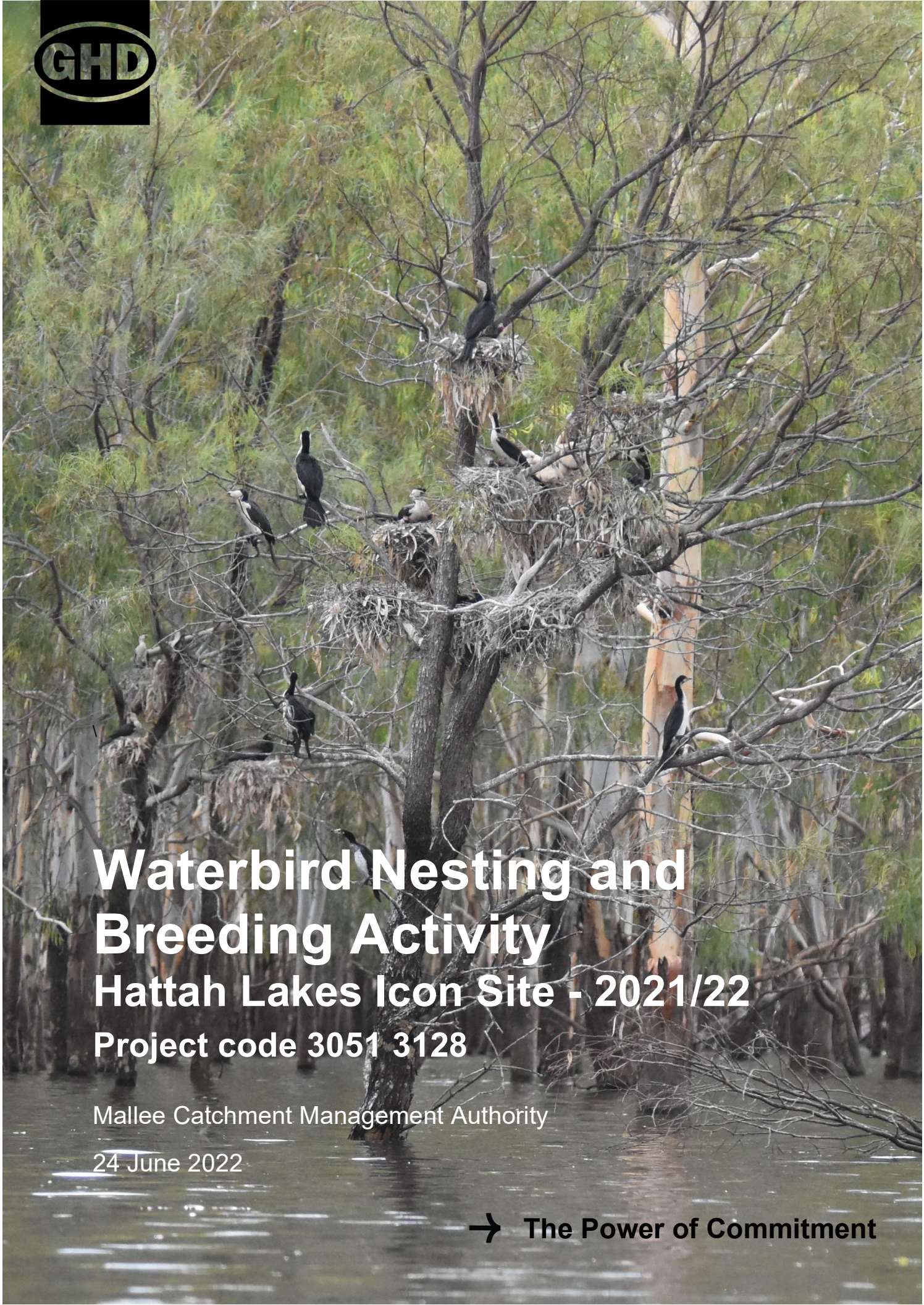

Waterbird Nesting and Breeding Activity

Hattah Lakes Icon Site - 2021/22

Project code 3051 3128

Mallee Catchment Management Authority

24 June 2022

→ The Power of Commitment

Waterbird nesting and breeding activity - Hattah Lakes Icon Site - 2021/22

Project name		Project code 3051 3128 - Nesting and breeding activity at the Hattah Lakes Icon Site following reestablishment of aquatic habitat at the Hattah Lakes Icon Site.					
Document title		Waterbird nesting and breeding activity - Hattah Lakes Icon Site - 2021/22 | Project code 3051 3128					
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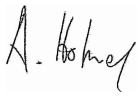
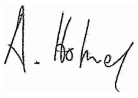
[Status code]	FINAL	D.Eyles	A.Holmes		A.Holmes		24/6/2022

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Client report for the Mallee Catchment Management Authority.

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Cover photo: colonial waterbird nests of Little Pied Cormorants, Australasian Darter and Great Cormorant at Lake Yelwell.

Referencing can be made as: GHD. (2022) Waterbird nesting and breeding activity - Hattah Lakes Icon Site - 2021/22. Project code 3051 3128. May 2021. Client report for the Mallee CMA by GHD.

Acknowledgments

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Executive Summary

This report describes the targeted survey of colonial breeding waterbird nests at 18 lakes across the Hattah-Kulkyne National Park in late 2021 and early 2022. The surveys were commissioned by the Mallee CMA, following the delivery of environmental water to the Hattah Lakes in autumn and spring 2021, following an extended drying phase in which all lakes had been completely dried out for between one and four years. Surveys were completed fortnightly from November 2021 to April 2022, primarily from kayaks, which were essential to access the flooded lakes and surrounding floodplains. Monitoring of species, locations and numbers of active waterbird nests across the Hattah Lakes Icon Site, and subsequent development of hatchlings through to fledging, provides information to assist in the planning and development of future watering events that aim to provide the hydrological cues to improve breeding outcomes for cormorants and other colonial nesting waterbirds. The results of these surveys will assist in informing recommendations for the planning, prioritisation and management of future environmental water flows within the Hattah Lakes and potentially the broader Murray-Darling Basin and assist with maximising waterbird recruitment.

The development of water resources for water extraction has degraded wetlands across the world, and in Australia this has been particularly true across the Murray-Darling Basin. Intensive management has changed natural flow regimes, affecting aquatic organisms, including colonially breeding waterbirds and their prey, that rely on periodic wetland inundation, reducing the frequency of breeding opportunities and impacting reproductive success. To overcome some of the impacts of water resource development, there has been an increasing focus on the management of environmental flows for ecosystems and specific groups of organisms. Colonial nesting waterbirds are an important target group for the management of environmental flows, providing a measure of the success or failure of environmental flow management. The success of breeding events in wetlands may be used as a measure of overall wetland health, as successful breeding by these species indicates the presence of a wide range of aquatic organisms upon which the birds feed.

Wetting and drying cycles of the Hattah Lakes system in northern Victoria are now largely dependent on environmental flows. The lack of connectivity between the lakes and the Murray River, and the complete drying of the lakes during the millennium drought has had detrimental effects on the Hattah Lakes ecosystem and its ability to act as a refuge during prolonged drought. The completion of The Living Murray Hattah Lakes Infrastructure project in 2013 has allowed the implementation of broad scale environmental watering to mitigate the effects of the reduced frequency of natural flooding, by inundating the Hattah Lakes Icon Site.

The ecological watering of the previously dry Hattah Lakes system in the autumn and spring of 2021 triggered a significant breeding event across much of the lakes system in the summer of 2021/22, with 24 waterbird species including nine species considered as colonial nesting, with 2,180 nests and 7,374 chicks recorded, of which the vast majority (1,897 nests and 6,582 chicks) were classified as colonial breeding waterbird species. Dominant species recorded breeding successfully included very large colonies of Great Cormorants and moderate sized colonies of Little Black and Little Pied Cormorant, Australasian Darter and sizeable numbers of Eurasian Coot, Grey Teal, Hoary-headed Grebe and Pink-eared Duck. Individual lakes varied greatly in abundances of nests, ranging from no colonial nests at Lakes Arawak, Boich, Marramook, Nip Nip, Tullamook, Woterap and Yerang, to as many as 118 nests at Lake Yelwell, 168 at Roonki and 1,358 at Lake Cantala.

An analysis of waterbird nest and nest tree data show mean number of chicks per nest was greatest for Australasian Darter (3.79), Great Cormorant (3.58) and Pied Cormorant (3.50), and lowest for Nankeen Night Heron (1.20) and Yellow-billed Spoonbill (2.07). The dominant tree species for nests were River Red Gum and approximately 57% of nests were in living trees. Mean nest heights above water level varied greatly between species, from between 3-4m for Australasian Darter, Australian White Ibis, Great Cormorant, Little Pied Cormorant and Nankeen Night Heron, 8m for Pied Cormorant, and over 9m for White-necked Heron and Yellow-billed spoonbill. Mean number of nests per tree ranged between 1.2 and 1.7 for most species, but a much greater 6.4 nests per tree for Little Black Cormorant and 11.0 for Pied Cormorant.

The 2021/22 surveys have also documented the high degree of site fidelity and breeding success of these waterbird populations. Locations of breeding colonies recorded in these surveys displayed a very high degree of site fidelity, with all but one colony located in the same area as those colonies detected in previous surveys in 2020/21. Larger colonies were found in the same locations at Lakes Cantala, Woterap, Konardin, Yelwell, Roonki and Hattah. Lake Mournpall was the sole exception with a colony of Great Cormorant nests in 2021/22 where one

had not existed prior. The reasons for these consistent locations of colonies is speculated on, but as theorised previously, it is likely that areas containing more suitable nesting habitat in the form of preferentially sized, oriented and shaped trees, and occurring in areas of high prey concentrations, reducing travel distance for breeding adult birds, will be preferred areas to colonise.

Observations of chick development and subsequent breeding success, recorded no signs of nest abandonment or predation and very few mortalities were observed, suggesting a very high success rate. Mean numbers of chicks per nest were generally high for those colonial species observed and development of colonial nesting chicks was also considered high, with the majority of chicks during final observations assessed as 'large (60-89% grown)' or 'ready to fledge (90%+ grown)'. Many of these values represent minimum stages of development, as many birds were observed at the 'large chick' stage when surveys were concluded in early April 2022, and therefore most 'large' chicks could be expected to progress and fledge.

These large numbers of chicks, when combined with the large percentage of chicks observed at a ready to fledge stage or considered large and over 60% grown, strongly suggest that chick development and breeding success during the 2021/22 summer breeding season was highly successful. These large numbers of chicks clearly demonstrate the importance of the Hattah Lakes system as an area for waterbird breeding.

Three threatened species were recorded breeding across the lake system, with one record of five young Blue-billed Duck (FFG Act listed Vulnerable), one record of two young Musk Duck (FFG Act listed Vulnerable) and one record of a single young White-bellied Sea-eagle (FFG Act listed Endangered). The EPBC Act and FFG Act listed Vulnerable Regent Parrot was ubiquitous across the survey area and seen or heard at most lakes. Additionally, one Lace Monitor (FFG Act listed Endangered) was recorded incidentally during surveys.

This comprehensive survey of colonial breeding waterbird nests across the Hattah Lakes system has successfully built on knowledge gained in the previous surveys of old unoccupied nests across the dry lakes in 2020/21. The most recent surveys validated the assumptions of nest types and waterbird species nests, made in the previous Hattah colonial waterbird nest assessment. Earlier surveys proved invaluable in predicting the locations of breeding colonies with six of the seven largest colonial waterbird breeding colonies in the location of previous colonies. This suggests that future monitoring may target these areas of known colony locations with some confidence, as areas are likely to be reused.

The overall success of waterbird breeding observed in these 2021/22 surveys, both in species diversity, numbers of chicks and their development, suggests that the timing of the environmental watering, and therefore hydrological cues needed to initiate and sustain breeding outcomes for cormorants and other species of colonial and non-colonial nesting waterbirds were appropriate. Future watering events should be planned to provide similar cues and conditions in order to assist with maximising waterbird recruitment. It is hoped that the results of these surveys will assist in informing recommendations for the planning, prioritisation, and management of environmental water flows within HKNP and potentially the broader Murray-Darling Basin and assist with maximising waterbird recruitment into the future.

This report is subject to, and must be read in conjunction with, the limitations set out in sections 1.5 and 2.1 and the assumptions and qualifications contained throughout the Report.

Abbreviations

CMA	Catchment Management Authority
DoAWE	Commonwealth Department of Agriculture, Water and the Environment
DELWP	Victorian Department Environment, Land, Water and Planning (formerly DEPI, DSE and NRE)
EPBC	Commonwealth *Environment Protection and Biodiversity Conservation* Act 1999
FFG	Victorian *Flora and Fauna Guarantee* Act 1988
GHD	GHD Pty Ltd
GPS	Global Positioning System
HKNP	Hattah-Kulkyne National Park
MDBA	Murray Darling Basin Authority
SDL	Sustainable Diversion Limits
TLM	The Living Murray
VBA	Victorian Biodiversity Atlas

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1. Introduction

1.1 Project Background and Objectives

This report describes targeted surveys completed between November 2021 and April 2022 of colonial nesting waterbird breeding, in response to environmental watering in autumn and spring 2021 at the Hattah Lakes Icon Site. It was expected that the filling of the lake system at this time would promote a breeding response by colonial nesting waterbird species, in particular cormorants. The surveys were commissioned by the Mallee CMA, following the delivery of environmental water to these 18 lakes within Hattah-Kulkyne National Park (HKNP), in the wake of a period of drying of all lakes over the preceding two years. This study follows surveys in 2020/21 of the dry lakes identifying and mapping previously used waterbird nests (GHD 2021).

Despite general monitoring of waterbird richness and abundance at the Hattah Lakes Icon Site over the last 16 years following environmental watering, monitoring has not specifically targeted waterbird breeding events. Data on breeding to date has been anecdotal, and the lakes are not known to be a site for regular large scale colonial nesting birds.

It is hoped that by assessing waterbird nest site locations, densities and success or failures, relative to characteristics of inundation, future watering events can be planned to provide the hydrological cues needed to improve breeding outcomes for cormorants and other species of colonial nesting waterbirds.

The key objectives of this study were:

– To quantify the extent of cormorant and other colonial nesting waterbird breeding at the Hattah Lakes Icon Site in response to environmental watering in autumn and spring 2021.
– Accurately map the species, location and number of active waterbird nests across the Hattah Lakes Icon Site, monitor these nests to observe and document the success of nesting birds, development of eggs and hatchlings through to fledging, and occurrence of nest abandonment or predation.
– Summarise findings to assist in the planning and development of future watering events that aim to provide the hydrological cues to improve breeding outcomes for cormorants and other colonial nesting waterbirds.

This was achieved by mapping the locations and key attributes of colonial nesting waterbird nests at the 18 lakes at the Hattah Lakes Icon Site. This technical report outlines the results of these surveys and provides spatial representations and GPS coordinates for each nest recorded. The results of these surveys will assist in informing recommendations for the planning, prioritisation and management of environmental water flows within HKNP and potentially the broader Murray-Darling Basin, and assist with maximising waterbird recruitment.

All data will be entered into the Victorian Biodiversity Atlas (VBA).

1.2 Study Area

The HKNP lakes (Hattah Lakes) are part of a Ramsar listed wetland located in northern Victoria within the Murray-Darling Basin. The area contains a series of floodplain lakes representing wetlands classified as permanent freshwater lakes and seasonal intermittent freshwater lakes, subject to flooding from the Murray River with flows entering predominantly via Chalka Creek. This series of interconnected lakes is the most extensive lake system along the Murray River. Twelve of the wetlands are listed as Wetlands of International Importance under the International Convention on Wetlands (Ramsar Convention). To be listed as a Ramsar site, a wetland must meet one or more internationally accepted criteria in relation to its zoology, botany, ecology, hydrology or limnology and importance to waterfowl. The Hattah Lakes site met four criteria as outlined on the Ramsar wetlands website (Ramsar 2021). The Ramsar site is also part of the Hattah Lakes Icon Site under The Living Murray program.

The lake system supports a number of vegetation groups, the most dominant of which is Lake Bed Herbland, as well as Grassy and Swampy Woodland. Species such as River Red Gum (*Eucalyptus camaldulensis*), Black Box (*Eucalyptus largiflorens*) and River Coobah (*Acacia stenophylla*) provide sheltering and nesting habitat for a range of fauna species, particularly bats, parrots, possums, snakes and waterbirds. The lake beds support submerged and aquatic plant communities when flooded and terrestrial species during dry phases.

The Hattah lakes are also an important cultural heritage site, having been a focus for traditional Aboriginal society for thousands of years, as evidenced by over 1000 registered Aboriginal archaeological sites within the Hattah-Kulkyne National Park.

1.3 Colonial nesting waterbirds

Colonial nesting is common among many species of Australian waterbirds, in particular species of cormorants, herons, egrets, spoonbills, ibises, pelicans, Black Swans and wading birds (Beruldsen, 2003, Brandis 2010, Marchant and Higgins 1990). Breeding colonies can range from several loosely associated nests, to many thousands of densely crowded nests. These colonial nesting waterbirds are dependent on river flows for the critical breeding stage of their lifecycle, and breed in response to large flows on relatively few wetlands in Australia (Brandis 2010, Kingsford and Johnson 1998). Colonial nesting species relevant to the lakes of HKNP include cormorants (*Phalacrocorax spp*.), egrets (*Ardea/Egretta* spp.), darters, spoonbills, herons, pelicans, ibis and Black Swan (Beruldsen, 2003). There are many other species that may not breed in colonies, but that may increase breeding in response to this watering event (e.g., ducks). Australian waterbird populations depend on suitable feeding and nesting habitats coupled with suitable rain and flood events to trigger breeding events. Wetlands within the Murray-Darling Basin provide critical waterbird habitats for many species; however, the quality and availability of these sites are greatly influenced by water and vegetation management decisions. Protecting and maintaining suitable feeding and nesting habitats between, and during flood events is essential to maximise waterbird recruitment, maintain populations, and conserve biodiversity. This requires careful management of both vegetation and water regimes at a range of scales across the basin.

The development of water resources through water extraction and impoundment has degraded wetlands across the world, and in Australia this has been particularly true across the Murray-Darling Basin. Intensive management has changed natural flow regimes, affecting aquatic organisms, including colonially breeding waterbirds and their prey, that rely on periodic wetland inundation, reducing the frequency of breeding opportunities and impacting reproductive success (Brandis 2010). To overcome some of the impacts of water resource development, there has been an increasing focus on the management of environmental flows for ecosystems and specific groups of organisms. Colonial nesting waterbirds are an important target group for the management of environmental flows, providing a measure of the success or failure of environmental flow management. The success of breeding events in wetlands may be used as a measure of overall wetland health, as successful breeding by these species indicates the presence of a wide range of aquatic organisms including fish, frogs, crustaceans, molluscs and other aquatic macroinvertebrates, upon which the birds feed.

