Nature Reserve	Serpentine	-31			116	Carnaby's	2						
4998	16/10/2018		Clackline Nature Reserve	Serpentine	-31			116	Carnaby's	2						
17220	16/10/2018	17:15	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
17221	16/10/2018	18:00	Oban Loop	Bedforddale	-32			116	FRTBC	6						Drinking from trough
5002	19/10/2018		Brand Hwy	Muchea	-31			116	Carnaby's	20						
17222	20/10/2018	9:00	Oban Loop	Bedforddale	-32			116	FRTBC	3						Drinking from trough
17223	20/10/2018	17:17	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
7876	22/10/2018	17:00	Buckingham Rd	Kelmscott	-32			116	Baudin's	6						Head east
11112	22/10/2018		Nestbox 457, Great Northern Hwy	Bindoon	-32			116	Carnaby's							Female flushed
17224	22/10/2018	16:30	Oban Loop	Bedforddale	-32			116	FRTBC	3						Drinking from trough
17225	22/10/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	5						Drinking from trough
17226	22/10/2018	18:45	Oban Loop	Bedforddale	-32			116	FRTBC	2						Drinking from trough
17237	22/10/2018	14:35	Bedforddale Hill Rd	Bedforddale	-32			116	FRTBC	2						
5008	24/10/2018		Albany Hwy	Monadnocks	-32			116	FRTBC				Marri - seeds			
5009	24/10/2018		Scarp Rd	Myara	-32			116	FRTBC				Marri - seeds			
5010	24/10/2018		South Western Hwy	Mundijong	-32			116	FRTBC				Marri - seeds			
5011	24/10/2018		South Western Hwy	Mundijong	-32			115	Baudin's	4						
5012	24/10/2018		South Western Hwy	Keysbrook	-32			115	FRTBC	2						
5013	24/10/2018		South Western Hwy	North Dandalup	-32			115	Baudin's	3						
5014	24/10/2018		South Western Hwy	Pinjarra	-32			115	FRTBC	4						
5015	24/10/2018		South Western Hwy	Coolup	-32			115	FRTBC	4						
5016	24/10/2018		South Western Hwy	Coolup	-32			115	FRTBC	2						

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		115									
5017	24/10/2018		South Western Hwy	Coolup	-32		115		FRTBC	2						
17227	24/10/2018	17:00	Oban Loop	Bedforddale	-32		116		FRTBC	4						Drinking from trough
17301	24/10/2018	6:40	Roost, Edward St	Kenwick	-32		115		FRTBC	0						
5035	25/10/2018			Wagerup	-32		115		FRTBC		2		Marri - seeds			
5036	25/10/2018			Wagerup	-32		115		FRTBC		2		Marri - seeds			
5037	25/10/2018		Riversdale Rd	Cookernup	-32		115		FRTBC				Marri - seeds			
5038	25/10/2018		Riversdale Rd	Cookernup	-32		115		FRTBC				Marri - seeds			
5039	25/10/2018		Thompson Rd	Cookernup	-33		115		FRTBC				Marri - seeds			
5040	25/10/2018		Brockman Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5041	25/10/2018		Hayes Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5042	25/10/2018		Mclure Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5043	25/10/2018		Mclure Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5044	25/10/2018		Mclure Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5045	25/10/2018		Mclure Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5046	25/10/2018		Mayfield Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5047	25/10/2018		Mayfield Rd	Yarloop	-32		115		FRTBC				Marri - seeds			
5048	25/10/2018		Mayfield Rd	Coolup	-32		115		FRTBC				Marri - seeds			
5049	25/10/2018		South Western Hwy	Coolup	-32		115		FRTBC				Marri - seeds			
5050	25/10/2018		South Western Hwy	Pinjarra	-32		115		FRTBC	1						
5051	25/10/2018		South Western Hwy	Pinjarra	-32		115		FRTBC	2						
5052	25/10/2018		South Western Hwy	North Dandalup	-32		115		FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115								
5053	25/10/2018	17:20	South Western Hwy	North Dandalup	-32			115	FRTBC	1						Heading east
5054	25/10/2018		South Western Hwy	Byford	-32			116	Baudin's			Marri - seeds from fallen nuts				
5055	25/10/2018		South Western Hwy	Serpentine	-32			115	FRTBC		2					
5056	25/10/2018		South Western Hwy	Serpentine	-32			115	FRTBC			Marri - seeds				
7938	25/10/2018		Admiral Rd	Bedforddale	-32			116	Baudin's	15						
17228	25/10/2018	17:55	Oban Loop	Bedforddale	-32			116	FRTBC	14						Drinking from trough
7877	26/10/2018		South Western Hwy	Byford	-32			116	Baudin's	30						
17229	26/10/2018	17:55	Oban Loop	Bedforddale	-32			116	FRTBC	9						Drinking from trough
7940	27/10/2018		Bungendore Park, near Albany Hwy entrance	Armadale	-32			116	Baudin's	22						Heading south
7941	27/10/2018		Bungendore Park, Admiral Rd entrance	Armadale	-32			116	Baudin's		5					
17230	28/10/2018		Oban Loop	Bedforddale	-32			116	FRTBC	11						
17238	28/10/2018		Nest 1346, Oban Loop	Bedforddale	-32			116	FRTBC	2						
17239	28/10/2018		Nest 1346, Oban Loop	Bedforddale	-32			116	FRTBC							
17240	28/10/2018		Oban Loop	Bedforddale	-32			116	FRTBC	4		Sheoak - seeds				
5107	29/10/2018		South Western Hwy	Coolup	-32			115	FRTBC			Marri - seeds				
5108	29/10/2018		South Western Hwy	North Dandalup	-32			115	FRTBC			Marri - seeds				
10752	29/10/2018		Dewars Pool Rd	Bindoon	-32			116	Carnaby's			Marri - seeds				
17231	29/10/2018	17:46	Oban Loop	Bedforddale	-32			116	FRTBC	14						Drinking from trough
5130	30/10/2018	16:15	South Western Hwy	Keysbrook	-32			115	FRTBC	3						
7942	30/10/2018		Town Centre	Byford	-32			116	Baudin's	6						

