



iNSiGHT Ornithology

Wildlife Photography ~ Research ~ Environmental Education

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Holcim Gosnells Quarry Black Cockatoo Foraging Habitat Assessment for Clearing Permit Amendment CPS 8582/4

LETTER REPORT

for

Holcim (Australia) Pty. Ltd.
Level 4, 233 Adelaide Terrace, PERTH
Western Australia 6000

November 2023

Project Summary

The Department of Water and Environmental Regulation (hereafter 'DWER') granted Holcim (Australia) Pty. Ltd. (hereafter 'Holcim') a Clearing Permit (CPS 8582-3) to clear 10.7ha of native vegetation as part of the extension to their Gosnells Quarry at Lot 3 Cockram Road, Martin. Holcim then applied for a Clearing Permit Amendment (CPS 8582/4) to expand the area of clearing to accommodate reprofiling of an existing batter to improve geotechnical and operational safety. This proposal requires the removal of approximately 2.45 ha (2.35 ha rehabilitation, 0.1 ha remnant, native vegetation) on the eastern edge of the existing quarry pit (see Figure 1).



Figure 1. Map of Holcim's Gosnells Quarry showing the 2.45 ha area covered by the clearing permit amendment area CPS 8582/4 (yellow line, main and inset). The proportion of this area comprising remnant native vegetation (approximately 0.1 ha, located at GPS UTM: 50H 408880m E, 6451113m S) is shown in the green hatched area.

As part of the clearing approval process, DWER requested that a fauna specialist carry out an assessment of vegetation within the proposed clearing area with a specific focus on black cockatoo foraging habitat, as quoted below:

"The black cockatoo habitat survey is required to:

- a) *map and quantify the extend and quality of black cockatoo foraging habitat within the application area, including the documentation of any evidence of foraging within the application area (feeding signs or feeding debris, sightings of the birds and observations of their behaviour, the presence of black cockatoo droppings and feathers, or 'chewed' Banksia or pinecones or marri nuts, as well as broken or scattered flowers).*
- b) *identify all trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater that contain a hollow(s) that may be suitable for breeding by Carnaby's cockatoo, Baudin's cockatoo, and/or forest red-tailed black cockatoo."*

Further detail on the permit conditions is provided in Appendix 1.

Methods and Results

Holcim commissioned iNSiGHT Ornithology to carry out this assessment on 28th November 2023. The assessment was carried out following the Environmental Protection Authority's *Technical Guidance: Terrestrial Fauna Surveys* (December 2016), by an ornithologist with a high level of experience in black cockatoo ecology. This included using the habitat scoring tool in the Referral guideline for 3 WA threatened black cockatoo species (Commonwealth of Australia, 2017),.

Most of the vegetation in the clearing area comprised rehabilitation (Figure 2), consisting of plant species not suitable as foraging habitat or old enough to provide nest trees for any of the black cockatoo species (e.g. *Acacia saligna*, *A. iteaphylla*, *Eucalyptus cladocalyx*, *Callitris preissii*). Some local, native plant species known to be eaten by black cockatoos (e.g. *Hakea lissocarpha* – Carnaby's Cockatoo; *Corymbia calophylla* – Carnaby's, Baudin's and Forest Red-tailed Black Cockatoo) did occur in the rehabilitation area but most plants were immature and there was no evidence of foraging by black cockatoos beneath any that possessed fruit.

Given only a small proportion of the site comprised remnant, native vegetation with suitable black cockatoo foraging habitat (0.1 ha, Figure 3), the Federal Government's scoring tool was not able to be used (applicable to areas 1 ha or more in size). No evidence of foraging by any black cockatoo species, either recent or historical, was found beneath any of the potential food plants identified (*Banksia sessilis*, *Hakea lissocarpha*, *H. undulata*, *Corymbia calophylla*, *Eucalyptus marginata*). Figure 3 shows an example of a *Hakea undulata* shrub with at least two years of fruit still present, suggesting no cockatoos have visited this as a food source recently or historically.



Figure 2. Sites photos taken during black cockatoo habitat assessment at eastern edge of Holcim's Gosnells Quarry pit (Martin) showing structure and composition of rehabilitation vegetation, comprising exotic (i.e. not locally native) *Eucalyptus* and *Callitris* species unsuitable as foraging habitat and too young to provide nest sites for black cockatoo species.