Wetting and drying cycles of the Hattah Lakes system are now largely dependent on environmental flows, with just one natural, unregulated flooding event in the last 20 years (2016), and the last major flood before that in 1993 (Mallee CMA 2010). The lack of connectivity between the lakes and the Murray River, and the complete drying of the lakes in the past decade has had detrimental effects on the Hattah Lakes ecosystem and its ability to act as a refuge during prolonged drought (MDBA 2012). The ecological productivity of the system has declined and the habitat value for fauna has been degraded (MDBA 2012). The completion of the Hattah Lakes The Living Murray (TLM) infrastructure project in 2013 has allowed the implementation of broad scale environmental watering to mitigate the effects of the reduced frequency of natural flooding, by inundating the Hattah Lakes Icon Site. Environmental watering of some lakes was implemented between 2005 and 2010, with broad scale filling of the system completed between 2013 and 2015, and again between 2016 and 2018. A complete drying of all lakes within the Hattah system between 2019 and summer 2020/21 was followed by environmental watering in the autumn and spring of 2021. These surveys were completed immediately following this broad scale inundation of all 12 RAMSAR lakes and six adjacent lakes, along with surrounding areas of floodplain.

1.4 Target species

Many of the waterbird species which have been previously recorded across the Hattah Lakes are known to typically breed in colonies, ranging from a loose aggregation of several nests, to dense colonies of thousands of birds. Territories immediately around nests are typically defended (Marchant and Higgins 1990), often resulting in groups of nests ‘pecking distance’ from each other.

Species targeted during the 2021/22 surveys include the Great Cormorant (*Phalacrocorax carbo*) and Pied Cormorant (*Phalacrocorax varius*), which typically breed in colonies of ten to many thousands, often with other

species of cormorants, herons, spoonbills and ibises (Beruldsen 2003, Marchant and Higgins 1990). The Little Pied Cormorant (*Microcarbo melanoleucos*) and Little Black Cormorant (*Phalacrocorax sulcirostris*) typically breed in colonies of 4-300 nests, often with other species of cormorants, herons, spoonbills and ibises (Beruldsen 2003, Marchant and Higgins 1990).

Other species of waterbird known to nest in the HKNP lakes included the Australasian Darter (*Anhinga novaehollandiae*), White-faced Heron (*Egretta novaehollandiae*), White-necked Heron (*Ardea pacifica*), Eastern Great Egret (*Ardea alba modesta*), Little Egret (*Egretta garzetta*), and Plumed Egret (*Ardea intermedia plumifera*). Australasian Darter typically nest solitarily, as do Little Egret, and White-faced Heron. Plumed and Eastern Great Egrets, and White-necked Heron sometimes nest in loose colonies with cormorants, other herons, egrets, ibises and spoonbills (Beruldsen 2003, Marchant and Higgins 1990). Most of these species also typically build relatively thin and frail nests, higher in trees, 7-25m above water level (Beruldsen 2003).

1.5 Scope and limitations

This report: has been prepared by GHD for the Mallee Catchment Management Authority and may only be used and relied on by Mallee Catchment Management Authority for the purpose agreed between GHD and Mallee Catchment Management Authority as set out in section 2.1 of this report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

2. Methods

2.1 Assumptions and Limitations

A number of important limitations were identified for the surveys of colonial nesting waterbird nests at HKNP in 2021-22. The Hattah Lakes cover a very large area, and the 2021 spring environmental watering inundated over 3403.9 ha of floodplain (Mallee CMA pers. comm.) including over 1,000 ha of lakes (Butcher & Hale 2011), and more than 50 km of creek that all provide potential waterbird breeding habitat. Many of these areas are challenging to access safely, and despite much walking and extensive kayak-based travel, some areas will have been missed during the survey. In addition to this, nesting birds are adept at hiding nests in difficult to access areas, out of view in thick stands of saplings, and particularly mobile species such as waterfowl; discreetly avoiding predators and people.

Previous surveys (GHD 2021) provided a very good indication of the areas to focus on and types of habitats likely to be used. Previous colonies were typically around the inlet/outlet areas of lakes, along peninsulas and isthmuses, and especially areas with inundated trees or dense stands of saplings that provide good cover from predators, are hidden from view, and provide an ability for large numbers of birds to nest close to one other.

While completing monitoring of active nests, utmost consideration was given to avoid disturbing birds. Initial expectations that motion-sensor and timer triggered camera traps might be used to monitor nests were discarded when it was realised that positioning cameras close enough to nests to collect meaningful information would potentially risk distress causing nest abandonment or chicks jumping from nests. All GHD fauna related projects require Animal Ethics consideration and approval, and animal welfare is always a primary consideration.

The numbers of nests and chicks counted during this survey can be considered minimum values, as invariably some nests will have been missed during surveys due to obstruction of views or poor access, and some nests are likely to occur in areas of the Chalka Creek or broader floodplain that were beyond the scope of this project and not accessed during surveys.

2.2 Field Survey

Field surveys were primarily completed by GHD Ecologists Dan Eyles, Shelley Thompson, and Alex Holmes, with guidance by Richard Loyn of Eco Insights. Surveys were completed between November 2021 and April 2022.

A total of 18 TLM lakes were assessed across HKNP, as listed in Table 1 below, and shown in Appendix A. Field surveys initially focussed on reconnaissance visits on a fortnightly basis to all lakes, looking for signs of waterbird nest building and courtship or breeding behaviours. A kayak was used to gain access to most areas and proved essential in locating nesting colonies and counting nests and chicks. Monitoring from the water in a kayak allowed greater freedom to quietly approach nests and observe from a wider range of angles to detect and count occupants (adults, chicks). Data was collected using the ArcGIS Collector GPS application to accurately record the location, species, nest status (number of chicks, stage of chick development etc), tree metrics (tree species, tree dead or alive, height of nest above water, tree diameter, tree height, and count of nests) and a unique ID number assigned to allow ongoing repeat assessments of each nest over time. The developmental stages of chicks were assessed on a scale of 1 to 5:

1. A newly hatched altricial chick, largely naked, eyes closed (~0-9% grown),
2. Small chick but with eyes open (~10-24% grown);
3. Medium chick with some body feathers and pin-feathers on wings (~25-59%grown);
4. Large chick with most body feathers (~60-89% grown);
5. Ready to fledge at any stage (~90%+ grown).

Nests are known to be typically constructed over water, and therefore surveys focussed on the perimeter of each lake, along with any islands or isthmuses to inspect all fringing trees, as this is the area where nests are anticipated. It would be expected that most colonial nests would be detected using this thorough method. Ecologists also recorded evidence or signs of other waterbird breeding such as duck, swan or grebe.

For the purpose of this study, a waterbird was defined as any species that habitually wades or swims in water, and includes species that forage almost exclusively within wetlands such as terns, gulls and White-bellied Sea-Eagle.

Table 1 Summary of survey sites

Wetland Name	Size (ha)	Approximate Perimeter (km)
Lake Arawak	40	4.2
Lake Bitterang	73	13.4
Lake Brockie	28	5.8
Lake Boich	10	1.9
Lake Bulla	40	5.2
Lake Cantala	101	15.2
Lake Hattah	61	4.7
Lake Konardin	121	6
Little Lake Hattah	7.3	5.5
Lake Lockie	141	8.6
Lake Marramook	7	4.2
Lake Mournpall	243	7
Lake Nip Nip	3	1.2
Lake Roonki	38	5
Lake Tullamook	14	5.6
Lake Woterap	50	5.2
Lake Yelwell	81	6.5
Lake Yerang	65	2.5
TOTAL SURVEY EFFORT	**1,123.3**	**107.7**

2.2.1 Incidental records

Any noteworthy species observed during field surveys were recorded as incidental records. Noteworthy species may include those listed under the FFG or EPBC Act, or considered as regionally significant due to location or time of year. These records will be submitted to the VBA to add to the knowledge of fauna of the area and potential indirect benefits of environmental watering to additional species. These observations are summarised in section 3.5 and Appendix C.

2.3 Permits

Surveys were completed under DELWP Flora & Fauna Guarantee Act (1988) Research Permit 10009910, Victorian National Parks Research Permit Ref #10009923, and Animal Ethics Scientific Procedures Licence SPFL20067.

3. Results

3.1 Overview of survey results

A total of 2,180 breeding events and 7,374 chicks were recorded for 24 waterbird and wetland utilising species during the 2021/22 surveys. Waterbird breeding was recorded at all lakes except for Lake Boich (Table 2, Table 4, Table 5). The most numerous breeding species were Great Cormorant (1,734 records, 6,121 chicks), Little Black Cormorant (78 records, 229 chicks), Grey Teal (83 records, 198 chicks), Little Pied Cormorant (68 records, 187 chicks), Australasian Darter (39 records 148 chicks), Pink-eared Duck (29 records 136 chicks), Eurasian Coot (51 records 111 chicks) and Hoary-headed Grebe (30 records, 102 chicks) (Table 2).

Colonial nesting waterbirds species recorded 1,897 nests and 6,582 chicks of nine species, across all lakes except Arawak, Boich, Marramook, Nip Nip, Tullamook, Woterap and Yerang (Table 4). Lake Cantala contained the greatest number of colonial waterbird nests and chicks, with 1,358 and 4,894 respectively, followed by Lake Roonki (168 nests, 534 chicks), Lake Yelwell (118 nests, 341 chicks), Lake Mournpall (98 nests, 365 chicks), Lake Hattah (77 nests, 193 chicks) and Lake Konardin (52 nests, 174 chicks).

Waterbird nest and nest tree data (Table 6) show the range of variables such as number of chicks per nest, height of nests, and the nest tree species, height, size (DBH), living or not and numbers of nests per tree. Mean number of chicks per nest was greatest for Australasian Darter (3.79), Great Cormorant (3.58) and Pied Cormorant (3.50), and lowest for Nankeen Night Heron (1.20) and Yellow-billed Spoonbill (2.07). The dominant tree species were River Red Gum (1,915) with a much smaller number of River Coobah (113). Approximately 57% of nests were in living trees. Mean tree height varied by species from around 10m for Australasian Darter, Great Cormorant and Little Pied Cormorant to over 14m for Little Black Cormorant, Pied Cormorant, White-necked Heron and Yellow-billed Spoonbill. Overall, the mean tree diameter (DBH) was 31.48cm, but varied greatly between species from as much as 60-70cm for Little Black Cormorant, Pied Cormorant, White-necked Heron and Yellow-billed spoonbill, to just 20-30cm in mid-sized sapling recruits, for all other waterbird species recorded, including three of the four most dominant species – Great Cormorant, Little Pied Cormorant and Australasian Darter. Mean nest heights also varied greatly between species, from between 3-4m for Australasian Darter, Australian White Ibis, Great Cormorant and Little Pied Cormorant and Nankeen Night Heron, 6.26m for Little Pied Cormorant, 8m for Pied Cormorant, and over 9m for White-necked Heron and Yellow-billed spoonbill. Mean number of nests per tree ranged between 1.2 and 1.7 for most species, but a much greater 6.4 nests per tree for Little Black Cormorant and 11.0 for Pied Cormorant.

The total number of waterbird nests can be seen to vary greatly between lakes (Table 4, Table 5, Figure 2), from none detected at Lake Boich (0), very few at Lakes Tullamook (2), Marramook (3), Yerang (4), Nip Nip (6), to very large numbers at some others, particularly Lake Cantala (1,358 nests), Roonki (168), Yelwell (118), Mournpall (98), Hattah (77) and Konardin (52).

Three threatened species were recorded breeding across the lake system, with one record of five young Blue-billed Duck (*Oxyura australis*) (FFG Act listed Vulnerable), one record of two young Musk Duck (*Biziura lobata*) (FFG Act listed Vulnerable) and one record of a single young White-bellied Sea-eagle (*Haliaeetus leucogaster*) (FFG Act listed Endangered). The EPBC Act and FFG Act listed Vulnerable Regent Parrot (*Polytelis anthopeplus*) was ubiquitous across the survey area and seen or heard at most lakes. Additionally, one Lace Monitor (*Varanus varius*) (FFG Act listed Endangered) was recorded incidentally during surveys.

Results are summarised below in Table 2, Table 4, Table 5, Table 6, shown visually in Figure 1 and Figure 2 and provided in their entirety in Appendix B. A summary of incidental and threatened species observed during surveys is provided in Appendix C, and a selection of photographs of nests, nesting birds and species of interest is provided in Appendix D.

Table 2 Summary of all waterbird and wetland utilising breeding results 2021/22

Common Name	Scientific Name	FFG Act Status	Communal nesting	No Records	No Chicks
Australasian Darter	*Anhinga novaehollandiae*		No	39	148
Australasian Grebe	*Tachybaptus novaehollandiae*		No	6	14
Australian White Ibis	*Threskiornis molucca*		Yes	15	36
Australian Wood Duck	*Chenonetta jubata*		No	3	17
Black Swan	*Cygnus atratus*		Yes	0	3
Blue-billed Duck	*Oxyura australis*	VU	No	1	5
Eurasian Coot	*Fulica atra*		No	53	111
Great Cormorant	*Phalacrocorax carbo*		Yes	1,734	6,121
Great Crested Grebe	*Podiceps cristatus*		No	23	35
Grey Teal	*Anas gracilis*		No	85	202
Hoary-headed Grebe	*Poliocephalus poliocephalus*		No	28	98
Little Black Cormorant	*Phalacrocorax sulcirostris*		Yes	78	229
Little Pied Cormorant	*Phalacrocorax melanoleucos*		Yes	40	120
Musk Duck	*Biziura lobata*	VU	No	1	2
Nankeen Night Heron	*Nycticorax caledonicus*		No	7	8
Pacific Black Duck	*Anas superciliosa*		No	7	15
Pied Cormorant	*Phalacrocorax varius*		Yes	2	17
Pink-eared Duck	*Malacorhynchus membranaceus*		No	29	136
Royal Spoonbill	*Platalea regia*		Yes	3	0
Whistling Kite	*Haliastur sphenurus*		No	1	3
White-bellied Sea-eagle	*Haliaeetus leucogaster*	EN	No	1	1
White-necked Heron	*Ardea pacifica*		Yes	9	22
Yellow-billed Spoonbill	*Platalea flavipes*		Yes	15	31
TOTALS	**24 species**	**2 VU, 2 EN**		**2,180**	**7,374**

Table 3 Summary of all waterbird and wetland utilising breeding results 2021/22 by lake

Lake	Colonial species nests	Non-Colonial species nests	Total number of nests	Colonial species chicks	Non-Colonial species chicks	Total Number of chicks
Arawak	0	13	**13**	0	32	**32**
Bitterang	3	35	**38**	1	139	**140**
Brockie	9	14	**23**	30	33	**63**
Boich	0	0	**0**	0	0	**0**
Bulla	5	10	**15**	15	34	**49**
Cantala	1358	49	**1407**	4,894	157	**5051**
Chalka Creek	0	1	**1**	0	2	**2**
Hattah	77	22	**99**	193	51	**244**
Konardin	52	21	**73**	174	67	**241**
Little Hattah	1	10	**11**	5	19	**24**
Lockie	8	13	**21**	30	20	**50**
Marramook	0	3	**3**	0	10	**10**
Mournpall	98	9	**107**	365	16	**381**
Nip Nip	0	6	**6**	0	18	**18**
Roonki	168	2	**170**	534	9	**543**
Tullamook	0	2	**2**	0	6	**6**
Woterap	0	57	**57**	0	130	**130**
Yelwell	118	12	**130**	341	41	**382**
Yerang	0	4	**4**	0	8	**8**
TOTALS	**1897**	**283**	**2180**	**6582**	**792**	**7374**

Table 4 Colonial species breeding data – by lake

Lake	Australian White Ibis nests/chicks	Black Swan nests/chicks	Great Cormorant nests/chicks	Little Black Cormorant nests/chicks	Little Pied Cormorant nests/chicks	Pied Cormorant nests/chicks	Royal Spoonbill nests/chicks	White-necked Heron nests/chicks	Yellow-billed Spoonbill nests/chicks	TOTAL Colonial nests/chicks
Arawak	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
Bitterang	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	2 / 0	0 / 0	0 / 0	**3 / 1**
Brockie	0 / 0	0 / 0	8 / 29	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	**9 / 30**
Boich	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
Bulla	0 / 0	0 / 0	0 / 0	2 / 7	3 / 8	0 / 0	0 / 0	0 / 0	0 / 0	**5 / 15**
Cantala	0 / 0	0 / 0	1,336 / 4,829	0 / 0	18 / 58	0 / 0	1 / 0	0 / 0	3 / 7	**1,358 / 4,894**
Hattah	12 / 29	0 / 0	28 / 67	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**77 / 193**
Konardin	3 / 7	0 / 0	44 / 155	0 / 0	0 / 0	0 / 0	0 / 0	4 / 9	1 / 3	**52 / 174**
Little Hattah	0 / 0	2 / 3	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 2	**3 / 5**
Lockie	0 / 0	0 / 0	8 / 30	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**8 / 30**
Marramook	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
Mournpall	0 / 0	0 / 0	98 / 365	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**98 / 365**
Nip Nip	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
Roonki	0 / 0	0 / 0	165 / 525	0 / 0	0 / 0	0 / 0	0 / 0	3 / 9	0 / 0	**168 / 534**
Tullamook	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
Woterap	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
Yelwell	0 / 0	0 / 0	10 / 36	76 / 222	19 / 54	2 / 7	0 / 0	2 / 4	9 / 18	**118 / 341**
Yerang	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
TOTALS	**15 / 36**	**2 / 3**	**1,698 / 6,037**	**78 / 229**	**40 / 120**	**2 / 7**	**3 / 0**	**9 / 22**	**15 / 31**	**1,897 / 6,582**