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32			115								
17290	30/10/2018	6:45	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
17291	31/10/2018	7:00	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
17232	1/11/2018	17:59	Oban Loop	Bedforddale	-32			116	FRTBC	17						Drinking from trough
17233	4/11/2018	16:52	Nest 1346, Oban Loop	Bedforddale	-32			116	FRTBC							
5131	5/11/2018		Brookton Hwy	Dale	-32			116	FRTBC	4						
5132	6/11/2018		Gobby Rd	Keysbrook	-32			115	FRTBC		5		Marri - seeds			
5133	6/11/2018		Gobby Rd	Keysbrook	-32			115	FRTBC		5		Marri - seeds			
5134	6/11/2018		Gobby Rd	Keysbrook	-32			115	FRTBC		2		Marri - seeds			
5135	6/11/2018		Scarp Rd	North Dandalup	-32			116	FRTBC		2		Marri - seeds			
5136	6/11/2018		Scarp Rd	North Dandalup	-32			116	FRTBC		2		Marri - seeds			
5137	7/11/2018		Kingsbury Dve	Serpentine Hills	-32			116	FRTBC				Marri - seeds			
5138	7/11/2018		Kingsbury Dve	Serpentine Hills	-32			116	FRTBC				Marri - seeds			
5140	13/11/2018		South Western Hwy	Byford	-32			116	FRTBC				Marri - seeds			
5141	13/11/2018		South Western Hwy	Byford	-32			116	FRTBC				Marri - seeds			
5142	13/11/2018		South Western Hwy	Serpentine	-32			115	FRTBC				Marri - seeds			
5143	13/11/2018		South Western Hwy	Serpentine	-32			115	FRTBC				Marri - seeds			
5144	13/11/2018		South Western Hwy	Serpentine	-32			115	FRTBC				Marri - seeds			
5145	13/11/2018		South Western Hwy	Serpentine	-32			115	FRTBC	2						Chased by magpies
5146	13/11/2018		South Western Hwy	Serpentine	-32			115	FRTBC				Marri - seeds			
5147	13/11/2018		South Western Hwy	Keysbrook	-32			115	FRTBC				Marri - seeds			
5148	13/11/2018		South Western Hwy	North Dandalup	-32			115	FRTBC				Marri - seeds			

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-32		115									
5149	13/11/2018		South Western Hwy	North Pinjarra	-32		115		FRTBC			Marri - seeds				
5150	13/11/2018		South Western Hwy	Cookernup	-33		115		FRTBC			Marri - seeds				
5151	13/11/2018		South Western Hwy	Cookernup	-33		115		FRTBC			Marri - seeds				
17075	13/11/2018		Dampier Park	Mullaloo	-31		115		FRTBC	12		Ilyarrie - seeds				
5182	15/11/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
5183	15/11/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
5184	15/11/2018		South Western Hwy	Donnybrook	-33		115		FRTBC			Marri - seeds				
5185	15/11/2018		South Western Hwy	Donnybrook	-33		115		FRTBC			Marri - seeds				
5186	15/11/2018		South Western Hwy	Donnybrook	-33		115		FRTBC			Marri - seeds				
5187	15/11/2018		South Western Hwy	Donnybrook	-33		115		FRTBC			Marri - seeds				
5188	15/11/2018		South Western Hwy	Donnybrook	-33		115		FRTBC			Marri - seeds				
5189	15/11/2018		South Western Hwy	Donnybrook	-33		115		FRTBC			Marri - seeds				
5190	15/11/2018		South Western Hwy	Harvey	-33		115		FRTBC			Marri - seeds				
5191	15/11/2018		South Western Hwy	Harvey	-33		115		FRTBC			Marri - seeds				
5192	15/11/2018		South Western Hwy	Cookernup	-33		115		Baudin's	20						Overhead
5193	15/11/2018		South Western Hwy	Coolup	-32		115		FRTBC			Marri - seeds				
5194	15/11/2018		South Western Hwy	Coolup	-32		115		FRTBC			Marri - seeds				
17350	16/11/2018		South Western Hwy	Kirup	-33		115		FRTBC			Marri - seeds				
17352	16/11/2018		South Western Hwy	Mullalyup	-33		115		FRTBC			Marri - seeds				
17367	16/11/2018		South Western Hwy	Greenbushes	-33		116		FRTBC			Marri - seeds				
17069	18/11/2018		Lease Rd	Sawyers Valley	-31		116		FRTBC							Nest in Marri

Record No.	Date	Time	Location 1	Location 3	Latitude and Longitude co-ordinates				Cockatoo species	No. birds	Calling	Food	Recent evidence of feeding	Old evidence of feeding	Amount of feeding	Comments
					-31			116								
17070	18/11/2018		Lease Rd	Sawyers Valley	-31			116	FRTBC							Nest in Marri
5196	19/11/2018		Balmoral Rd	Jarrahdale	-32			116	FRTBC				Marri - seeds			
5197	19/11/2018		Balmoral Rd	Jarrahdale	-32			116	FRTBC				Marri - seeds			
5198	19/11/2018		Scarp Rd	North Dandalup	-32			116	FRTBC				Marri - seeds			
17241	19/11/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	14						Drinking from trough
17292	20/11/2018	7:00	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
17302	20/11/2018	7:00	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
17293	21/11/2018	7:00	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
17242	23/11/2018	17:20	Oban Loop	Bedforddale	-32			116	FRTBC	19						Drinking from trough
17243	24/11/2018		Nest 1346, Oban Loop	Bedforddale	-32			116	FRTBC							
17244	24/11/2018		Nest 1410, Oban Loop	Bedforddale	-32			116	FRTBC							
17245	25/11/2018	12:00	Oban Loop	Bedforddale	-32			116	FRTBC	6						Drinking from trough
17246	25/11/2018	18:00	Oban Loop	Bedforddale	-32			116	FRTBC	15						Drinking from trough
17247	27/11/2018	17:00	Oban Loop	Bedforddale	-32			116	FRTBC	3						Drinking from trough
17248	27/11/2018	17:15	Oban Loop	Bedforddale	-32			116	FRTBC	4						Drinking from trough
17249	27/11/2018	17:25	Oban Loop	Bedforddale	-32			116	FRTBC	6						Drinking from trough
17294	27/11/2018	7:00	Roost, Edward St	Kenwick	-32			115	FRTBC	0						
17250	28/11/2018		Rails Crescent	Byford	-31			116	FRTBC	6						Drinking from trough
17071	29/11/2018		Lease Rd	Sawyers Valley	-31			116	FRTBC							Nest in Marri
17072	29/11/2018		Lease Rd	Sawyers Valley	-31			116	FRTBC							Nest in Marri
17073	29/11/2018		Lease Rd	Sawyers Valley	-31			116	FRTBC							Nest in Marri
17251	29/11/2018	18:35	Oban Loop	Bedforddale	-32			116	FRTBC	13						Drinking from trough
17252	30/11/2018		Oban Loop	Bedforddale	-32			116	FRTBC							Several calling at 04:50 (still dark)
17253	1/12/2018		Oban Loop	Bedforddale	-32			116	FRTBC	3						
17254	2/12/2018		Nest 1346, Oban Loop	Bedforddale	-32			116	FRTBC							
17255	2/12/2018		Oban Loop	Bedforddale	-32			116	FRTBC	12						Drinking from trough
17289	5/12/2018	7:00	Roost, Edward St	Kenwick	-32			115	FRTBC	0						