Figure 3. Site photo taken during black cockatoo habitat assessment at south-eastern corner of proposed clearing area Holcim’s Gosnells Quarry pit (Martin) showing small pocket (0.1 ha) of remnant, native Jarrah *Eucalyptus marginata* and Marri *Corymbia calophylla* vegetation and associated understorey. Inset photos show examples of common food plants for Carnaby’s Cockatoo: a) a *Banksia sessilis* shrub, with no feeding debris beneath, and b) a *Hakea undulata* shrub, with at least two years of fruit still present, indicating lack of foraging by black cockatoos in this area.

Conclusion

Given that most of Holcim’s lease, and the surrounding Banyowla Regional Park contains remnant, native vegetation comprising suitable habitat for all three black cockatoo species, and the current proposal applies mostly to rehabilitation with no suitable black cockatoo foraging or breeding habitat, the proposal to clear will have negligible impact to these species.

References

- iNSiGHT Ornithology (2022) Habitat Tree Assessment (II). Unpublished report on tree hollows at Holcim Quarry in March 2022. Holcim (Australia) Pty. Ltd., Perth
- Commonwealth of Australia (2022). Referral guideline for 3 WA threatened black cockatoo species Carnaby’s Cockatoo (*Zanda latirostris*), Baudin’s Cockatoo (*Zanda baudinii*) and the Forest Red-tailed Black-cockatoo (*Calyptorhynchus banksii naso*).
- Department of Water and Environmental Regulation (2023) Holcim Gosnells Quarry – CPS 8582/3 Request for further information, unpublished letter to Holcim Pty Ltd.

Appendix 1

Clearing Permit Amendment CPS 8582/4

| Information requirements | Specifications | Rationale |
|--|--|---|
| <p>A faunal survey and black cockatoo habitat assessment is required for the area proposed to be cleared.</p> <p>Please note that should threatened or priority fauna be identified, additional surveys of surrounding areas will also be required to determine the species' local population size and distribution.</p> | <p>The assessment / survey is to be carried out by a fauna specialist (see below for relevant definitions) and survey methodology must be consistent with the Environmental Protection Authority's (EPA) Technical Guidance: Terrestrial Fauna Surveys (December 2016), copies of which are available at the EPA's website.</p> <p>The black cockatoo habitat survey is required to:</p> <p>a) map and quantify the extend and quality of black cockatoo foraging habitat within the application area, including the documentation of any evidence of foraging within the application area (feeding signs or feeding debris, sightings of the birds and observations of their behaviour, the presence of black cockatoo droppings and feathers, or 'chewed' Banksia or pinecones or marri nuts, as well as broken or scattered flowers).</p> <p>It is recommended to use the foraging quality scoring tool within Appendix A of the Referral guideline for 3 WA threatened black cockatoo species (Commonwealth of Australia, 2017) to ascertain and quantify the quality of the foraging habitat.</p> <p>b) identify all trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater that contain a hollow(s) that may be suitable for breeding by Carnaby's cockatoo, Baudin's cockatoo, and/or forest red-tailed black cockatoo.</p> <p>The survey must document:</p> <ul style="list-style-type: none"> - the date(s) of the survey; - the GPS locations (i.e. eastings and northings or decimal degrees) of all trees identified as containing hollows which may be suitable for black cockatoos; - the methodology for determining the evidence of use of each hollow; and - a description/photo of the evidence of use. <p>Any evidence of foraging by Carnaby's cockatoo, Baudin's cockatoo, and/or forest red-tailed black cockatoo observed during the survey should be documented.</p> | <p>As the vegetation within the application area is likely to have matured in the six years following the most recent fauna surveys, the quality of habitat present within the application area is likely to have changed. This includes the quality of foraging habitat for black cockatoos. For example, current aerial imagery indicates areas previously surveyed as bare ground now contain vegetation (see Item 2) which may comprise suitable foraging species for black cockatoos.</p> <p>Given the above, new surveys are required to determine the current habitat quality of the application area. Surveys are also needed to determine if conservation significant fauna species persist in and near the application area, noting previous surveys have identified conservation significant fauna species nearby.</p> |