Table 5 Non-colonial species breeding data – by lake

Lake	Australasian Darter nests/chicks	Australasian Grebe nests/chicks	Australian Wood Duck nests/chicks	Blue-billed Duck nests/chicks	Eurasian Coot nests/chicks	Great Crested Grebe nests/chicks	Grey Teal nests/chicks	Hoary-headed Grebe nests/chicks	Musk Duck nests/chicks	Nankeen Night Heron nests/chicks	Pacific Black Duck nests/chicks	Pink-eared Duck nests/chicks	White-bellied Sea-eagle nests/chicks	TOTAL non-colonial nests/chicks
Arawak	7 / 24	0 / 0	0 / 0	0 / 0	2 / 2	2 / 2	2 / 4	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**13 / 32**
Bitterang	0 / 0	2 / 4	0 / 0	0 / 0	7 / 11	0 / 0	17 / 49	2 / 28	0 / 0	0 / 0	0 / 0	9 / 47	0 / 0	**35 / 139**
Brockie	5 / 18	0 / 0	0 / 0	0 / 0	2 / 4	2 / 3	4 / 6	0 / 0	0 / 0	0 / 0	1 / 2	0 / 0	0 / 0	**14 / 33**
Boich	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**0 / 0**
Bulla	6 / 25	0 / 0	0 / 0	0 / 0	2 / 4	1 / 1	1 / 4	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**10 / 34**
Cantala	9 / 34	2 / 6	0 / 0	1 / 5	4 / 21	0 / 0	11 / 36	15 / 29	0 / 0	0 / 0	2 / 2	5 / 24	0 / 0	**49 / 157**
Chalka Creek	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**1 / 2**
Hattah	1 / 5	0 / 0	1 / 4	0 / 0	6 / 15	5 / 10	0 / 0	1 / 1	0 / 0	6 / 7	2 / 9	0 / 0	0 / 0	**22 / 51**
Konardin	1 / 4	0 / 0	0 / 0	0 / 0	7 / 11	3 / 4	3 / 12	3 / 24	0 / 0	0 / 0	0 / 0	2 / 12	0 / 0	**21 / 67**
Little Hattah	0 / 0	0 / 0	0 / 0	0 / 0	4 / 4	1 / 2	2 / 8	2 / 4	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	**10 / 19**
Lockie	0 / 0	0 / 0	0 / 0	0 / 0	4 / 5	5 / 7	1 / 1	2 / 4	0 / 0	0 / 0	0 / 0	1 / 3	0 / 0	**13 / 20**
Marramook	1 / 4	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 5	0 / 0	**3 / 10**
Mournpall	0 / 0	0 / 0	0 / 0	0 / 0	5 / 11	2 / 3	2 / 2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**9 / 16**
Nip Nip	0 / 0	2 / 4	0 / 0	0 / 0	1 / 2	0 / 0	1 / 8	2 / 4	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**6 / 18**
Roonki	0 / 0	0 / 0	0 / 0	0 / 0	1 / 3	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 6	0 / 0	**2 / 9**
Tullamook	0 / 0	0 / 0	0 / 0	0 / 0	1 / 5	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**2 / 6**
Woterap	2 / 8	0 / 0	2 / 13	0 / 0	3 / 4	0 / 0	38 / 65	0 / 0	1 / 2	0 / 0	2 / 2	9 / 36	0 / 0	**57 / 130**
Yelwell	7 / 26	0 / 0	0 / 0	0 / 0	2 / 5	0 / 0	1 / 3	1 / 4	0 / 0	0 / 0	0 / 0	1 / 3	0 / 0	**12 / 41**
Yerang	0 / 0	0 / 0	0 / 0	0 / 0	1 / 3	1 / 1	1 / 3	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	**4 / 8**
TOTALS	**39 / 148**	**6 / 14**	**3 / 17**	**1 / 5**	**53 / 111**	**23 / 35**	**85 / 202**	**28 / 98**	**1 / 2**	**7 / 8**	**7 / 15**	**29 / 136**	**1 / 1**	**283 / 792**

Table 6 Waterbird nest data – by species

Common Name	Scientific Name	Number of nests	Number of chicks	Mean chicks per nest	Tree species RRG / Coobah	Number Alive / Dead	Tree Height (m) mean / sd	Tree DBH (cm) mean / sd	Nest Height (m) mean / sd	Nests per tree mean / sd
Australasian Darter	*Anhinga novaehollandiae*	29	110	3.79	3 / 26	19 / 10	10.62 / 2.20	29.17 / 9.90	3.90 / 3.01	1.62 / 1.54
Australian White Ibis	*Threskiornis molucca*	14	33	2.36	14 / 0	11 / 3	11.64 / 0.48	22.86 / 4.82	3.64 / 0.48	1.00 / 0.00
Great Cormorant	*Phalacrocorax carbo*	1,669	5,972	3.58	1,601 / 68	897 / 772	10.29 / 1.65	29.11 / 8.63	3.39 / 1.23	1.28 / 0.87
Little Black Cormorant	*Phalacrocorax sulcirostris*	112	315	2.81	100 / 12	93 / 19	14.25 / 3.79	64.93 / 45.18	6.26 / 3.22	6.40 / 5.15
Little Pied Cormorant	*Phalacrocorax melanoleucos*	63	173	2.75	166 / 7	52 / 11	9.65 / 2.90	21.24 / 14.67	3.11 / 1.51	1.68 / 1.55
Nankeen Night Heron	*Nycticorax caledonicus*	5	6	1.20	5 / 0	5 / 0	11.40 / 0.80	21.20 / 2.48	3.80 / 0.40	1.00 / 0.00
Pied Cormorant	*Phalacrocorax varius*	2	7	3.50	2 / 0	2 / 0	14.50 / 2.50	70.00 / 38.0	8.00 / 2.00	11.00 / 5.00
White-necked Heron	*Ardea pacifica*	9	22	2.44	9 / 0	9 / 0	14.67 / 3.23	68.22 / 29.97	9.22 / 4.10	1.78 / 0.92
Yellow-billed Spoonbill	*Platalea flavipes*	15	31	2.07	15 / 0	14 / 1	14.53 / 2.92	70.47 / 35.34	9.40 / 3.79	1.40 / 0.80
All Species		**1,918**	**6,669**	**3.48**	**1,915 / 113**	**1,102 / 816**	**10.57**	**31.48**	**3.64**	**1.59**

*Note nest data does not align with breeding data as young birds were also recorded away from nests.

3.2 Spatial distributions of breeding records

The following maps show the spatial distributions of waterbird breeding records, across the Hattah Lakes system, as locations (Figure 1), and as a 'heat map' which indicated the density of breeding/nest records (Figure 2).

Figure 1 All waterbird breeding records from 2021/22 surveys

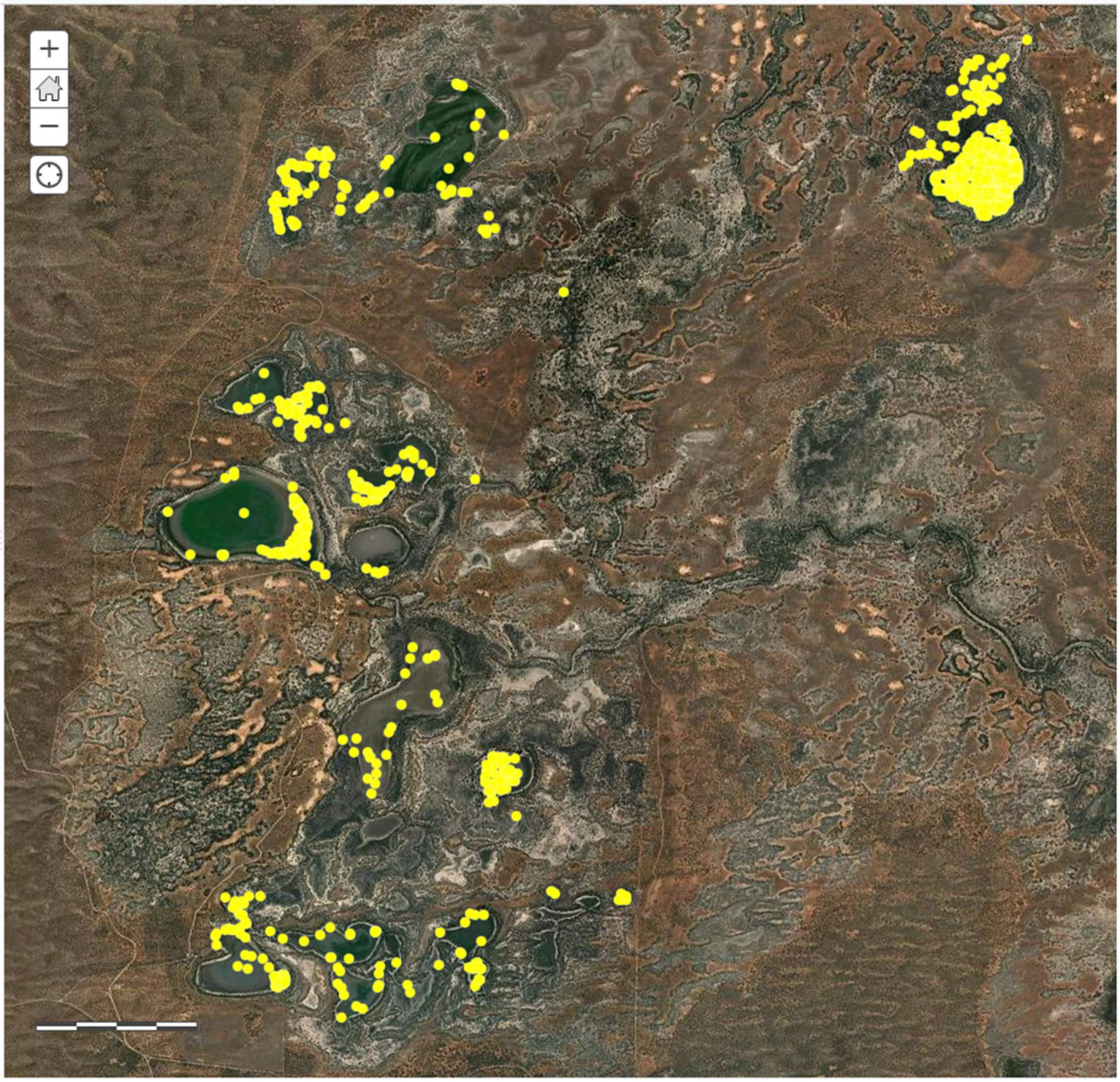
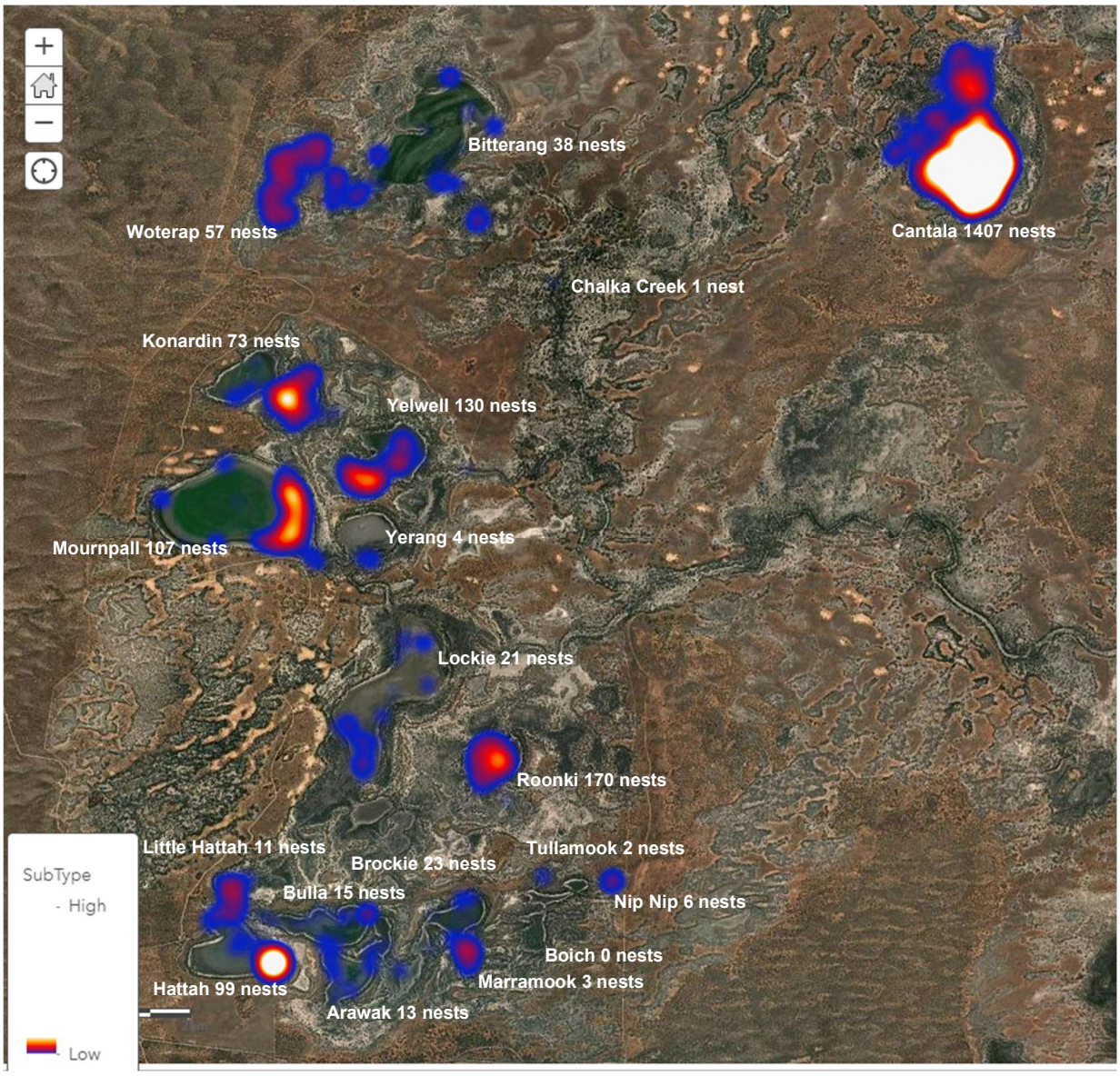


Figure 2 Heat map of waterbird nests detected during 2021/22 surveys



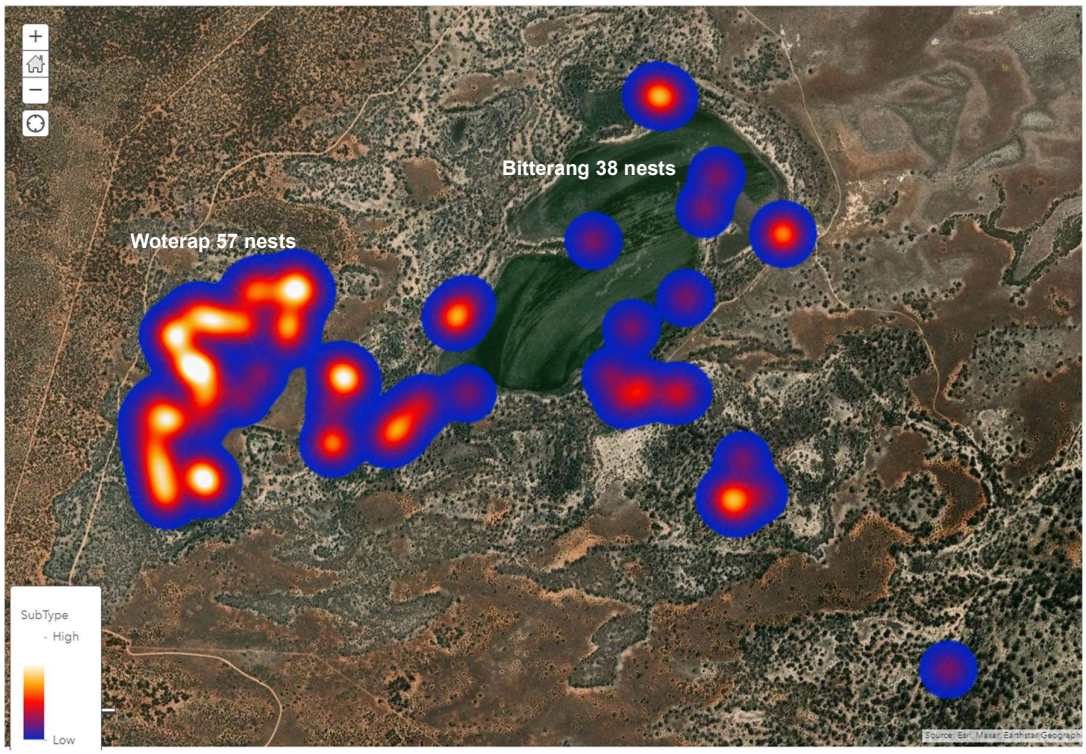
3.3 Spatial densities of nests

The following heat maps show the spatial densities of the nest sites in greater detail at each lake or group of proximate lakes, with descriptions of these areas provided.

3.3.1 Lakes Bitterang and Woterap

Nests at Lakes Bitterang (38 nests) and Woterap (57) can be seen in Figure 3 to be quite widespread across the perimeter of Lake Bitterang, with nests primarily in areas of River Red Gum regeneration. Lake Woterap contained no colonial nesting waterbird species, but significant numbers of young waterfowl including Grey Teal, Australian Wood Duck and Pink-eared Duck spread across much of its area.

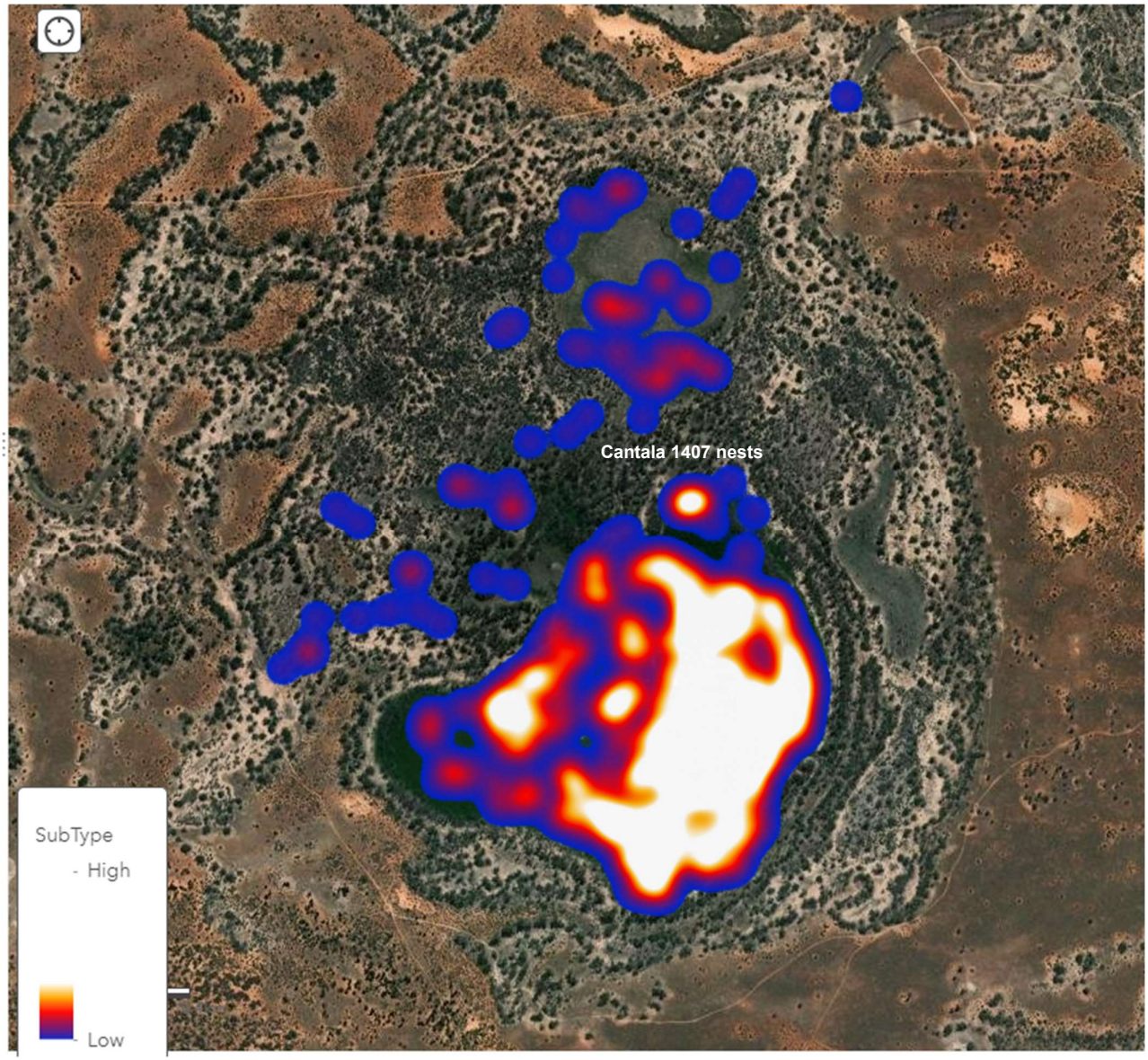
Figure 3 Spatial distribution of nests at Lakes Bitterang and Woterap



3.3.2 Lake Cantala

Lake Cantala had the greatest number of nests (1,407), which can be seen in Figure 3 to be widespread across the lake, with much greater concentrations in the southern areas, most associated with medium to large River Red Gum saplings growing across the lakebed. A number of nests in larger River Red Gums were also observed in the north-central areas of the lake.