Table 3 2018 revisit details of Marri nest trees and hollows found up to 2003

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
0102	Yes	Fallen				On ground 2005	Scarp Road	Serpentine Hills
0010	Yes	Fallen				On ground	Near Scarp Road	Serpentine Hills
0014	Yes	Fallen				New photo	31 Mile Road	Gleneagle
0015	Yes	Fallen				Tree down. Already noted?	Scrivener Road	Serpentine Hills
0022	Yes	Fallen					Tower Road	Collie area
0025	Yes	Fallen				Top of tree missing. No longer viable	Tower Road	Collie area
0018	Yes	Fallen				No photos. Located 1999 on ground in Nov 1999	Bungendore Park	Armadale
0031	Yes	Rotted away				Non-viable. Top missing	Bungendore Park	Armadale
0032	Yes	Fallen				On ground Feb 2003	Near Worsley	Collie area
0033	Yes	Fallen				On ground 2001	Tower Road	Collie area
0041	Yes	Fallen				Top missing. No longer viable	Near Scarp Road	Serpentine Hills
0042	Yes	Fallen				Tree over, 29-11-2012	Near Scarp Road	Serpentine Hills
0044	Yes	Fallen				Top off and no longer viable 29-11-2011	Near Scarp Road	Serpentine Hills
0045	Yes	Prescribed burn				Burnt to ground 19-5-2011	Springfield Road	Wungong
0050	Yes	Wildfire				Burned to a stump 24-1-2005	Brookton Highway	Lesley
0049	Yes	Prescribed burn				Stump only	31 Mile Road	Gleneagle
0089	Yes	Wildfire				Destroyed by fire 22-9-2005	Near Canning Road	Victoria Dam
0094	Yes	Fallen				New photo. Stump only	Hakea Road	Gleneagle
0097	Yes	Wildfire				Burned to a stump 24-1-2005	Boulder Rock	Boulder Rock
0098	Yes	Pushed				Pushed over after fires in 2005	Canning Road	Victoria Dam
0100	Yes	Fire; unknown whether prescribed burn or not				Tree on ground. Burned out at base from last fires	Christmas Tree Well	Dale
0117	Yes	Fallen				On ground	Bungendore Park	Armadale
0118	Yes	Wildfire				Burned to a stump 24-1-05	Boulder Rock	Lesley
0143	Yes	Fallen				Hollow collapsed and tree no longer viable 2008	Near South Coast Highway	Denmark

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
Coolgardie St	Yes	Fallen				Top missing. No longer viable	Coolgardie Street	Mundaring
0019			Yes	Limb fallen		Original hollow missing, but still has other good hollows	Scrivener Road	Serpentine Hills
0023			Yes	Hollow entrance now too small		New photo. Possibly now too small. Burl healed up. No signs.	Tower Road	Collie area
0034			Yes		Yes	New photo. Large hole in side at hollow floor	Bungendore Park	Armadale
0092			Yes	Prescribed burn	Yes	New photo. Stump only. Lost to fires 2017	Hakea Road	Gleneagle
0003		Extant				New photo. Chewing at entrance	Near Scarp Road	Serpentine Hills
0007		Extant				New photo. Heavy chewing	Near Scarp Road	Serpentine Hills
0011		Extant				Extant. New photo 22-2-2018	Scrivener Road	Serpentine Hills
0001 Upper		Extant				New photo. No signs?	Bungendore Park	Armadale
0009		Extant				Extant. New photo 22-2-2018	Scrivener Road	Serpentine Hills
0012		Extant					Illawarra Forest	Karragullen
0004		Extant				New photo. Split in trunk	Scrivener Road	Serpentine Hills
0005		Extant				New photo. Chewed at entrance	Near Scarp Road	Serpentine Hills
0006		Extant				Slight chewing	Near Scarp Road	Serpentine Hills
0008		Extant				Extant. New photo 22-2-2018	Near Scarp Road	Serpentine Hills
0016		Extant				Chewed at entrance. Prospected by Carnaby's 7-8-2018	Scrivener Road	Serpentine Hills
0017		Extant				New photo. Well chewed	Scrivener Road	Serpentine Hills
0020		Extant				New photo. No signs of use	31 Mile Road	Gleneagle
0021		Extant				New photo. Check old photo	Tower Road	Collie area
0024		Extant				New entry used. Old entry unused. Both lead to same chamber.	Tower Road	Collie area
0036		Extant				New photo. Well chewed	31 Mile Road	Gleneagle
0039		Extant				Hole in side now being used as entrance. Well chewed	Kinsella Road	Lesley
0043		Extant					Near Scarp Road	Serpentine Hills

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
0088		Extant				New photo. Chewing at entrance	Bungendore Park	Armadale
0093		Extant				New photo. Well used	Canning Road	Victoria Dam
0096		Extant				New photo	Christmas Tree Well	Dale
0099		Extant				Slight chewing at entrance	Waterwheel Road area	Armadale
0113		Extant				New photo. Chewed at entrance	Bungendore Park	Armadale
0114		Extant				New photo. Hollow entrance now lower and side entry. Well chewed	Scrivener Road	Serpentine Hills

Table 4 2018 revisit details of Marri nest trees and hollows found up to 2008

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
0102	Yes	Fallen				On ground 2005	Scarp Road	Serpentine Hills
0010	Yes	Fallen				On ground	Near Scarp Road	Serpentine Hills
0014	Yes	Fallen				New photo	31 Mile Road	Gleneagle
0015	Yes	Fallen				Tree down. Already noted?	Scrivener Road	Serpentine Hills
0022	Yes	Fallen					Tower Road	Collie area
0025	Yes	Fallen				Top of tree missing. No longer viable	Tower Road	Collie area
0031	Yes	Rotted away				Non-viable. Top missing	Bungendore Park	Armadale
0032	Yes	Fallen				On ground Feb 2003	Near Worsley	Collie area
0033	Yes	Fallen				On ground 2001	Tower Road	Collie area
0041	Yes	Fallen				Top missing. No longer viable	Near Scarp Road	Serpentine Hills
0042	Yes	Fallen				Tree over 29-11-2012	Near Scarp Road	Serpentine Hills
0044	Yes	Fallen				Top off and no longer viable 29-11-2011	Near Scarp Road	Serpentine Hills
0045	Yes	Prescribed burn				Burnt to ground 19-5-2011	Springfield Road	Wungong

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
0050	Yes	Wildfire				Burned to a stump 24-1-2005	Brookton Hwy	Lesley
0049	Yes	Prescribed burn				Stump only	31 Mile Road	Gleneagle
0089	Yes	Wildfire				Destroyed by fire 22-9-2005	Near Canning Road	Victoria Dam
0094	Yes	Fallen				New photo. Stump only	Hakea Road	Gleneagle
0097	Yes	Wildfire				Burned to a stump 24-1-2005	Boulder Rock	Boulder Rock
0098	Yes	Pushed				Pushed over after fires in 2005	Canning Road	Victoria Dam
0100	Yes	Fire but don't know whether prescribed burn or not				Tree on ground. Burned out at base from last fires	Christmas Tree Well	Dale
0117	Yes	Fallen				On ground	Bungendore Park	Armadale
0118	Yes	Wildfire				Burned to a stump 24-1-2005	Boulder Rock	Lesley
0143	Yes	Fallen				Hollow collapsed and tree no longer viable 2008	Near South Coast Highway	Denmark
Coolgardie St	Yes	Fallen				Top missing. No longer viable	Coolgardie Street	Mundaring
0164	Yes	Prescribed burn				Lost to fire 19-5-2011	Springfield Road	Wungong
0165	Yes	Fallen				Top off no longer viable	Bungendore Park	Armadale
0064	Yes	Fallen				Already over 20-3-2007	Springfield Road	Wungong
0067	Yes	Prescribed burn				Burnt to ground 19-5-2011	Springfield Road	Wungong
0199	Yes	Cleared by developers				Tree cleared. 2015?	Stock Road	Stakehill
0080	Yes	Fire but don't know whether prescribed burn or not				Tree missing	Mt Cooke	Cooke
0449	Yes	Fallen				Stump. Not viable.	Coronation Road	Wungong catchment
0018	Yes	Fallen				No photos. Located 1999 on ground in Nov 1999	Bungendore Park	Armadale

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
0019		Extant	Yes	Limb fallen		Original hollow missing but still has other good hollows	Scrivener Road	Serpentine Hills
0023		Extant	Yes	Hollow entrance now too small		New photo. Possibly now too small. Burl healed up. No signs.	Tower Road	Collie area
0034		Extant	Yes		Yes	New photo. Large hole in side at hollow floor	Bungendore Park	Armadale
0092		Extant	Yes	Prescribed burn	Yes	New photo. Stump only. Lost to fires 2017	Hakea Road	Gleneagle
0140		Extant	Yes	Prescribed burn?	Yes	Could form another hollow	Brookton Highway	Lesley
0160		Extant	Yes	Top of tree fallen	Yes	New photo still not viable hollow	Opposite Hakea Road	Gleneagle
0003		Extant				New photo. Chewing at entrance	Near Scarp Road	Serpentine Hills
0007		Extant				New photo. Heavy chewing	Near Scarp Road	Serpentine Hills
0011		Extant				New photo 22-2-2018	Scrivener Road	Serpentine Hills
0001 Upper		Extant				New photo. No signs?	Bungendore Park	Armadale
0009		Extant				New photo 22-2-2018	Scrivener Road	Serpentine Hills
0012		Extant					Illawarra Forest	Karragullen
0004		Extant				New photo. Split in trunk	Scrivener Road	Serpentine Hills
0005		Extant				New photo. Chewed at entrance	Near Scarp Road	Serpentine Hills
0006		Extant				Slight chewing	Near Scarp Road	Serpentine Hills
0008		Extant				New photo 22-2-2018	Near Scarp Road	Serpentine Hills
0016		Extant				Chewed at entrance. Prospected by Carnaby's 7-8-2018	Scrivener Road	Serpentine Hills
0017		Extant				New photo. Well chewed	Scrivener Road	Serpentine Hills
0020		Extant				New photo. No signs of use	31 Mile Road	Gleneagle
0021		Extant				New photo. Check old photo	Tower Road	Collie area

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
0024		Extant				New entry used. Old entry unused. Both lead to same chamber.	Tower Road	Collie area
0036		Extant				New photo. Well chewed	31 Mile Road	Gleneagle
0039		Extant				Hole in side now being used as entrance. Well chewed	Kinsella Road	Lesley
0043		Extant					Near Scarp Road	Serpentine Hills
0088		Extant				New photo. Chewing at entrance	Bungendore Park	Armadale
0093		Extant				New photo. Well used	Canning Road	Victoria Dam
0096		Extant				New photo	Christmas Tree Well	Dale
0099		Extant				Slight chewing at entrance	Waterwheel Road area	Armadale
0113		Extant				New photo. Chewed at entrance	Bungendore Park	Armadale
0114		Extant				New photo. Hollow entrance now lower and side entry. Well chewed	Scrivener Road	Serpentine Hills
0119		Extant				New photo. Heavy chewing	Bungendore Park	Armadale
0144		Extant				New photo. Well used	Springfield Road	Wungong
0145		Extant				Need photo	Hakea Road	Gleneagle
0146		Extant				New photo. No signs of use	Christmas Tree Well	Dale
0147		Extant				New photo. Well used	Springfield Road	Wungong
0150		Extant				New photo. Slight chewing. Splits in trunk. Compare with old photos	Bungendore Park	Armadale
0156		Extant				New photo. Signs of use. Old image is reversed	Ashendon Road, Nest 156	Lesley
0162		Extant				New photo. Heavy chewing	Bungendore Park	Armadale
0163		Extant				New photo. Slight chewing	Springfield Road	Wungong
0177		Extant				New photo. Signs of use?	Brookton Highway	Lesley