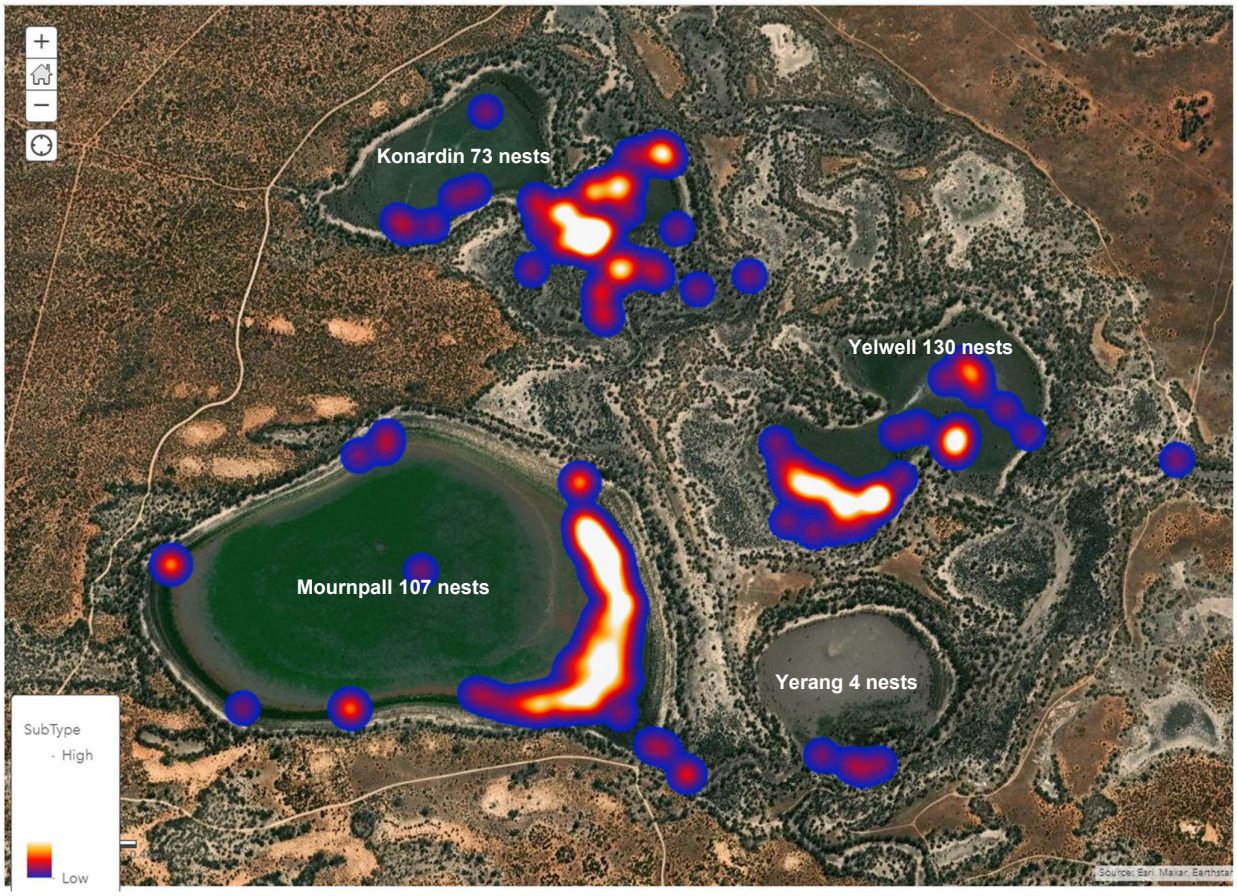
Figure 4 Spatial distribution of nests at Lake Cantala



3.3.3 Lakes Mournpall, Konardin, Yellwell and Yerang

Colonial waterbird nests at these central lakes (Figure 5) were concentrated in three large groups of River Red Gum saplings; in the southeast of Lake Konardin (73 nests), the south of Lake Yelwell (130 nests), and along the eastern edge of Lake Mournpall (107 nests). A number of smaller colonies were scattered across these lakes.

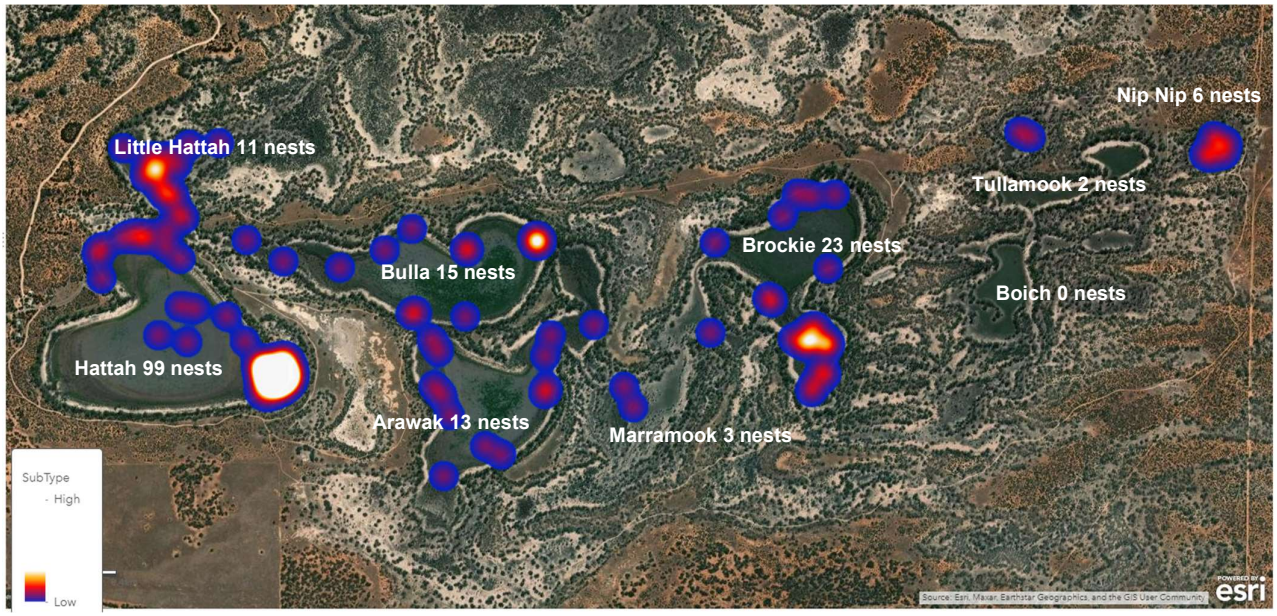
Figure 5 Spatial distribution of nests at Lakes Mournpall, Konardin, Yellwell and Yerang



3.3.4 Lakes Hattah, Little Hattah, Bulla, Arawak, Marramook, Brockie, Tullamook, Boich and Nip Nip

Colonial waterbird nests across the lakes in the south of Hattah can be seen in Figure 6 to be quite widespread, with a large mixed colony of nests in River Red Gum regeneration in the south-eastern corner of Lake Hattah (99 nests), and a smaller colony in the south of Lake Brockie (23 nests). Most other breeding records in these southern lakes were of non-colonial species such as Australasian Darter, Ducks, Grebes and Eurasian Coot.

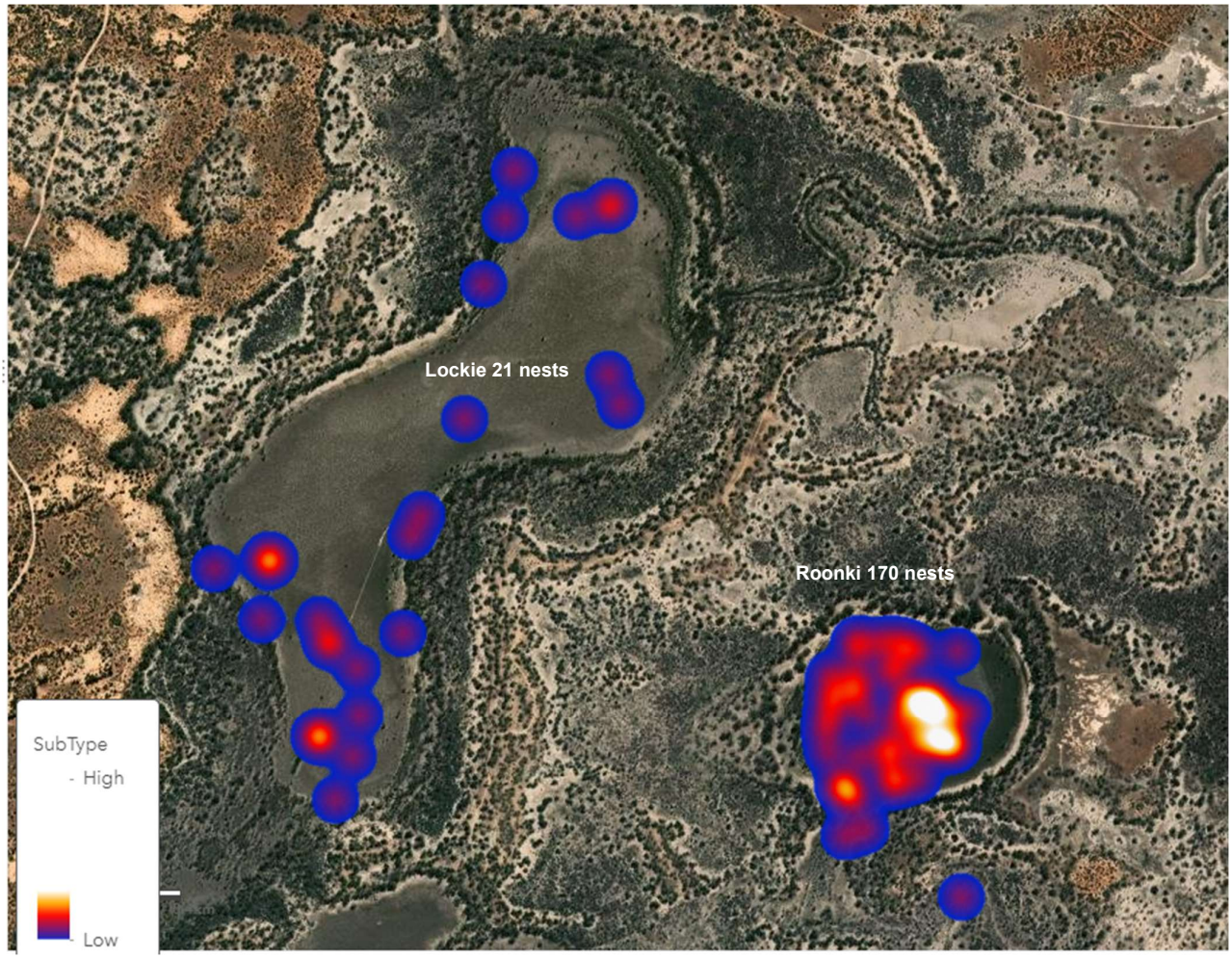
Figure 6 ***Spatial distribution of nests at Lakes Hattah, Little Hattah, Bulla, Arawak, Marramook, Brockie, Tullamook, Boich and Nip Nip***



3.3.5 Lakes Lockie and Roonki

Despite its large size, Lake Lockie contained relatively few colonial waterbird nests (21) scattered around the perimeter and south, whilst Lake Roonki contained at least 170 nests, mostly Great Cormorants spread across much of the lake in medium sized River Red Gum regrowth.

Figure 7 Spatial distribution of nests at Lakes Lockie and Roonki



3.4 Waterbird breeding - chick development

As outlined in the methods, chick development was assessed on a scale of 1 to 5 where:

1. A newly hatched altricial chick, largely naked, eyes closed (0-9% grown),
2. Small chick but with eyes open (10-24% grown);
3. Medium chick with some body feathers and pin-feathers on wings (25-59%grown);
4. Large chick with most body feathers (60-89% grown);
5. Ready to fledge at any stage (90%+ grown).

Chick development is summarised by waterbird species and by lake below in Table 7 and Table 8. Most species show high percentages of birds in late development stages from surveys, and those with significant percentages of smaller chicks being waterfowl that were observed and could not be re-assessed at a later stage, as opposed to those species in nests which were re-assessed over time as chick development progressed. Very few dead chicks and no obvious failed nests (filled with dead chicks) were observed during surveys No obvious predation was observed during surveys. Many chicks which were not fully fledged were still occupying nests when surveys ceased in April 2022.

Many of these values represent minimum stages of development, at the most recent surveys of these nest sites, and many birds were at this stage when surveys were concluded, and therefore many ‘large’ chicks would be expected to progress and fledge. Many young (stage 4 and 5) cormorants were observed moving through the water and roosting low in submerged trees showing that birds of this age can leave the nest and move about the lake following feeding parents etc.

Table 7 Waterbird Chick Development – by species

Common Name	Scientific Name	Altricial (0-9% grown)		Small (10-24% grown)		Medium (25-59 % grown)		Large (60-89% grown)		Ready to Fledge (90%+ grown)		TOTAL
		Number	%	Number	%	Number	%	Number	%	Number	%	
Australasian Darter	*Anhinga novaehollandiae*	0	0%	4	3%	34	23%	100	68%	10	7%	**148**
Australasian Grebe	*Tachybaptus novaehollandiae*	0	0%	4	29%	6	43%	3	21%	1	7%	**14**
Australian White Ibis	*Threskiornis molucca*	0	0%	0	0%	5	14%	22	61%	9	25%	**36**
Australian Wood Duck	*Chenonetta jubata*	0	0%	0	0%	7	41%	6	35%	4	24%	**17**
Black Swan	*Cygnus atratus*	0	0%	2	67	1	33%	0	0%	0	0%	**3**
Blue-billed Duck	*Oxyura australis*	0	0%	0	0%	0	0%	0	0%	5	100%	**5**
Eurasian Coot	*Fulica atra*	1	1%	5	5	8	7%	54	49%	43	39%	**111**
Great Cormorant	*Phalacrocorax carbo*	0	0%	0	0%	110	2%	3466	58%	2397	40%	**5973**
Great Crested Grebe	*Podiceps cristatus*	0	0%	0	0%	11	31%	18	51%	6	17%	**35**
Grey Teal	*Anas gracilis*	5	3%	56	28%	67	34%	51	26%	21	11%	**200**
Hoary-headed Grebe	*Poliocephalus poliocephalus*	0	0%	0	0%	24	24%	41	40%	37	36%	**102**
Little Black Cormorant	*Phalacrocorax sulcirostris*	0	0%	0	0%	48	15%	247	76%	31	10%	**326**
Little Pied Cormorant	*Phalacrocorax melanoleucos*	0	0%	13	7%	8	4%	130	70%	36	19%	**187**

Common Name	Scientific Name	Altricial (0-9% grown)		Small (10-24% grown)		Medium (25-59 % grown)		Large (60-89% grown)		Ready to Fledge (90%+ grown)		TOTAL
		Number	%	Number	%	Number	%	Number	%	Number	%	
Musk Duck	*Biziura lobata*	0	0%	0	0%	0	0%	0	0%	2	100%	**2**
Nankeen Night Heron	*Nycticorax caledonicus*	0	0%	0	0%	0	0%	2	25%	6	75%	**8**
Pacific Black Duck	*Anas superciliosa*	0	0%	13	87%	1	7%	1	7%	0	0%	**15**
Pied Cormorant	*Phalacrocorax varius*	0	0%	0	0%	0	0%	7	100%	0	0%	**7**
Pink-eared Duck	*Malacorhynchus membranaceus*	0	0%	49	36%	29	21%	52	38%	6	4%	**136**
Whistling Kite	*Haliastur sphenurus*	0	0%	0	0%	0	0%	3	100%	0	0%	**3**
White-bellied Sea-eagle	*Haliaeetus leucogaster*	0	0%	0	0%	0	0%	0	0%	1	100%	**1**
White-necked Heron	*Ardea pacifica*	0	0%	0	0%	2	9%	20	91%	0	0%	**22**
Yellow-billed Spoonbill	*Platalea flavipes*	0	0%	0	0%	2	6%	29	94%	0	0%	**31**

Table 8 Waterbird Chick Development – by lake

Lake	Altricial (0-9% grown)		Small (10-24% grown)		Medium (25-59 % grown)		Large (60-89% grown)		Ready to Fledge (90%+ grown)		TOTAL
	Number	%	Number	%	Number	%	Number	%	Number	%	
Arawak	0	0	0	0	7	22	21	66	4	13	32
Bitterang	0	0	43	30	18	13	79	55	3	2	143
Brockie	0	0	2	3	8	13	49	78	4	6	63
Boich	0	0	0	0	0	0	0	0	0	0	0
Bulla	0	0	7	14	0	0	36	73	6	12	49
Cantala	0	0	31	1	131	3	2866	57	2023	40	5051
Hattah	0	0	11	5	12	5	148	61	73	30	244
Konardin	0	0	8	3	13	5	201	82	22	9	244
Little Hattah	3	13	2	8	6	25	5	21	8	33	24
Lockie	0	0	3	6	5	10	38	76	4	8	50
Marramook	0	0	0	0	5	50	5	50	0	0	10
Mournpall	1	0	0	0	0	0	327	86	53	14	381
Nip Nip	0	0	0	0	6	33	4	22	8	44	18
Roonki	0	0	0	0	10	2	162	30	371	68	543
Tullamook	0	0	0	0	0	0	5	83	1	17	6
Woterap +	0	0	22	17	78	60	28	22	2	2	130
Yelwell	0	0	17	4	61	16	272	71	32	8	382
Yerang	0	0	0	0	1	13	6	75	1	13	8

3.5 Incidental and threatened species observations

Incidental and threatened species records observed during surveys were taken and are summarised in Table 9 and in detail in Appendix C. Observations of noteworthy species include those which are listed as threatened under state or federal legislation, or which are considered uncommon or significant from a regional perspective.

The nationally (EPBC Act Vulnerable) and state (FFG Act Vulnerable) listed Regent Parrot (*Polytelis anthopeplus*) is well known from HKNP and the surrounding area, and this species was regularly heard and seen during the surveys, across the study area. Several other threatened and regionally significant species were observed to be breeding in response to the environmental watering, including Blue-billed Duck (5 young), Musk Duck (2 young), Royal Spoonbill occupying a nest, and a recently fledged White-bellied Sea-eagle (*Haliaeetus leucogaster*).

Of interest were a number of European Carp (*Cyprinus carpio*) of up to 25cm in length, observed in the water and also being disgorged by cormorant and darters to feed chicks or when disturbed by surveyors. Several large groups of Australian Pelicans were observed at lakes and while not breeding, these lakes likely provide an important feeding habitat for these birds.

An unusual record was several apparently large colonies of micro-bats heard calling from under the bark of River Red Gum saplings at Lake Cantala. It was not possible to discern the potential species from these contact calls and disturbing the bark had the potential to cause the bats to drop into the water so no attempt was made to identify them. It would be expected that these bats are benefiting from the food source of large numbers of invertebrates resulting from the inundation of the lakes, and potentially the inundated trees provide good protection from predation, possibly as maternal roosts.

Table 9 Threatened Species observed during surveys

Common Name	Scientific Name	Number	FFG Act Status	EPBC Act Status	Breeding Activity?
Blue-billed Duck	*Oxyura australis*	24	VU	-	Yes – 5 young
Freckled Duck	*Stictonetta naevosa*	1	EN	-	No
Lace Monitor	*Varanus varius*	1	EN	-	No
Musk Duck	*Biziura lobata*	6	VU	-	Yes – 2 young
Regent Parrot	*Polytelis anthopeplus*	x	VU	VU	No
Royal Spoonbill	*Platalea regia*	3	-	-	Yes – one nest
White-bellied Sea-eagle	*Haliaeetus leucogaster*	3	EN	-	Yes – 1 young

4. Discussion

The environmental watering of the previously dry Hattah Lakes system in the autumn and spring of 2021 triggered a significant breeding event across much of the lakes system in the summer of 2021/22, with at least 24 species of waterbird and wetland utilising birds recorded breeding. A total of 2,180 nests and 7,374 chicks were recorded, of which the vast majority (1,897 nests and 6,582 chicks) were classified as colonial breeding waterbird species.

These large numbers of nests and chicks, and the largely successful development of chicks clearly show the importance of the Hattah Lakes system as an area for waterbird breeding, and likely as a refuge for waterbirds during dry times. Lakes varied greatly in abundances of nests and chicks, ranging from no colonial nests at Lakes Arawak, Boich, Marramook, Nip Nip, Tullamook, Woterap and Yerang, to as many as 77 at Lake Hattah, 98 at Mournpall, 118 at Lake Yelwell, 168 at Roonki and 1,358 at Lake Cantala. Non-colonial nesting species of waterbird were recorded breeding at all lakes except Lake Boich. Locations of breeding colonies displayed a high degree of site fidelity, with all but one active breeding colony located in the same area as a previous, old vacant nesting colony detected in 2020/21. It is important to note that surveys in 2020/21 detected old, unused nests that were the result of numerous years of breeding while the lake system had been inundated, and that the present 2021/22 surveys detected nesting activity at every location that had previously been utilised, over a number of seasons. This suggests that in 2021/22, breeding activity was both high in numbers, and widespread.

Another important finding from this survey was the validation of assumptions of nest types and waterbird species nests, made in the previous Hattah colonial waterbird nest assessment in 2020/21 (GHD 2021). Nests that had previously been labelled as ‘large cormorant’ nests and believed to be Great or Pied Cormorant nests, and those of ‘small cormorant’ nests and believed to be Little-black and Little-pied Cormorant nests were confirmed to be very accurate, as nests were clearly different in size from one another, and typically located in positions different to one another. Large cormorant nests such as those of Great Cormorant tended to form more ‘loose colonies’ with nests more spread out, higher above the water in larger saplings, while ‘small cormorant’ nests of Little Pied and Little Black Cormorants were typically much more densely arranged, and in one of two situations: lower to the water in dense stands of small saplings or very close together in larger old trees (up to 16 nests in a single tree).

The following discussion investigates the numbers of nests and nestlings, their spatial distribution and densities, and the successful development of the young.

4.1 Colonial waterbird nest numbers

The 2021/22 targeted surveys of colonial nesting waterbird breeding recorded a total of 1,897 nests and 6,582 chicks from nine species classified as colonial nesting waterbirds. The large numbers of nests and chicks, and their largely successful development (discussed in section 4.3) clearly show the importance of the Hattah Lakes system as an area for colonial nesting waterbird breeding. Individual lakes varied greatly in abundances of nests, ranging from no colonial nests at Lakes Arawak, Boich, Marramook, Nip Nip, Tullamook, Woterap and Yerang, to as many as 118 nests at Lake Yelwell, 168 at Roonki and 1,358 at Lake Cantala.

These counts of nests may be considered an estimate of the minimum number of nests in these areas surveyed, as it is almost certain that some additional nests were not observed or missed, though colonies of any larger size are unlikely to go undetected due to their obvious nature and the significant noise generated by large congregations of birds – all colonies of over 50 nests were audible from a distance and very noisy up close.

A comparison of the numbers of colonial waterbird nests recorded in these 2021/22 surveys with those recorded as unoccupied colonial waterbird nests in 2020/21 (GHD 2022) is provided below in Table 10. These values show a remarkably similar values for total number of nests (1,901 in 20/21, 1,897 in 21/22) and a broadly similar spread of lakes with nests. The spread of nests across lakes was broader in the earlier nests, with nine lakes in 20/21 having 50 or more nests, compared to five in 21/22, and 13 lakes in 20/21 having 10 or more nests, compared to six in 21/22. In both surveys Lake Cantala had more than twice as many nests as any other lake, with lakes Hattah, Konardin, Roonki and Yelwell all recording large numbers of nests in both surveys.

It is important to note when comparing nest numbers between these two surveys, that the 2020/21 surveys were of the cumulative totals of all nests that had been constructed over a number of years – possibly five or more years of

nesting activity – and over time it would be expected that greater numbers of nests will accumulate, and potentially a greater spread of lakes used as food resources wax and wane at different locations over time. Therefore, the high number and broad spread of active nests recorded in 2021/22 suggests that this represents a large and widespread breeding event. As far as can be ascertained, this represents the largest breeding event documented withing the Hattah Lakes system.

Table 10 *Comparison of colonial waterbird nest numbers – 2020/21 (unoccupied nests) and 2021/22 (occupied nests).*

Lake	Unoccupied (cumulative) nests of colonial breeding waterbird species 2020/21	Occupied nests of colonial breeding waterbird species 2021/22
Arawak	34	0
Bitterang	66	3
Brockie	70	9
Boich	15	0
Bulla	58	5
Cantala	739	1,358
Hattah	315	77
Konardin	188	52
Little Hattah	4	1
Lockie	29	8
Marramook	1	0
Mournpall	1	98
Nip Nip	0	0
Roonki	70	168
Tullamook	1	0
Woterap	66	0
Yelwell	205	118
Yerang	39	0
TOTALS	**1,901**	**1,897**

4.2 Spatial distribution and densities of nests

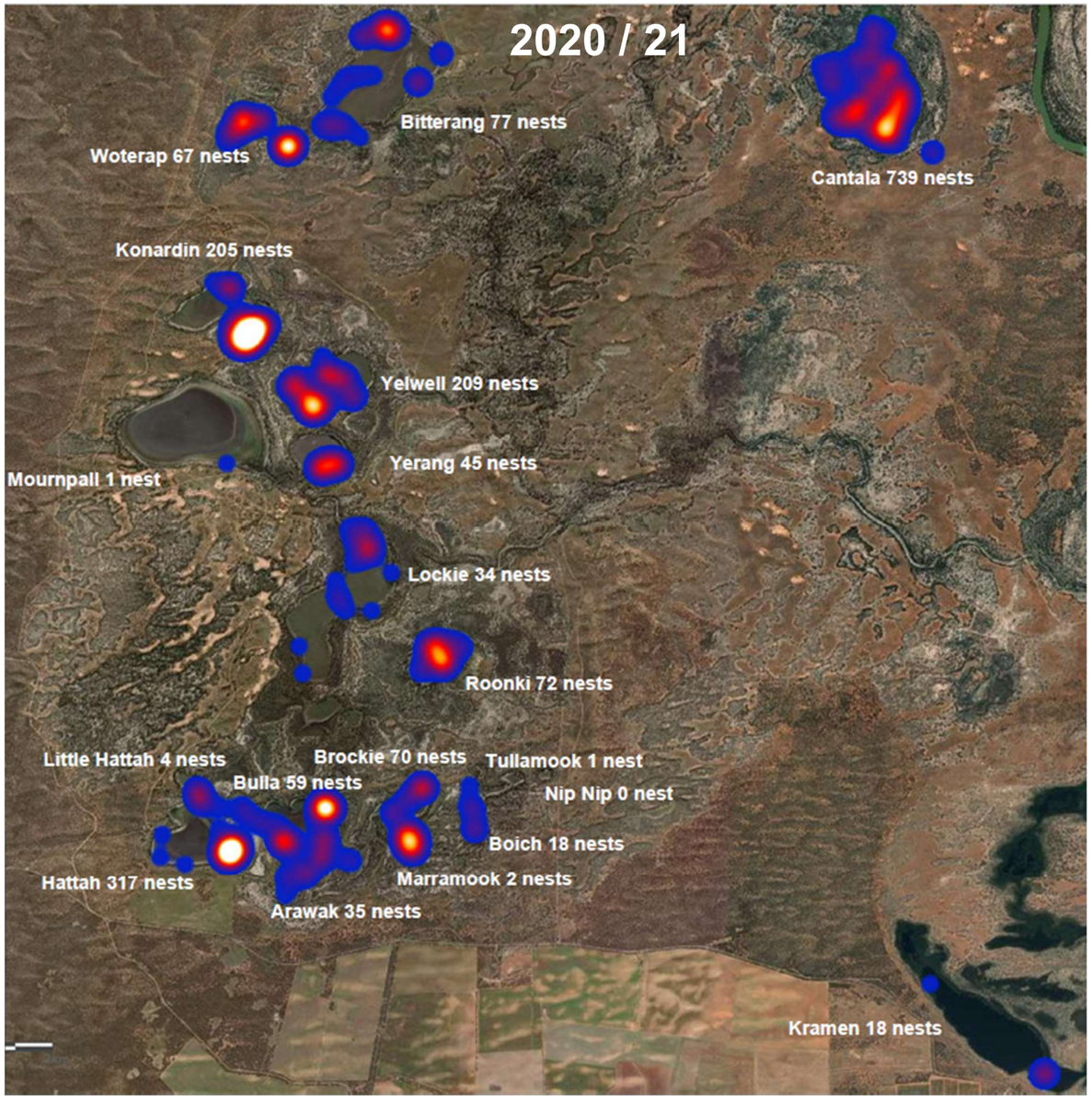
As summarised previously, lakes across HKNP varied greatly in abundances of nests, ranging from no colonial breeding waterbird nests at Lakes Arawak, Boich, Marramook, Nip Nip, Tullamook, Woterap and Yerang, to 77 at Lake Hattah, 98 at Lake Mournpall, 118 at Lake Yelwell, 168 at Lake Roonki and 1,358 at Lake Cantala.

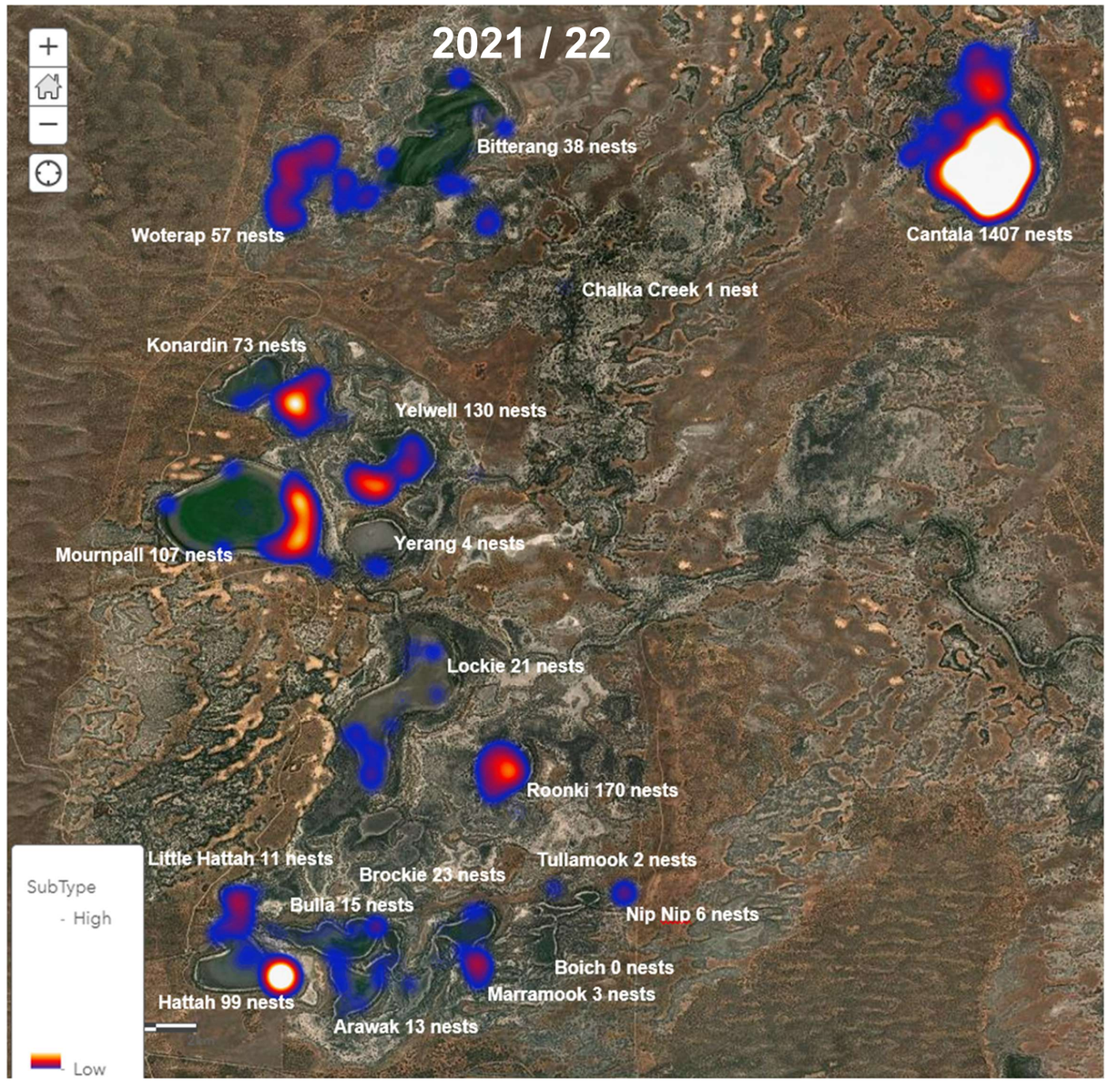
Mapping of nest locations using heat maps (Figure 2 and Figures 3 to 7) provides a clear visual representation of the distribution of nests and colonies across the study area, with a generally broad spread of nesting activity across the Hattah Lakes area, with clear areas of intensive nesting activity. Dense colonies were typically found within or close to the inlet/outlet areas of the lakes, along narrow peninsulas which project into the lake areas, and overflow areas adjacent to the main lake waterbodies. The nests across the Lake Cantala lakebed were the main divergence to this, with many nests relatively spread out in the medium-to-large trees which have regenerated across the lake. The basis of the distribution of the nesting colonies can only be speculated on but seems likely to relate to those areas containing more suitable nesting habitat in the form of preferentially sized, oriented and shaped trees, and more importantly, to occur in areas of high prey concentrations, reducing travel distance for breeding adult birds. Areas in and around the inlet/outlet creeks of the lakes may be more productive due to flows of water through those areas, potentially concentrating prey items. Most colonial waterbirds including cormorants are however strong fliers and can travel large distances between feeding grounds and nesting colonies (Marchant and Higgins 1990). Incidental observations were made of large flocks of Great Cormorants moving between lakes, potentially adult birds feeding in lakes distant to their breeding colonies.

Of note during surveys was the frequency of nests within dense clumps of River Red Gum regeneration. These dense stands of regeneration may be suitable as they provide protection to the nests from wind and sun, cover from predators, or may simply provide an easy opportunity for large numbers of nests to be built very close to one another. Nesting communal waterbirds in freshwater wetlands have a strong preference for nesting in trees standing in water, and this certainly contributes to the locations and tree preferences observed during this study, with all nests observed in trees that were inundated. Large areas of River Red Gum regeneration exist within and around the perimeter of the lake beds of most of the lakes, whilst the largest old trees typically surround the lakes in higher locations. Most of the larger diameter trees that were recorded to contain nests occurred in lower lying areas of the lakes, such as on peninsulas. Very few of the largest trees are fully inundated during environmental watering events, and even when they do, are often not standing in water for long before water levels begin to recede. For this reason, it is possible, and even likely, that different, and possibly larger height and DBH trees would be used for nesting by these species during natural flood events, when water levels may be substantially higher than those possible during environmental watering.

Locations of breeding colonies recorded in these surveys displayed a very high degree of site fidelity, with all but one colony located in the same area as those unoccupied colonies detected in previous surveys in 2020/21 – as shown in Figure 8 below. Larger colonies were found in the same locations at Lakes Cantala, Woterap, Konardin, Yelwell, Roonki and Hattah. Lake Mournpall was the sole exception with a colony of Great Cormorant nests in 2021/22 where one had not existed prior. The specific reasons for these consistent locations of colonies can only be speculated on, but as theorised previously, it is likely that areas containing more suitable nesting habitat in the form of preferentially sized, oriented and shaped trees, and occurring in areas of high prey concentrations, reducing travel distance for breeding adult birds, will be preferred areas to colonise. Areas in and around the inlet/outlet creeks of the lakes may be more productive due to flows of water through those areas, potentially concentrating prey items.

Figure 8 Spatial distribution of all waterbird nests as heatmaps from occupied nests in 2020/21 surveys (left) and unoccupied nests in 2021/22 surveys (right).