Nest No.	Tree lost	Reason for tree loss	Hollow lost	Reason for hollow loss	Could form another hollow	2018 revisit	LOCATION 1	LOCATION 2
0061		Extant				New photo	Springfield Road	Wungong
0062		Extant				New photo	Kalamunda	National Park
0198		Extant				New photo. Top missing off tree, but maybe another hollow lower down. Check photo.	Tower Road	Collie
0349		Extant				New photo. Pair at hollow	Bungendore Park	Armadale
0056		Extant					Canning Road	Victoria Dam
0079		Extant				New photo. Chewing at entrance	Bee Farm Road	Wungong catchment
0085		Extant				Chewing. New photo	Curtis Road	Wungong catchment
0438		Extant				New photo. Old chewing	Curtis Road	Wungong catchment
0444		Extant				New photo 9-3-2018	Near Curtis Road	Wungong catchment
0445		Extant				New photo. Well used	Old Haul Road	Byford
0464		Extant				New photo. No change	Callistemon Road	Wungong catchment

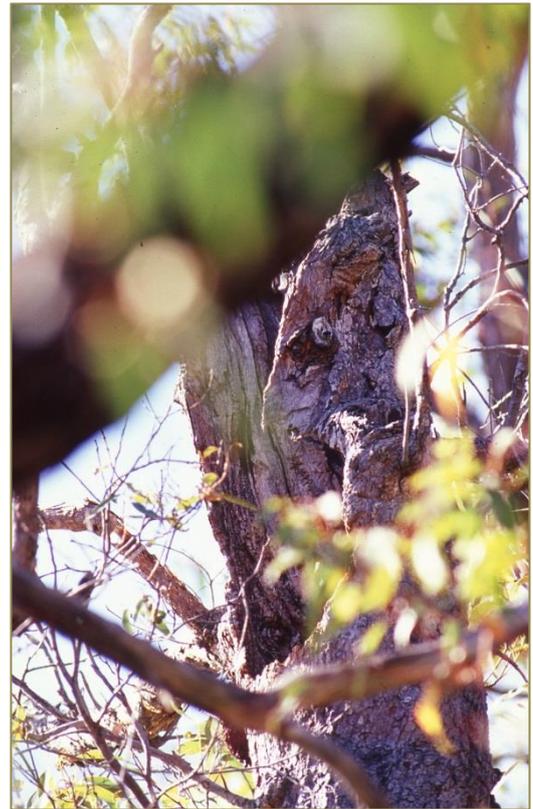
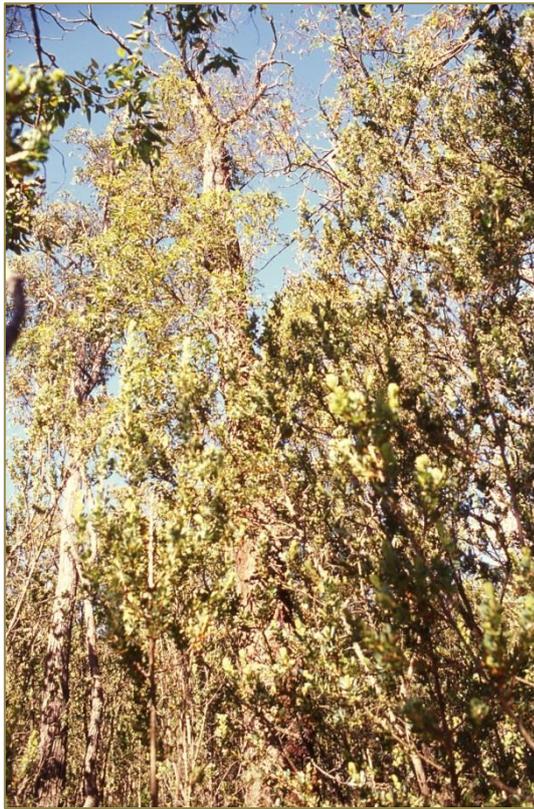


Figure 28 Nest tree 102 and nest in December 2003 – lost in 2005



Figure 29 Nest tree 010 in November 2007, nest in August 2004 – now on ground



Figure 30 Nest tree 014 in August 2004, on ground June 2012



Figure 31 Nest tree 015 in July 2004, on ground February 2018



Figure 32 Nest tree 022, on ground June 2007

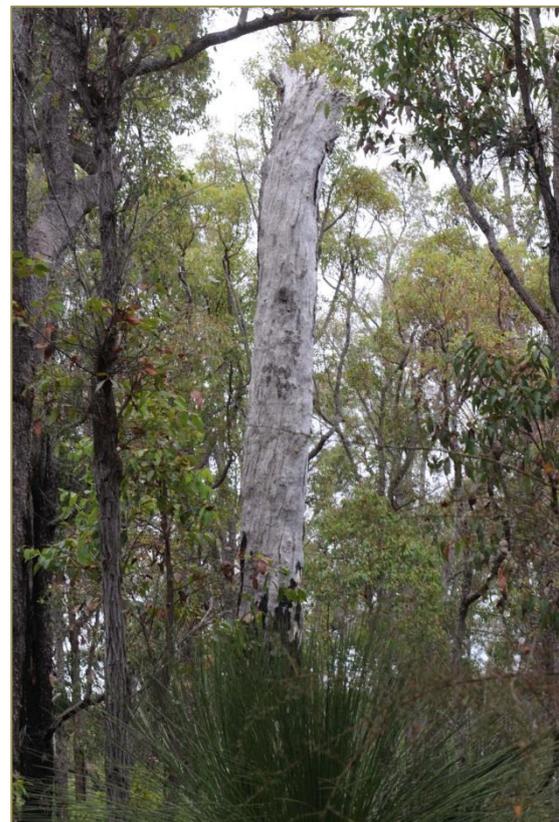


Figure 33 Nest tree 025 in September 2004 (L), top missing April 2018 (R)