4.3 Colonial waterbird nestling numbers, chick development and breeding success

The 2021/22 targeted surveys of waterbird breeding recorded a total of 7,290 chicks, of which the vast majority (6,582 chicks) were colonial nesting species (Table 2, Table 7). Colonial nesting species with large numbers of chicks were Great Cormorant with 6,121 chicks, Little Black Cormorant with 229 chicks, Little Pied Cormorant with 120 chicks, Australian White Ibis with 36 chicks, and Yellow-billed spoonbill with 31 chicks. Observations of chick development and subsequent breeding success, as defined by the number of birds reaching independence, is hard to assess accurately as birds upon fledging leave the nest and cannot be reconciled with a specific nest. However, no signs of nest abandonment or predation and very few mortalities were observed, suggesting a very high success rate. Mean numbers of chicks per nest were generally high for those colonial species observed (Table 6), ranging from 2.75 (Little Pied Cormorant), 2.81 (Little Black Cormorant), 3.5 (Pied Cormorant) and 3.58 (Great Cormorant). Development of colonial nesting chicks was also considered high, with the majority of chicks during final observations assessed as 'large (60-89% grown)' or 'ready to fledge (90%+ grown)' (Table 7), as shown by the percentages of chicks considered 'large' and 'ready to fledge' for Australian White Ibis (61% / 25%), Great Cormorant (58% / 40%), Little Black Cormorant (76% / 10%), Little Pied Cormorant (70% / 10%), Nankeen Night Heron (25% / 75%), Pied Cormorant (100% / 0%) and Yellow-billed Spoonbill (94% / 0%).

Many of these values represent minimum stages of development, as many birds were observed at the 'large chick' stage when surveys were concluded in early April 2022, and therefore most 'large' chicks could be expected to progress and fledge. Many young (stage 4 and 5) cormorants were observed moving through the water and roosting low in submerged trees showing that birds of this age can leave the nest and move about the lake following feeding parents. Overall, the generally large clutch sizes and late stage chick development suggested that sufficient food was available for nesting birds and chicks were expected to fledge successfully. Accurately following the progress of young birds as they leave the nest is very difficult to assess, and would at a minimum require follow-up surveys for several months beyond the completion of these surveys.

These large numbers of chicks, when combined with the large percentage of chicks observed at a ready to fledge stage or considered large and over 60% grown, strongly suggest that chick development and breeding success during the 2021/22 summer breeding season was highly successful. These large numbers of chicks clearly demonstrate the importance of the Hattah Lakes system as an area for waterbird breeding.

Of note during surveys was the apparent degree of synchrony of nests on each lake, with colonies of chicks at each lake apparently all at similar stages to each other, while often offset from those of other colonies on other lakes. This suggests that individuals within colonies establish at a similar time, potentially in response to suitable food availability at that site. Also of note was the apparent second round of breeding by new birds or potentially second clutch of nests by birds that had just finished breeding at Lake Cantala, where an increasing number of birds were observed incubating on nests in the final rounds of survey. A new colony or second clutch both suggest that conditions at this lake continue to be very productive for waterbirds and the fish and macroinvertebrates on which they depend.

In incidental observations by our ecologists, unrelated to this project, juvenile but independent Great Cormorants were observed in groups of 20-30 birds at locations on the Murray River and Kings Billabong in April and May following completion of surveys. While the origins of these young birds cannot be known it is nonetheless possible that they have dispersed from the Hattah Lakes system, as these are likely to be the biggest or potentially only breeding colonies in the local area, given natural flooding of other areas is not known from the local area at this stage.

4.4 Future monitoring

This comprehensive survey of colonial breeding waterbird nests across the Hattah Lakes system has successfully built on knowledge gained in the previous surveys of old nests in 2020/21. The most recent surveys validated the assumptions of nest types and waterbird species nests, made in the previous Hattah colonial waterbird nest assessment. Nests that had been labelled 'large cormorant' and believed to be Great or Pied Cormorant nests, and those of 'small cormorant' and believed to be Little Black and Little Pied Cormorant nests were confirmed to be accurate, and in general clearly different in size from one another, and typically located differently to one another. Additionally, the 2020/21 surveys proved invaluable in predicting the locations of breeding colonies with six of the seven largest colonial waterbird breeding colonies in the location of a previous colony. This suggests that future monitoring may target these areas of known colony locations with some confidence, as areas are likely to be reused, with species often building nests on top of existing nests (Beruldsen 2003).

Colonies are likely to be located in areas that contain suitable nesting habitat, and close to high quality feeding habitat. Targeting known colony sites may save time associated with completing reconnaissance of lakes searching for colonies. Future monitoring of old nests can now be done with confidence as to the species group, but will not convey knowledge of breeding success. Future monitoring of active breeding colonies may however be completed with greater efficiency through less reconnaissance visits, targeting known preferred colony sites, and where possible visiting nests close to fledging stage. It must be conceded that all water-based surveys are potentially time consuming as accessing the lakes, and movement by boat can be slow. However, monitoring of actively breeding waterbird colonies from the water has the benefits of providing data on numbers of nests, species, and breeding success. Careful consideration must be given to timing of breeding and the need for reconnaissance trips, to ascertain when breeding activity is occurring. Waterbird nesting colonies also typically have a protracted onset of breeding activity (Marchant and Higgins 1990), meaning that not all birds begin or finish breeding simultaneously, as observed across different lakes in these surveys, adding a challenge to accurately counting active nests in a season without multiple surveys of each area. Nonetheless, surveys of breeding activity are essential to gather data on the species and their numbers breeding within the Hattah Lakes, and allow records of other waterbird breeding activity, including threatened species.

Consideration of other non-invasive, and potentially more time and cost effective technologies for nest monitoring could be made, such as the use of unmanned aerial vehicles (Nowak et al. 2019) and the use of passive acoustic monitoring, which has increased in recent years (Sugai et al. 2019). Passive acoustic monitoring requires the placement of autonomous recording units (ARUs) in the field, programmed to record and followed up by an interpretation of the recordings. ARUs have proven to be a suitable alternative to traditional field surveys for monitoring wildlife across many research areas (Sugai et al. 2019).

4.5 Conclusions

Australian waterbird populations are reliant on suitable feeding and nesting habitats coupled with suitable rain and flood events to trigger breeding events. Wetlands within the Murray-Darling Basin provide many critical waterbird habitats; however the quality and availability of these sites are greatly influenced by water and vegetation management decisions in such a heavily regulated system. Protecting and maintaining suitable feeding and nesting habitats between and during flood events is essential to maximise waterbird recruitment, maintain populations, and conserve biodiversity. This requires careful management of water regimes at a range of scales across the basin. The large number of nests and chicks and their successful development, recorded in these surveys only serves to emphasise the importance of the Hattah Lakes areas as a breeding ground for these species and potentially as a refuge in times when much of the Murray-Darling basin is dry and suitable wetlands few and far between.

The use of valuable 'environmental water' within the Murray-Darling Basin has become increasingly important in supporting successful completion of waterbird breeding events. Appropriately managing environmental water placement, volume and timing is critical to enable the recruitment of juveniles into waterbird populations and ultimately assist species survival. The success of nesting and breeding of colonial nesting waterbirds depends on water levels in wetlands prior to the breeding season, with appropriate water conditions needed to cue nest building and breeding behaviours. In what is likely to be a complex relationship involving food availability (fish and macroinvertebrate populations) and nest predation risk (including land-based predators and nest raiders such as feral pigs, goannas, snakes, foxes, brush-tail possums), these species typically require stable or rising water for

three or more months before nesting is attempted, with water required to be relatively stable during the breeding and chick rearing period. Applying environmental water to the right places at the right times is critical to promote the success of future breeding events and waterbird recruitment within the Hattah Lakes, and across the Murray-Darling Basin.

While some knowledge exists on the water flows needed to trigger waterbird nesting, basic knowledge of how water flows interact with other factors such as food abundance to influence waterbird breeding success and recruitment is lacking. Knowledge of the foraging and dispersal movements of important species during and between breeding events is also lacking, such as where do birds go, and why? Working towards filling these knowledge gaps is key to improving the efficiency of environmental water management. Applying water to the right places at the right times will help to ensure the success of future breeding events and waterbird recruitment within the Hattah Lakes, and across the Murray-Darling Basin.

Despite all lakes within the Hattah system being dry for one or more years prior to the addition of environmental water in autumn and spring 2021, aquatic conditions developed rapidly and sufficiently that by November 2021 fish, macroinvertebrate and zooplankton populations could support large numbers of breeding waterbirds through the 2021/22 summer. Fish were clearly present in good numbers as seen by Great Cormorants feeding and fish observed being regurgitated by cormorant species and Australian Darter on occasion. The addition of water at this time appears to have been very successful at initiating a large influx of colonial and non-colonial nesting waterbirds to the lakes and promoting a considerable breeding event across a broad area and many of the lakes.

Breeding was observed by 24 waterbird species including nine species considered as colonial nesting, with 2,180 nests and 7,374 chicks recorded, of which the vast majority (1,897 nests and 6,582 chicks) were classified as colonial breeding waterbird species. Dominant species recorded breeding successfully included very large colonies of Great Cormorants and moderate sized colonies of Little Black and Little Pied Cormorant, Australasian Darter and sizeable numbers of Eurasian Coot, Grey Teal, Hoary-headed Grebe and Pink-eared Duck. These observations follow similarly large breeding colonies of cormorant species documented following previous large watering events.

The 2021/22 surveys have also documented the high degree of site fidelity and breeding success of these waterbird populations. Locations of breeding colonies recorded in these surveys displayed a very high degree of site fidelity, with all but one colony located in the same area as those colonies detected in previous surveys of unoccupied nests in 2020/21. Larger colonies were found in the same locations at Lakes Cantala, Woterap, Konardin, Yelwell, Roonki and Hattah. Lake Mournpall was the sole exception with a colony of Great Cormorant nests in 2021/22 where one had not existed prior. The reasons for these consistent locations of colonies are speculated on, but as theorised previously, it is likely that areas containing more suitable nesting habitat in the form of preferentially sized, oriented and shaped trees, and occurring in areas of high prey concentrations, reducing travel distance for breeding adult birds, will be preferred areas to colonise.

Observations of chick development and subsequent breeding success, recorded no signs of nest abandonment or predation and very few mortalities were observed, suggesting a very high success rate. Mean numbers of chicks per nest were generally high for those colonial species observed and development of colonial nesting chicks was also considered high, with the majority of chicks during final observations assessed as ‘large (60-89% grown)’ or ‘ready to fledge (90%+ grown)’. Many of these values represent minimum stages of development, as many birds were observed at the ‘large chick’ stage when surveys were concluded in early April 2022, and therefore most ‘large’ chicks could be expected to progress and fledge.

These large numbers of chicks, when combined with the large percentage of chicks observed at a ready to fledge stage or considered large and over 60% grown, strongly suggest that chick development and breeding success during the 2021/22 summer breeding season was highly successful. These large numbers of chicks clearly demonstrate the importance of the Hattah Lakes system as an area for waterbird breeding.

This comprehensive survey of colonial breeding waterbird nests across the Hattah Lakes system in 2021/22 has successfully built on knowledge gained in the previous surveys of old unoccupied nests in 2020/21. The most recent surveys validated the assumptions of nest types and waterbird species nests, made in the previous Hattah colonial waterbird nest assessment. Earlier surveys proved invaluable in predicting the locations of breeding colonies with six of the seven largest colonial waterbird breeding colonies in the location of previous colonies. This suggests that future monitoring may target these areas of known colony locations with some confidence, as areas are likely to be reused.

The overall success of waterbird breeding observed in these 2021/22 surveys, both in species diversity, numbers of chicks and their development, suggests that the timing of the environmental watering, and therefore hydrological cues needed to initiate and sustain breeding outcomes for cormorants and other species of colonial and non-colonial nesting waterbirds were appropriate. Future watering events should be planned to provide similar cues and conditions in order to assist with maximising waterbird recruitment. It is hoped that the results of these surveys will assist in informing recommendations for the planning, prioritisation, and management of environmental water flows within HKNP and potentially the broader Murray-Darling Basin and assist with maximising waterbird recruitment into the future.

5. References

Beruldsen, G. 2003. Australian birds, their nests and eggs.

Brandis, K. 2010. Colonial waterbird breeding in Australia: wetlands, water requirements and environmental flows. PhD Thesis. Australian Wetlands and Rivers Centre. School of Biological, Earth and Environmental Sciences. University of New South Wales.

Butcher, R. and Hale, J. 2011. Ecological Character Description for Hattah-Kulkyne Lakes Ramsar site. Report to the Department of Sustainability, Environment, Water, Population and Communities, Canberra (DSEWPaC).

GHD. (2021) Assessing nest sites of colonial nesting waterbirds - Hattah Kulkyne National Park. Project 3046-3128. March 2021. Client report for the Mallee CMA by GHD.

Kingsford, R. T., Johnson, W. 1998. Impact of water diversions on colonially-nesting waterbirds in the Macquarie Marshes of Arid Australia. Colonial Waterbirds 21, 159-170.

Mallee CMA. 2010. Hattah lakes environmental flows project investment proposal, Mallee Catchment Management Authority, Mildura, Victoria.

Marchant, S., Higgins, P.J., ed. 1990. The Handbook Of Australian, New Zealand And Antarctic Birds: Volume 1: Ratites To Ducks, Parts A & B (Handbook Of Australian, New Zealand & Antarctic Birds, Vol 1 : Part B).

MDBA. 2012. Hattah Lakes. Environmental Water Management Plan. February 2012. Murray–Darling Basin Authority. GPO Box 1801, Canberra ACT 2601.

Menkhorst, P. Rogers, D. Clarke, R. Davies, J. Marsack, P and Franklin, K. 2017. The Australian Bird Guide.

Nowak, M.M., Dziób, K. & Bogawski, P. 2019. Unmanned Aerial Vehicles (UAVs) in environmental biology: a review. Eur. J. Ecol. 4: 56– 74.

Ramsar. 2021. Ramsar (Convention on Wetlands of International Importance) 2021. **www.ramsar.org**

Sugai, L.S.M., Silva, T.S.F., Ribeiro, J.W., Jr & Llusia, D. 2019. Terrestrial passive acoustic monitoring: review and perspectives. Bioscience 69: 15– 25.

Appendices

Appendix A

Locations of survey sites.


Lake Bitterang
Lake Cantala
Lake Woterap
Lake Konardin
Lake Yelwell
Lake Mournpall
Lake Yerang
Lake Lockie
Lake Roonki
Little Lake Hattah
Lake Nip Nip
Lake Brockie
LakeTullamook
Lake Bulla
Lake Hattah
Lake Marramook
Lake Arawak
Lake Boich
Lake Kramen

Appendix B

Results of 2022 surveys.

Location	Common Name	Sci Name	No Chicks	Colonial?	Chick % grown	Tree Sp	Dead / Alive	Height m	DBH cm	Nest Height	Multiple nests?	Easting	Northing
Arawak	Australasian Darter	Anhinga novaehollandiae	4	N	90	RRG	Dead	8	22	2	1	624508.6	6152644.7
Arawak	Australasian Darter	Anhinga novaehollandiae	4	N	50	RRG	Dead	12	42	3	1	624948.0	6152908.4
Arawak	Australasian Darter	Anhinga novaehollandiae	3	N	80	RRG	Dead	8	18	1	1	624740.8	6152462.0
Arawak	Australasian Darter	Anhinga novaehollandiae	3	N	80	RRG	Dead	12	42	3	1	624953.5	6152764.1
Arawak	Australasian Darter	Anhinga novaehollandiae	4	N	60	RRG	Dead	8	34	4	1	624459.7	6152935.9
Arawak	Australasian Darter	Anhinga novaehollandiae	3	N	80	RRG	Dead	12	42	3	1	624941.8	6152737.3
Arawak	Australasian Darter	Anhinga novaehollandiae	3	N	30	RRG	Dead	12	35	2	2	624473.0	6152737.0
Bitterang	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	35	4	1	625799.3	6163379.7
Brockie	Australasian Darter	Anhinga novaehollandiae	3	N	70	RRG	Alive	11	22	11	1	626178.3	6153619.5
Brockie	Australasian Darter	Anhinga novaehollandiae	4	N	40	RRG	Dead	14	41	2	2	626213.3	6152826.7
Brockie	Australasian Darter	Anhinga novaehollandiae	3	N	70	RRG	Alive	11	29	13	1	626285.9	6153625.1
Brockie	Australasian Darter	Anhinga novaehollandiae	4	N	70	RRG	Alive	11	32	13	1	626161.8	6152728.0
Brockie	Australasian Darter	Anhinga novaehollandiae	4	N	50	RRG	Dead	14	37	3	1	626084.1	6152972.8
Brockie	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	22	4	1	626231.9	6152945.1
Brockie	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Dead	14	39	3	2	626237.9	6152940.9
Brockie	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Dead	14	39	2	2	626151.8	6152950.1
Brockie	Great Cormorant	Phalacrocorax carbo	3	Y	60	RRG	Dead	14	35	5	1	626143.2	6152961.9
Brockie	Great Cormorant	Phalacrocorax carbo	3	Y	60	RRG	Dead	14	35	5	1	626239.1	6152947.0
Brockie	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Alive	14	36	3	2	626187.1	6152964.3
Brockie	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Dead	14	39	3	2	626130.1	6152948.2
Brockie	Great Cormorant	Phalacrocorax carbo	3	Y	60	RRG	Dead	14	39	2	2	626165.7	6152970.3
Brockie	Yellow-billed Spoonbill	Platalea flavipes	1	Y	70	RRG	Alive	18	113	12	1	625973.2	6153159.7
Bulla	Australasian Darter	Anhinga novaehollandiae	4	N	70	RRG	Alive	12	22	4	1	624347.4	6153495.4
Bulla	Australasian Darter	Anhinga novaehollandiae	6	N	100	RRG	Alive	12	22	4	1	624593.9	6153391.5
Bulla	Australasian Darter	Anhinga novaehollandiae	4	N	20	RRG	Alive	9	34	1	2	624595.6	6153408.9
Bulla	Australasian Darter	Anhinga novaehollandiae	4	N	80	RRG	Alive	12	22	4	1	624217.9	6153400.3
Bulla	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	12	22	4	1	624920.8	6153430.0
Bulla	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	70	Coobah	Dead	7	24	4	1	624918.5	6153426.2
Bulla	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	12	22	4	1	624914.5	6153432.0
Bulla	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	12	34	4	1	624916.9	6153440.1
Bulla	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	70	RRG	Alive	11	34	3	1	624911.2	6153443.9
Cantala	Australasian Darter	Anhinga novaehollandiae	4	N	80	RRG	Alive	6	7	2	1	632842.9	6163387.5
Cantala	Australasian Darter	Anhinga novaehollandiae	3	N	70	RRG	Alive	11	24	3	1	632187.4	6162819.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	5	18	1	2	632692.0	6163727.6

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632562.8	6163160.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	30	RRG	Alive	11	34	3	1	632370.1	6162584.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	34	3	1	632448.7	6162930.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632522.9	6162969.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632695.4	6163733.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632133.7	6162663.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632337.0	6162568.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632692.8	6163913.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632297.2	6162604.1
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	12	96	4	1	632656.8	6163807.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	96	4	1	632599.4	6163108.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	60	RRG	Alive	12	96	4	1	632606.0	6163938.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	12	96	4	1	632601.7	6163927.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	12	96	4	1	632503.3	6162987.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	96	4	1	632752.1	6163797.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	7	8	2	1	632697.6	6163917.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632363.7	6162550.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632579.1	6163124.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632144.9	6162637.6
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	34	3	1	632636.6	6163771.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632178.9	6162617.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632644.3	6163059.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	30	RRG	Alive	11	34	3	1	632380.1	6162598.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632582.7	6163208.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	34	3	1	632349.6	6162612.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632393.4	6162556.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632977.5	6163212.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632118.2	6162617.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632511.2	6162967.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	96	4	1	632644.5	6163914.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632487.7	6162951.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632161.6	6162651.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	34	4	1	632550.2	6163201.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	34	4	1	632563.7	6163199.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	34	4	1	632102.8	6162734.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	34	4	1	632474.4	6162957.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	34	4	1	632620.2	6163082.4

Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	12	96	4	1	632566.1	6163134.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	34	4	1	632567.2	6163115.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	34	4	1	632100.7	6162799.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	34	4	1	632559.3	6163212.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	34	4	1	632205.3	6162622.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	34	4	1	632534.1	6163006.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	34	4	1	632351.9	6162566.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	34	4	1	632460.8	6162909.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	34	4	1	632387.3	6162579.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	34	4	1	632555.1	6163193.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	12	38	3	1	632546.2	6163124.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632215.5	6162651.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	34	3	1	632604.0	6163132.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632607.1	6163932.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632652.3	6163928.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632466.2	6162925.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632284.6	6162549.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	34	4	1	632767.8	6163739.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	34	4	1	632091.9	6162781.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	12	38	3	1	632482.6	6162923.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632337.7	6162556.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632107.3	6162787.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632296.8	6162543.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632268.0	6162624.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	5	18	1	2	632637.4	6163906.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	11	31	3	1	632475.3	6162592.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632780.9	6163747.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	34	4	1	632506.4	6163127.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	34	4	1	632447.1	6162908.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	12	38	3	1	632547.3	6163185.4
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	34	3	1	632609.6	6163044.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632567.0	6163146.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632090.5	6162756.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632556.2	6163126.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	12	38	3	1	632177.4	6162633.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632098.5	6162752.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632771.5	6163804.9

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	112	3	1	632618.2	6163812.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	12	38	3	1	632581.3	6163191.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632513.1	6162954.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632579.9	6163138.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	632276.4	6162582.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632569.4	6163216.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	26	2	1	632529.9	6163156.2
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	34	3	1	632158.2	6162635.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	23	5	1	632414.0	6162907.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Dead	10	28	4	1	632402.5	6162922.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	13	27	2	1	632508.8	6162593.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	13	27	2	1	632672.2	6162620.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	29	1	1	632537.9	6162481.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	12	31	3	1	632655.9	6162478.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632456.5	6162531.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632482.7	6162507.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632599.4	6162480.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632560.9	6162578.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632536.6	6162524.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632504.1	6162521.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632627.5	6162490.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632646.9	6162502.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632651.4	6162511.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632631.3	6162511.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632612.4	6162498.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632650.2	6162560.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632603.1	6162572.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632659.9	6162590.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632666.1	6162612.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632512.2	6162571.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632482.9	6162519.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632553.6	6162548.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632555.9	6162535.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632573.6	6162538.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632539.4	6162584.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632532.9	6162541.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	13	27	2	1	632560.6	6162517.0

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	13	27	2	1	632581.1	6162508.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	29	1	1	632591.6	6162520.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	12	31	3	1	632509.8	6162543.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632579.8	6162524.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632567.1	6162531.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632519.3	6162521.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632602.0	6162526.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632593.7	6162530.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632616.2	6162522.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632563.5	6162483.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632617.0	6162473.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632608.9	6162462.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632647.3	6162466.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632629.5	6162527.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632469.6	6162554.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632499.0	6162547.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632564.8	6162540.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632597.8	6162510.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632589.7	6162495.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632601.5	6162490.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632617.4	6162505.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632636.6	6162504.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632631.7	6162544.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632602.0	6162598.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632586.4	6162607.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632655.7	6162603.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632482.9	6162551.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632443.9	6162510.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632463.5	6162506.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632564.8	6162471.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632591.8	6162465.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632632.9	6162456.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632604.6	6162471.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632543.6	6162533.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632520.9	6162594.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632499.3	6162597.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632486.2	6162611.0

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632477.0	6162618.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632469.8	6162630.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632488.8	6162624.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632452.1	6162634.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632506.3	6162606.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632508.9	6162615.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632578.3	6162486.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632596.9	6162448.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632519.2	6162477.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632494.4	6162496.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632623.9	6162445.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632630.1	6162464.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632637.2	6162482.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632614.2	6162488.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	35	3	1	632570.9	6162518.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632514.3	6162583.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632485.7	6162642.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632491.4	6162664.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632659.5	6162524.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632343.4	6162846.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	2	1	632674.9	6162994.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	632306.1	6162822.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632455.1	6162840.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	5	1	632462.4	6162823.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632383.6	6162817.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632353.4	6162738.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632624.9	6162830.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632589.1	6162796.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	4	1	632350.0	6162775.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632270.9	6162810.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632274.0	6162802.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632276.8	6162824.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632421.9	6162784.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632289.9	6162744.0
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	10	34	4	1	632571.4	6162782.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632630.2	6162987.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632681.1	6162842.6

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632643.2	6162873.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632642.3	6162960.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632647.1	6162986.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	50	RRG	Alive	10	35	5	1	632354.6	6162895.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632337.6	6162813.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632651.5	6162844.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632639.0	6162838.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632595.9	6162840.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632614.8	6162723.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632269.8	6162762.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632386.1	6162857.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632659.9	6162873.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632676.2	6163029.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632623.7	6162793.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632687.2	6162864.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632616.5	6162811.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632609.7	6162803.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	632301.6	6162835.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	632367.1	6162907.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	632289.2	6162820.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632312.7	6162712.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	2	1	632364.3	6162889.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632347.1	6162710.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632316.1	6162785.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632699.6	6162994.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	12	33	5	1	632318.8	6162814.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632544.1	6162819.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632580.0	6162809.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632662.5	6162915.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	2	1	632664.7	6162986.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632701.8	6162977.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632337.6	6162786.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	5	1	632279.3	6162813.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632701.0	6162731.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632351.9	6162803.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	2	1	632403.0	6162907.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632670.6	6163021.7

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	32	3	1	632414.6	6162882.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	632315.2	6162879.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632402.3	6162800.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632639.8	6162716.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632341.5	6162748.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632289.9	6162769.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632392.4	6162718.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632687.1	6162719.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632346.7	6162885.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632668.4	6162856.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632374.1	6162763.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	10	35	5	1	632389.3	6162827.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632625.7	6162873.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632302.7	6162783.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632288.0	6162832.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632291.0	6162783.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632281.9	6162793.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632317.3	6162760.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632655.2	6162963.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632352.3	6162786.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632597.5	6162789.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632406.6	6162754.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632303.7	6162801.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632449.1	6162773.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	4	1	632366.7	6162747.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632363.3	6162856.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	24	3	1	632339.5	6162835.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632446.8	6162742.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	632410.8	6162896.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632658.3	6162828.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632473.7	6162858.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632651.8	6163008.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632624.9	6162798.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	632317.3	6162859.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	632310.8	6162846.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	2	1	632615.2	6162839.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	34	3	1	632414.1	6162923.6

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	24	3	1	632327.4	6162822.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	29	2	1	632385.6	6162890.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	26	1	1	632339.6	6162760.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	23	5	1	632423.7	6162858.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	21	2	1	632697.7	6162738.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632697.5	6162933.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632303.8	6162750.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632603.5	6162829.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632438.3	6162876.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632663.3	6162731.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632488.4	6162788.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632669.8	6163038.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632581.2	6162830.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632678.0	6162825.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	10	35	5	1	632367.1	6162722.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632281.1	6162759.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632686.5	6162971.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632624.3	6162740.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632704.3	6162957.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632350.9	6162817.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632343.6	6162729.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632361.3	6162689.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632364.9	6162799.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632671.2	6163053.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632373.4	6162773.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632616.0	6162821.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632318.3	6162829.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632675.8	6162976.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632621.8	6162851.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632379.2	6162786.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632633.9	6162820.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632470.8	6162778.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632630.3	6162811.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	10	35	5	1	632425.7	6162754.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632654.0	6162854.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632354.9	6162874.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632320.1	6162839.1

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632655.8	6162978.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632634.5	6162864.3
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Dead	9	26	3	1	632397.1	6162896.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632246.3	6162812.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632385.0	6162914.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632264.0	6162820.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Dead	11	32	4	1	632398.1	6162779.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632604.3	6162819.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632344.2	6162698.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632302.7	6162695.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632393.3	6162875.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632649.6	6163040.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632291.5	6162837.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632363.3	6162843.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632300.3	6162849.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	10	35	5	1	632645.4	6162786.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632325.2	6162705.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632387.7	6162903.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632641.1	6163029.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	11	32	4	1	632684.9	6163023.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632866.2	6162406.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632976.0	6162436.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	633015.8	6162485.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632879.9	6162511.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632932.9	6162480.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632652.8	6162354.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632677.7	6162337.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632828.2	6162495.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	10	35	5	1	632638.6	6162395.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	29	4	1	632911.7	6162473.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	31	4	1	632913.1	6162533.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	19	2	1	632883.1	6162363.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632917.7	6162501.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	632693.1	6162373.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632650.1	6162376.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632743.0	6162330.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632754.9	6162367.7

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632853.2	6162407.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632759.0	6162398.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	19	2	1	632873.0	6162380.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632702.9	6162330.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632973.3	6162461.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	12	25	4	1	632747.5	6162366.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	12	27	5	1	632860.8	6162473.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632727.8	6162442.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632739.0	6162359.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632712.1	6162372.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	34	4	1	632957.9	6162521.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	10	23	3	1	632674.8	6162399.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632870.7	6162505.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632768.7	6162427.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	633006.0	6162532.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632901.3	6162517.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	632915.8	6162368.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632868.3	6162360.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632752.8	6162350.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632952.7	6162509.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632923.1	6162466.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632643.8	6162419.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632703.0	6162459.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632927.3	6162525.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632904.3	6162418.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632697.7	6162384.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632679.7	6162327.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632628.8	6162393.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	70	RRG	Alive	11	31	4	1	632673.9	6162462.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632709.2	6162477.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	12	25	4	1	632716.4	6162447.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	10	35	5	1	632722.6	6162404.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632938.4	6162364.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632675.3	6162377.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632704.2	6162372.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	19	2	1	632901.5	6162453.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632940.6	6162506.9

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	31	4	1	632944.9	6162421.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632757.4	6162441.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	632745.2	6162390.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632658.3	6162382.3
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	31	4	1	632741.8	6162307.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632860.1	6162362.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632675.1	6162302.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	34	4	1	632894.9	6162417.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	29	4	1	632864.5	6162431.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632796.8	6162427.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632875.5	6162417.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632802.8	6162388.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632796.8	6162427.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632860.9	6162392.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632742.5	6162424.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632877.7	6162463.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632703.5	6162322.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632850.3	6162381.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632879.1	6162433.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632940.3	6162443.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632732.1	6162418.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	10	35	5	1	632740.7	6162408.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632775.0	6162389.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632726.7	6162360.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632835.2	6162462.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632957.8	6162528.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632691.0	6162407.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632681.2	6162451.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632715.9	6162363.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632744.8	6162455.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	11	32	4	1	632920.6	6162440.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	632771.6	6162406.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632912.8	6162432.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632782.2	6162374.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632834.0	6162376.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632962.5	6162473.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632970.0	6162493.4

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	29	4	1	632844.2	6162480.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	12	27	5	1	632932.5	6162501.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632728.5	6162384.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632883.5	6162471.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632827.4	6162392.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632729.7	6162342.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632945.2	6162527.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632770.1	6162373.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	34	4	1	632989.8	6162495.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632702.5	6162406.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632954.1	6162462.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632957.7	6162436.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	632977.6	6162473.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632841.7	6162397.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632926.7	6162461.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632914.2	6162448.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	11	32	4	1	632681.2	6162435.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632662.1	6162391.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	9	26	3	1	632704.3	6162359.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632692.1	6162452.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632686.7	6162392.2
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	32	4	1	632656.3	6162306.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632882.9	6162399.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632743.2	6162296.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632719.1	6162370.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632955.9	6162447.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	34	4	1	632927.5	6162380.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	10	35	5	1	632656.2	6162413.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	12	25	4	1	632704.3	6162419.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632769.7	6162451.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632680.6	6162369.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	23	3	1	632945.4	6162381.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632723.2	6162330.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632916.2	6162481.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632829.2	6162478.5
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	31	4	1	632853.5	6162442.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632823.8	6162406.7

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632899.6	6162441.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	633005.0	6162470.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632686.3	6162424.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632886.1	6162391.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632655.4	6162399.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632735.6	6162371.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632675.3	6162412.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	26	3	1	632661.0	6162445.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632927.5	6162533.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632850.2	6162427.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	632718.2	6162312.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632825.6	6162452.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632698.6	6162338.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632710.9	6162304.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	10	35	5	1	632727.1	6162319.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	12	27	5	1	632825.1	6162435.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632644.8	6162439.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632713.1	6162392.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632721.6	6162297.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	29	4	1	632945.9	6162396.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	19	2	1	632800.9	6162440.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	31	4	1	632895.5	6162405.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	633006.0	6162532.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632689.1	6162331.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	632706.8	6162450.5
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	80	RRG	Dead	11	28	3	1	632681.4	6162580.3
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Dead	10	43	2	1	632702.0	6162611.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	9	24	2	1	632705.3	6162565.8
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	9	24	2	1	632683.2	6162532.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	12	27	5	1	632688.5	6162491.2
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	9	29	4	1	632669.7	6162483.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	10	23	3	1	632684.8	6162473.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	10	34	4	1	632667.6	6162505.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	10	23	3	1	632683.1	6162558.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632679.9	6162610.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632705.7	6162523.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	632690.1	6162500.4

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	632696.5	6162497.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	35	5	1	632702.7	6162487.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	28	3	1	632708.3	6162501.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	632719.1	6162500.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632722.9	6162492.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632729.5	6162604.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632737.4	6162608.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	26	3	1	632746.0	6162592.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	11	32	4	1	632794.9	6162605.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	23	3	1	632761.0	6162612.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632774.7	6162602.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632750.1	6162605.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	19	4	1	632769.0	6162585.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632788.8	6162595.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632803.9	6162584.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632810.1	6162573.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	632750.4	6162559.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	27	5	1	632741.4	6162545.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	632727.4	6162562.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	23	3	1	632772.7	6162568.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632724.7	6162477.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	23	3	1	632729.4	6162461.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632769.3	6162467.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632720.9	6162519.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	9	29	4	1	632699.1	6162510.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	28	3	1	632800.7	6162566.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	35	5	1	632817.7	6162584.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	28	3	1	632777.8	6162584.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	632779.6	6162430.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632741.1	6162491.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	632748.4	6162483.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	12	25	4	1	632733.6	6162484.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	26	3	1	632819.0	6162574.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632830.6	6162563.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632808.4	6162591.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	11	32	4	1	632747.1	6162534.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632745.7	6162502.6

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	19	4	1	632740.5	6162518.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632752.3	6162520.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632747.3	6162515.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632765.5	6162515.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632760.2	6162522.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	2	1	632782.4	6162524.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632788.9	6162531.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632782.8	6162555.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632786.5	6162570.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632801.9	6162551.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	34	4	1	632813.2	6162547.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	10	23	3	1	632795.5	6162545.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632826.0	6162551.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632831.3	6162572.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632763.0	6162475.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632772.1	6162492.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	35	5	1	632778.4	6162484.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	3	1	632790.3	6162493.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	25	4	1	632803.6	6162496.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632841.5	6162564.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632762.2	6162559.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	25	4	1	632648.5	6162617.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632774.6	6162461.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632732.9	6162469.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632808.4	6162522.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632744.3	6162475.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632807.3	6162447.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632665.4	6162630.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	11	31	4	1	632678.2	6162629.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632587.8	6162631.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	43	2	1	632582.6	6162646.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632759.7	6162619.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632685.9	6162650.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	4	1	632604.3	6162688.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	27	5	1	632728.8	6162729.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632741.1	6162727.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632680.1	6162657.4

Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	10	34	4	1	632734.1	6162622.4
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	10	23	3	1	632735.7	6162631.7
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	10	34	4	1	632744.9	6162718.2
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	99	RRG	Alive	11	31	4	1	632755.2	6162717.5
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	95	RRG	Alive	9	29	4	1	632783.1	6162713.7
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	9	28	3	1	632720.8	6162717.5
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	10	35	5	1	632714.6	6162697.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Dead	9	28	3	1	632685.0	6162692.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	12	25	4	1	632683.3	6162679.9
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	11	31	4	1	632690.5	6162667.1
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	11	32	4	1	632805.0	6162698.2
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	12	25	4	1	632791.7	6162692.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	26	3	1	632746.7	6162709.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632734.6	6162720.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	23	3	1	632738.8	6162705.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	632729.5	6162712.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632742.6	6162697.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	19	4	1	632705.4	6162642.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632693.5	6162630.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	28	4	1	632686.1	6162633.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	23	3	3	632689.7	6162642.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	27	5	1	632716.5	6162662.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	632721.0	6162669.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632753.2	6162680.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632805.2	6162638.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	10	23	3	1	632815.7	6162689.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	34	4	1	632805.2	6162676.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	31	4	1	632779.5	6162669.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	632815.5	6162674.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	632804.1	6162667.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	35	5	1	632766.6	6162657.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	632757.8	6162663.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632758.9	6162634.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632773.9	6162653.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632782.9	6162659.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632798.0	6162651.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	26	3	1	632767.4	6162612.6

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	11	32	4	1	632765.6	6162619.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	23	3	1	632753.2	6162652.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632784.6	6162644.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	632774.5	6162693.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	19	4	1	632793.4	6162708.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	11	31	4	1	632722.4	6162629.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	23	2	3	632712.1	6162628.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	632784.2	6162615.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632724.3	6162689.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632803.5	6162626.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632795.2	6162631.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632843.6	6162680.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	34	4	1	632837.9	6162661.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	10	23	3	1	632854.5	6162684.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632828.8	6162644.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632866.3	6162683.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	9	29	4	1	632842.6	6162645.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632814.8	6162628.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	35	5	1	632823.7	6162628.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632848.8	6162666.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632859.3	6162674.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632815.1	6162610.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632821.1	6162617.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	12	25	4	1	632833.2	6162638.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	632882.1	6162687.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632872.0	6162671.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632860.6	6162664.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632853.0	6162646.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	11	32	4	1	632850.1	6162653.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	19	4	1	632832.9	6162651.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632840.0	6162669.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632831.4	6162584.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632837.0	6162593.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632842.8	6162591.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632854.8	6162536.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	1	1	632853.0	6162548.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	24	2	1	632852.2	6162556.6