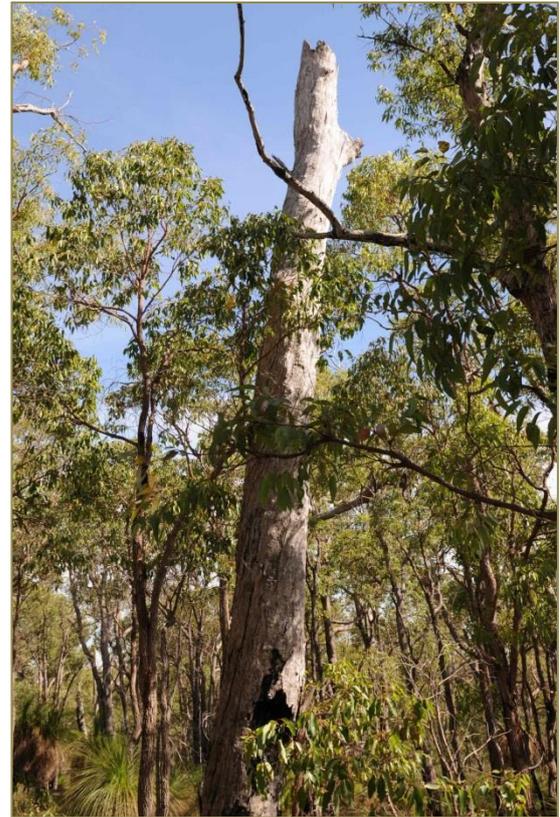
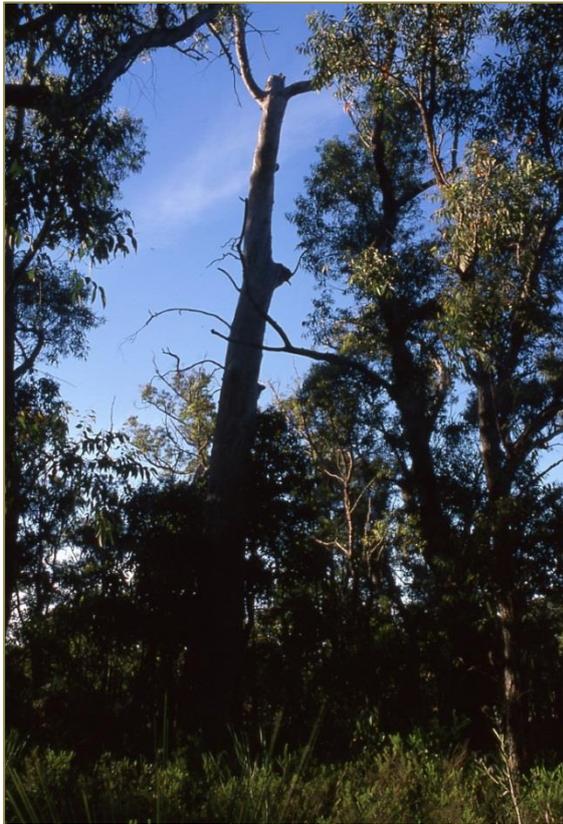


Figure 34 Nest tree 031 in November 2002 (L), top missing March 2018 (R)



Figure 35 Nest tree 041 in February 2007 (L), top missing February 2018 (R)



Figure 36 Nest tree 042 in December 2002 (L), November 2007 (R) – now on ground

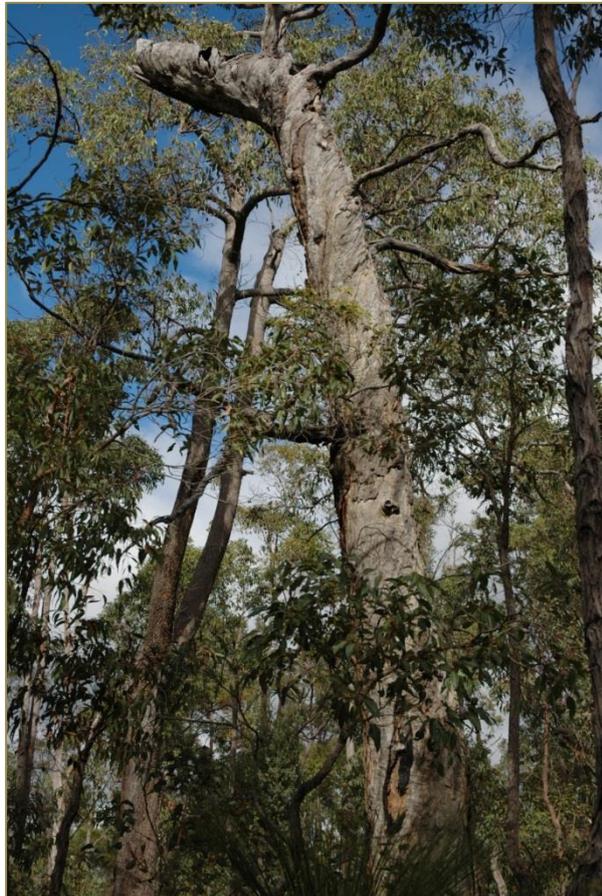


Figure 37 Nest tree 044 in July 2004 (L), top missing February 2018 (R)



Figure 38 Nest tree 045 in August 2005, destroyed by fire in May 2011



Figure 39 Nest tree 050 in August 2004, destroyed by fire in January 2005

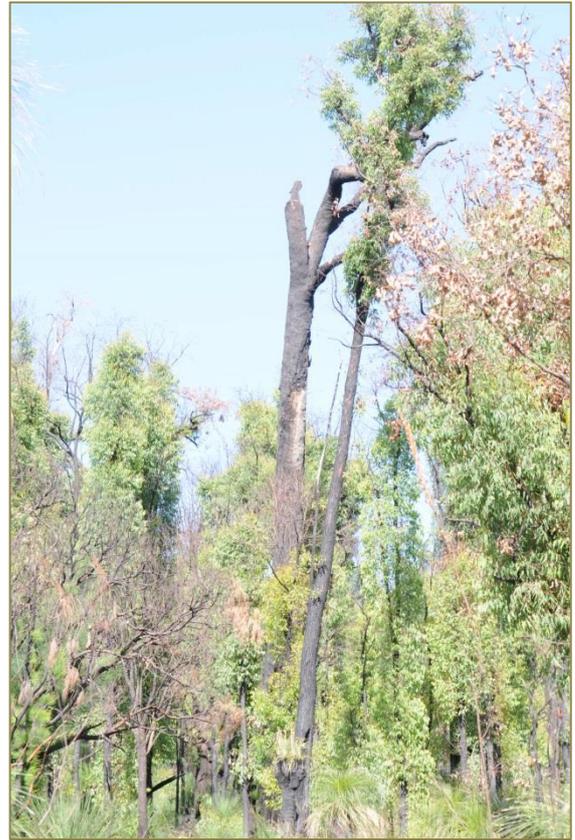


Figure 40 Nest tree 049 in December 2002 (L), in February 2018 (R) after fire



Figure 41 Nest tree 089 in July 2003, destroyed by fire in September 2005

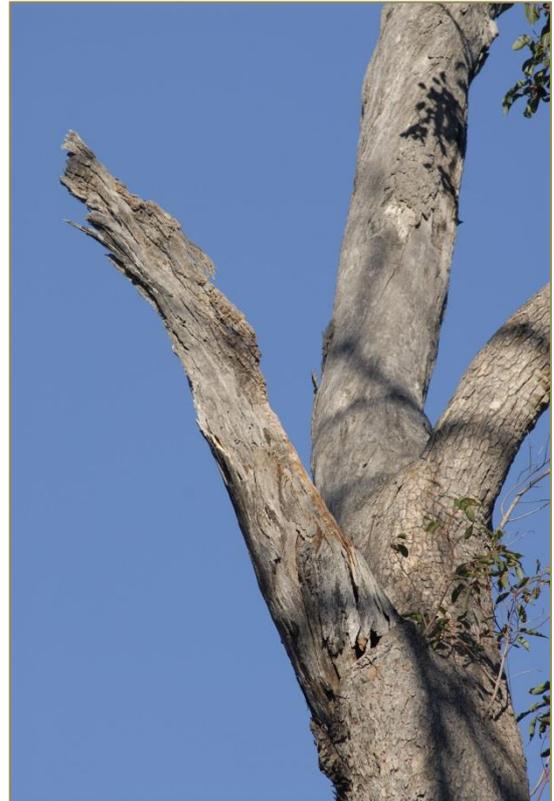


Figure 42 Nest tree 094 in May 2006 – now fallen



Figure 43 Nest tree 097 in August 2004 – destroyed by fire in January 2005



Figure 44 Nest tree 098 in January 2004 – pushed over after fire in 2005



Figure 45 Nest tree 100 in March 2007 – now on ground after fire

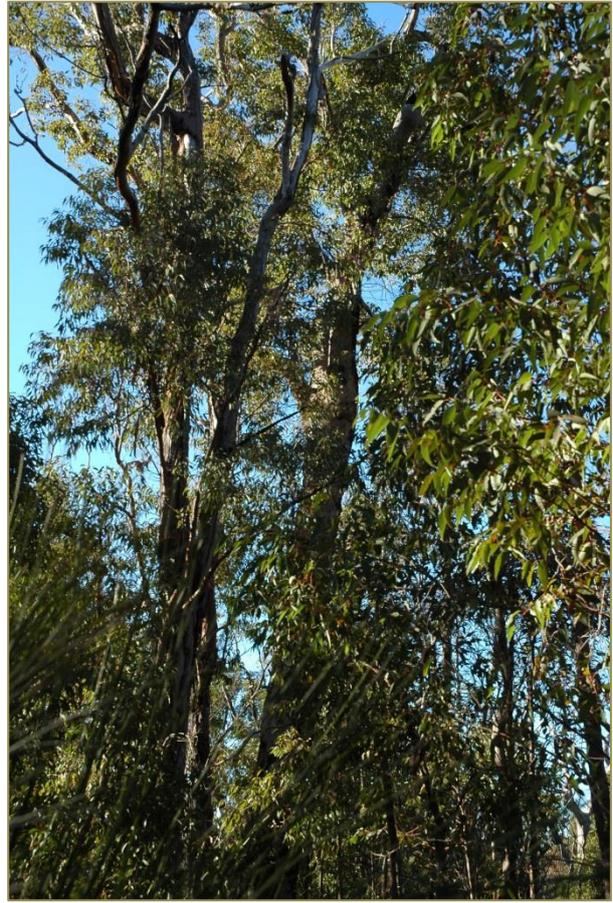


Figure 46 Nest tree 117 in December 2003 (L), September 2004 (R) – now fallen



Figure 47 Nest tree 118 in August 2004 – destroyed by fire in January 2005



Figure 48 Nest tree 143 in November 2007 – hollow collapsed and no longer viable 2008

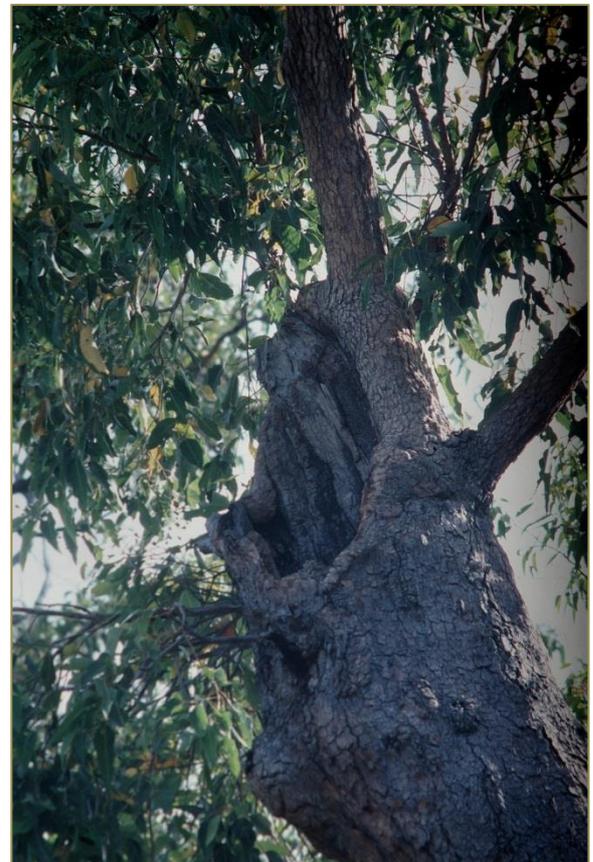


Figure 49 Nest tree Coolgardie Street, January 2003 – top missing and no longer viable

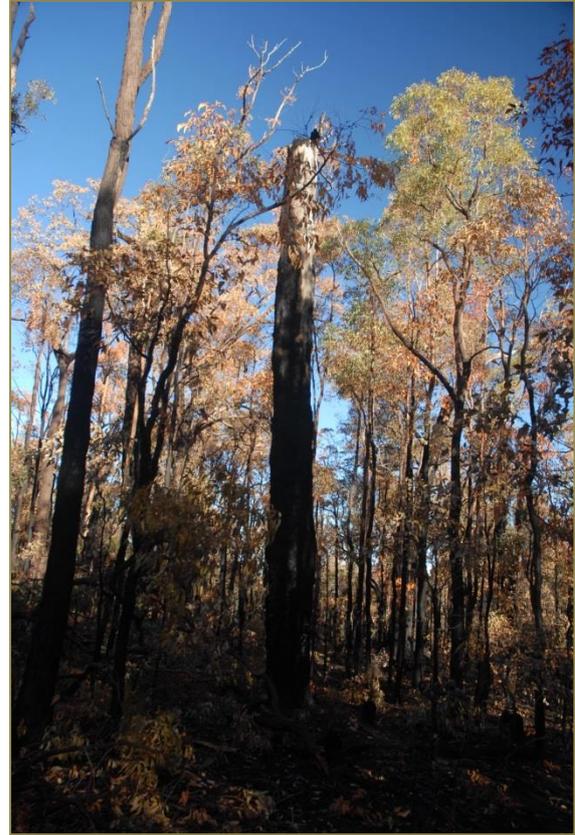


Figure 50 Nest tree 164 in October 2005, lost to fire in May 2011

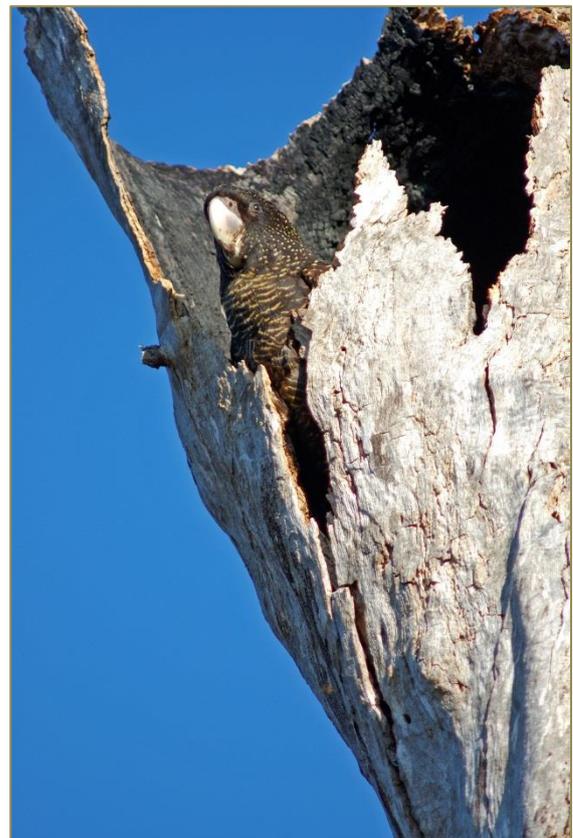


Figure 51 Nest tree 165 in October 2005 – top missing and no longer viable



Figure 52 Nest tree 064 in March 2007 – on ground



Figure 53 Nest tree 067 in May 2011 – burnt to ground



Figure 54 Nest tree 199 in January 2006 – cleared by developers



Figure 55 Nest tree 080 in August 2007 – burnt to ground, cause unknown



Figure 56 Nest tree 449 in December 2007 (L) and August 2018 (R) – stump, no longer viable



Figure 57 Nest tree 019 in July 2004 (L) and February 2018 (R) – limb fallen

Appendix 1 – Photographs of nest trees and hollows



Figure 58 Nest tree 023 in January 2007 (top R) and April 2018 (bottom R) – hollow entrance in burl healing over and now too small



Figure 59 Nest tree 034 in April 2007 (L) and March 2018 (R) – hole at side of hollow floor



Figure 60 Nest tree 092 in March 2007 (L) and February 2018 (R) – lost to fire 2017, stump only



Figure 61 Nest tree 140 in December 2004 (L) and March 2018 (R) – lost to fire in May 2011, could form another hollow

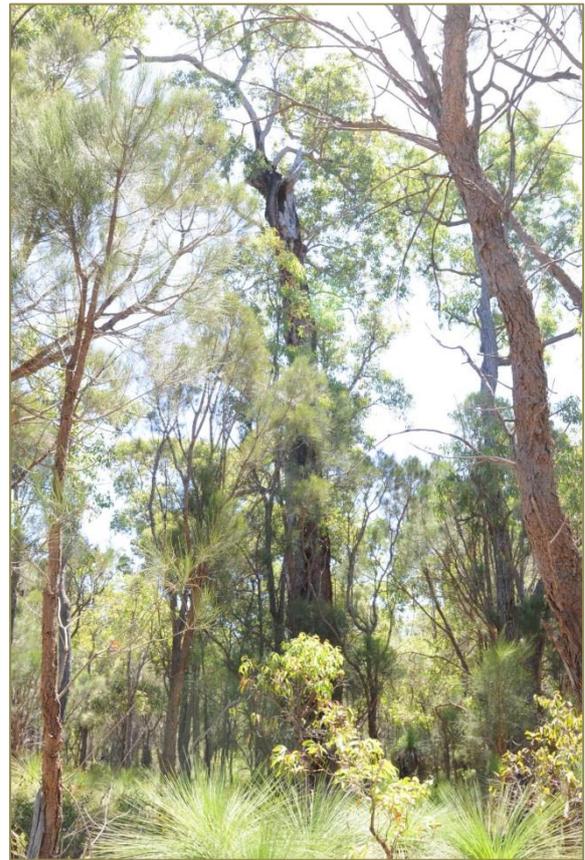


Figure 62 Nest tree 160 in October 2005 (top L) and February 2018 (top R).
Nest in March 2011 (bottom L) lost to fallen limb February 2018 (bottom R)