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632868.8	6162551.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632880.1	6162552.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	27	5	1	632886.9	6162544.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632884.2	6162564.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632854.3	6162571.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	632865.2	6162573.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632849.1	6162581.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	632854.1	6162591.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632864.3	6162581.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	9	29	4	1	632866.9	6162591.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632844.9	6162631.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	632838.9	6162626.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632835.3	6162615.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632840.7	6162613.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	11	31	4	1	632848.1	6162617.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	11	32	4	1	632857.0	6162620.1
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	12	25	4	1	632862.4	6162615.7
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	9	26	3	1	632866.7	6162611.7
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Dead	11	32	4	1	632869.6	6162606.3
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	10	23	3	1	632849.7	6162626.6
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	90	RRG	Alive	11	32	4	1	632859.6	6162626.5
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Dead	11	32	4	1	632864.9	6162624.0
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Alive	10	19	4	1	632873.3	6162622.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	11	31	4	1	632878.0	6162611.0
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	11	28	3	1	632863.4	6162656.8
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Dead	10	43	2	1	632872.8	6162660.5
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	9	24	2	1	632886.2	6162630.5
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	9	24	2	1	632916.8	6162575.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632922.9	6162586.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	632928.7	6162579.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632894.3	6162578.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	632902.8	6162590.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	24	2	1	632908.5	6162607.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	27	5	1	632922.1	6162596.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	632906.7	6162619.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	23	3	1	632903.9	6162630.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	34	4	1	632910.3	6162635.5

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	10	23	3	1	632875.9	6162635.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	34	4	1	632862.8	6162647.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632870.7	6162648.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	632883.0	6162647.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	632880.2	6162659.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	35	5	1	632885.7	6162669.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	28	3	1	632887.9	6162680.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	12	25	4	1	632893.0	6162663.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	31	4	1	632894.2	6162645.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632902.7	6162653.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	632900.6	6162678.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	26	3	1	632911.3	6162667.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632920.3	6162612.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	23	3	1	632924.6	6162674.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	632912.2	6162661.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632923.3	6162548.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	19	4	1	632933.1	6162545.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632958.6	6162540.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	24	2	1	632931.2	6162654.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632920.5	6162656.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	43	2	1	632942.6	6162587.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632951.9	6162589.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	27	5	1	632927.9	6162626.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	9	29	4	1	632929.0	6162637.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	23	3	1	632914.9	6162644.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632971.9	6162544.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	10	23	3	1	633013.4	6162590.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	633002.3	6162570.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632972.8	6162570.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632962.2	6162585.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	3	1	632991.6	6162578.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	35	5	1	633001.0	6162585.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632993.8	6162593.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632979.0	6162589.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	11	31	4	1	632963.9	6162597.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632992.0	6162603.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	25	4	1	632979.9	6162616.4

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	632970.6	6162618.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632946.2	6162600.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632947.3	6162610.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632953.9	6162619.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	11	32	4	1	632962.8	6162626.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	19	4	1	632936.9	6162637.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632943.9	6162646.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632940.1	6162656.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632935.4	6162667.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	4	1	632945.3	6162673.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	23	2	3	633038.3	6162681.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	633048.0	6162671.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	633040.0	6162658.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	633036.2	6162671.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	633001.5	6162616.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	633017.5	6162634.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	34	4	1	633027.9	6162640.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	10	23	3	1	633026.2	6162657.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	633029.3	6162669.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	633021.0	6162674.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	9	29	4	1	633013.8	6162649.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	633003.8	6162641.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	35	5	1	632988.7	6162618.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632984.9	6162627.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632975.1	6162626.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632949.6	6162663.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632962.2	6162655.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	12	25	4	1	632963.9	6162666.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	632972.6	6162661.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632972.3	6162669.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632990.4	6162633.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632994.5	6162640.7
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	99	RRG	Dead	11	32	4	1	632984.6	6162639.4
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	95	RRG	Alive	10	19	4	1	632976.8	6162639.5
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	31	4	1	632968.1	6162650.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	11	28	3	1	632958.2	6162648.1
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	80	RRG	Dead	9	28	4	1	632997.5	6162649.4

Cantala	Great Cormorant	Phalacrocorax carbo	2Y	90	RRG	Dead	9	24	2	1	633006.5	6162655.7
Cantala	Great Cormorant	Phalacrocorax carbo	2Y	90	RRG	Dead	9	24	2	1	632998.2	6162661.7
Cantala	Great Cormorant	Phalacrocorax carbo	2Y	99	RRG	Dead	9	24	1	1	632985.4	6162659.4
Cantala	Great Cormorant	Phalacrocorax carbo	2Y	95	RRG	Dead	9	24	2	1	633016.0	6162667.3
Cantala	Great Cormorant	Phalacrocorax carbo	2Y	80	RRG	Dead	9	28	4	1	633018.2	6162686.8
Cantala	Great Cormorant	Phalacrocorax carbo	2Y	80	RRG	Dead	11	28	3	1	632995.0	6162678.8
Cantala	Great Cormorant	Phalacrocorax carbo	2Y	95	RRG	Dead	10	43	2	1	633000.1	6162692.5
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Dead	9	24	2	1	632990.9	6162700.9
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Dead	9	24	2	1	632972.9	6162679.7
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Dead	9	24	2	1	632976.0	6162690.4
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Dead	9	24	2	1	632962.7	6162685.2
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Dead	9	24	2	1	632952.4	6162687.3
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Dead	11	28	3	1	632933.2	6162687.6
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	99	RRG	Alive	12	27	5	1	632943.8	6162704.1
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Alive	9	29	4	1	632963.2	6162723.4
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Alive	10	23	3	1	633011.6	6162702.1
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Alive	10	34	4	1	632982.2	6162708.4
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Dead	10	23	3	1	632974.2	6162703.1
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	99	RRG	Alive	10	34	4	1	632961.5	6162704.3
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	95	RRG	Alive	11	31	4	1	632941.6	6162722.2
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Alive	9	29	4	1	632951.1	6162732.3
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Dead	9	28	3	1	632929.4	6162731.7
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Alive	10	35	5	1	632784.9	6162734.2
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Dead	9	28	3	1	632930.9	6162697.9
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Alive	12	25	4	1	632938.5	6162711.0
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	99	RRG	Alive	11	31	4	1	632932.5	6162742.9
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	95	RRG	Alive	11	32	4	1	632926.1	6162772.3
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Alive	12	25	4	1	632914.9	6162746.1
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Dead	9	26	3	1	632914.8	6162737.8
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	95	RRG	Dead	11	32	4	1	632928.2	6162714.6
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Alive	10	23	3	1	632923.9	6162687.2
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Alive	11	32	4	1	632942.3	6162740.8
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Dead	11	32	4	1	632911.6	6162689.3
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Alive	10	19	4	1	632864.5	6162697.4
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	90	RRG	Alive	11	31	4	1	632812.0	6162703.5
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	80	RRG	Dead	11	28	3	1	632825.9	6162712.6
Cantala	Great Cormorant	Phalacrocorax carbo	3Y	99	RRG	Dead	9	24	2	1	632819.2	6162724.4

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632919.2	6162695.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	43	2	1	632915.9	6162705.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632908.7	6162717.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632903.5	6162697.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	4	1	632893.6	6162689.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	23	3	3	632840.3	6162708.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632840.6	6162700.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632848.1	6162706.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632863.3	6162706.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632873.0	6162696.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632882.9	6162697.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	12	27	5	1	632890.8	6162700.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	9	29	4	1	632887.0	6162709.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632878.1	6162706.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632870.3	6162709.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	10	23	3	1	632877.2	6162713.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632885.1	6162718.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632889.2	6162727.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632931.4	6162722.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632920.1	6162722.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	35	5	1	632952.5	6162751.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632968.0	6162734.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	12	25	4	1	632989.4	6162723.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632982.3	6162738.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632972.8	6162726.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	25	4	1	632955.9	6162716.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	633008.5	6162718.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	11	32	4	1	633027.4	6162699.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	23	3	1	633018.3	6162710.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632890.8	6162737.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632903.0	6162760.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632797.8	6162731.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632799.0	6162744.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632824.4	6162735.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	1	1	632882.6	6162745.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	24	2	1	632892.9	6162747.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632892.6	6162759.3

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632846.8	6162720.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	10	43	2	1	632854.7	6162718.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632866.5	6162719.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632876.3	6162721.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632864.1	6162727.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632860.3	6162734.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	10	23	3	1	632836.1	6162728.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632832.8	6162735.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	11	31	4	1	632846.5	6162729.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632846.1	6162736.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632820.6	6162743.7
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	10	35	5	1	632817.7	6162749.6
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Dead	9	28	3	1	632827.6	6162750.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	99	RRG	Alive	12	25	4	1	632836.5	6162751.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	95	RRG	Alive	11	31	4	1	632830.8	6162770.4
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	80	RRG	Alive	11	32	4	1	632841.5	6162761.0
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	12	25	4	1	632843.6	6162767.8
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	9	26	3	1	632850.8	6162758.9
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	11	32	4	1	632862.1	6162757.8
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	10	23	3	1	632864.9	6162778.3
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Alive	11	32	4	1	632890.3	6162769.1
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Dead	11	32	4	1	632901.6	6162768.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	10	19	4	1	632914.7	6162757.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632934.9	6162757.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	10	43	2	1	632976.1	6162752.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	632973.5	6162741.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632993.6	6162740.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	633008.7	6162728.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	632872.8	6162748.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	27	5	1	632907.5	6162789.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	632900.7	6162799.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	23	3	1	632880.6	6162800.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632874.4	6162782.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	23	3	1	632894.1	6162815.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632890.7	6162821.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632898.1	6162824.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	9	29	4	1	632886.1	6162844.2

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	28	3	1	632889.7	6162853.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	35	5	1	632899.0	6162849.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	28	3	1	632905.4	6162848.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	632902.5	6162856.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632900.7	6162865.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	632904.3	6162876.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	12	25	4	1	632909.1	6162869.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	26	3	1	632888.8	6162862.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632896.0	6162878.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632903.5	6162887.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	32	4	1	632910.8	6162884.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	632886.5	6162901.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	19	4	1	632883.9	6162891.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632860.4	6162898.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	632869.9	6162842.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632889.1	6162876.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	632878.3	6162880.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	24	2	1	632913.9	6162898.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632903.7	6162904.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	43	2	1	632871.3	6162807.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	27	5	1	632865.1	6162819.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632858.5	6162801.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	23	3	1	632850.9	6162789.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	34	4	1	632834.3	6162792.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632835.9	6162804.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	632848.2	6162808.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632866.7	6162827.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632857.8	6162823.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632858.5	6162836.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	35	5	1	632870.3	6162869.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	28	3	1	632866.9	6162876.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632858.1	6162877.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632856.8	6162886.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	11	32	4	1	632863.3	6162865.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632833.6	6162849.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	632823.7	6162846.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632819.4	6162854.5

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632812.1	6162858.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	632810.4	6162880.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632813.2	6162835.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	19	4	1	632808.0	6162846.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632795.2	6162848.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	43	2	1	632835.1	6162817.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632838.2	6162828.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632819.8	6162816.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	4	1	632789.9	6162822.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	23	2	3	632793.8	6162780.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632787.5	6162789.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632775.4	6162798.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632765.7	6162811.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632768.5	6162837.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632763.2	6162845.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	1	1	632789.8	6162847.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	24	2	1	632777.4	6162871.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632771.5	6162874.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632746.4	6162871.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	9	29	4	1	632752.8	6162836.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632754.1	6162822.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	632752.3	6162803.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	10	23	3	1	632745.5	6162806.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632742.7	6162816.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632823.1	6162771.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632801.7	6162752.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	3	1	632788.9	6162749.7
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	10	35	5	1	632777.0	6162744.0
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Dead	9	28	3	1	632776.2	6162752.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	12	25	4	1	632763.9	6162753.0
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	31	4	1	632757.1	6162758.5
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	99	RRG	Alive	11	32	4	1	632748.8	6162764.9
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Alive	12	25	4	1	632755.3	6162739.9
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	9	26	3	1	632749.5	6162747.3
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	11	32	4	1	632733.0	6162758.3
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	10	23	3	1	632725.4	6162778.0
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	11	32	4	1	632741.5	6162770.9

Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	11	32	4	1	632722.1	6162752.1
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Alive	10	19	4	1	633056.2	6162685.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	31	4	1	633071.5	6162689.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	4	1	633128.6	6162728.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	633127.4	6162742.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	10	43	2	1	633125.1	6162754.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	633134.6	6162764.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	27	5	1	633125.0	6162782.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	633136.8	6162782.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	633120.8	6162794.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	633120.4	6162803.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	23	3	1	633108.6	6162803.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	34	4	1	633098.0	6162816.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	633073.4	6162815.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	633091.0	6162808.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	28	3	1	633098.8	6162804.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	35	5	1	633113.7	6162817.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	28	3	1	633090.8	6162828.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	12	25	4	1	633055.8	6162823.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	633056.0	6162840.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	633025.3	6162826.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	633028.5	6162841.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	26	3	1	633016.7	6162842.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	633024.2	6162812.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	23	3	1	633044.1	6162796.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	32	4	1	633044.8	6162809.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	633075.4	6162789.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	19	4	1	633083.2	6162784.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	31	4	1	633093.6	6162787.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	633014.6	6162765.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	27	5	1	633018.5	6162761.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	633021.5	6162766.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632997.3	6162759.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	633010.0	6162783.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	23	3	1	633019.9	6162792.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	34	4	1	633027.8	6162760.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	633035.8	6162764.7

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	633076.6	6162769.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	633095.0	6162779.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	633101.8	6162778.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	3	1	633107.2	6162777.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	25	4	1	633100.1	6162792.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	633068.2	6162765.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	633047.3	6162713.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	633038.6	6162726.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	633036.0	6162716.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	633055.8	6162725.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	23	3	1	633044.8	6162745.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	11	32	4	1	633054.7	6162746.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	633064.6	6162750.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	633065.6	6162757.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	11	31	4	1	633093.2	6162761.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	633091.1	6162751.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	633079.3	6162749.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	27	5	1	633072.0	6162722.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	633091.2	6162721.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	633097.7	6162730.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	633082.0	6162730.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	10	23	3	1	633065.8	6162734.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	633048.6	6162702.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	633106.6	6162771.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	633122.8	6162766.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	633132.2	6162804.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	35	5	1	633015.5	6162872.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	28	3	1	633015.1	6162878.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632997.8	6162872.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632995.2	6162861.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632996.3	6162838.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	25	4	1	632935.8	6162904.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	632922.0	6162900.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	11	32	4	1	632923.9	6162892.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	23	3	1	632917.4	6162887.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632919.7	6162875.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632916.1	6162866.6

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	19	4	1	632923.2	6162844.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632928.2	6162854.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632915.7	6162835.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632927.8	6162792.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632927.5	6162805.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632911.9	6162812.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Dead	11	28	3	1	632964.2	6162825.3
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	99	RRG	Alive	12	27	5	1	632975.6	6162833.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	9	29	4	1	632986.6	6162843.6
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	10	23	3	1	632983.3	6162851.4
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	90	RRG	Alive	10	34	4	1	632975.8	6162842.7
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	10	23	3	1	632947.5	6162858.8
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Alive	10	34	4	1	632961.9	6162869.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Alive	11	31	4	1	632946.0	6162891.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	9	29	4	1	632940.1	6162894.2
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	9	28	3	1	632938.6	6162789.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	10	35	5	1	632945.1	6162764.9
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	9	28	3	1	632941.6	6162826.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632951.3	6162815.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	11	31	4	1	632959.0	6162802.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	32	4	1	632959.6	6162811.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	632975.3	6162778.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	26	3	1	632981.2	6162779.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	11	32	4	1	632961.9	6162766.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632973.1	6162763.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	632977.1	6162798.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	632986.9	6162795.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	19	4	1	632995.6	6162789.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632981.2	6162810.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	632974.8	6162811.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	24	2	1	633005.7	6162806.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	633005.1	6162833.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	43	2	1	632953.3	6162891.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632970.1	6162891.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	633016.3	6162893.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	28	4	1	633023.8	6162834.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	12	27	5	1	633018.4	6162831.4

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	633018.1	6162848.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	23	3	1	633022.8	6162903.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	34	4	1	633011.6	6162736.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	10	23	3	1	633013.6	6162742.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	633017.8	6162723.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	11	31	4	1	633040.3	6162751.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	9	29	4	1	633044.4	6162761.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	633059.5	6162783.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	35	5	1	633038.1	6162805.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	28	3	1	633010.8	6162817.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	632939.8	6162869.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632910.3	6162771.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	632816.5	6162889.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	632825.0	6162899.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	632824.6	6162908.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632768.4	6162894.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	23	3	1	632760.7	6162909.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	632771.6	6162911.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632783.4	6162911.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	19	4	1	632791.1	6162903.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632804.4	6162903.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	4	1	632771.3	6162930.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	23	2	3	632763.8	6163022.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632762.7	6163012.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632764.9	6162997.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632750.9	6162981.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632777.0	6162981.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632775.7	6162990.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	1	1	632785.5	6162988.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	24	2	1	632796.5	6162936.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632853.7	6163050.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632862.0	6163049.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	10	43	2	1	632843.2	6163069.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632836.9	6163077.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632817.7	6163078.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632808.4	6163077.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632815.2	6163073.5

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632817.5	6163066.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632811.6	6163059.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	2	1	632819.8	6163050.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632825.8	6163057.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	632836.5	6163050.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	9	29	4	1	632829.4	6163072.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632847.4	6163056.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	34	4	1	632845.2	6163039.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	10	23	3	1	632835.4	6163039.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	632819.6	6163039.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632809.0	6163050.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632802.7	6163027.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632799.5	6163042.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	35	5	1	632869.3	6163040.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	3	1	632849.0	6163027.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	25	4	1	632834.1	6163020.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632819.3	6163017.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632855.2	6163015.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	25	4	1	632848.2	6163007.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632848.5	6162997.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632828.0	6163005.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632840.9	6163011.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	32	4	1	632818.2	6163009.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	11	32	4	1	632826.9	6162997.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	10	19	4	1	632840.2	6162997.2
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	99	RRG	Alive	11	31	4	1	632840.2	6162930.2
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	90	RRG	Dead	11	28	3	1	632843.7	6162937.5
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	10	43	2	1	632849.7	6162945.7
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	11	28	3	1	632857.3	6162955.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	9	24	2	1	632844.0	6162957.0
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Dead	9	28	4	1	632839.9	6162943.9
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Dead	9	23	3	3	632828.3	6162957.3
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	12	27	5	1	632834.3	6162968.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	9	29	4	1	632828.7	6162921.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632821.9	6162922.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	632818.3	6162949.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	10	23	3	1	632811.4	6162945.3

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	34	4	1	632803.0	6162974.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	31	4	1	632809.0	6162985.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	632800.6	6162983.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	632875.4	6163040.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	35	5	1	632886.2	6163039.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	632868.3	6163030.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632875.8	6163034.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632864.8	6163022.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632856.5	6163027.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632865.0	6163002.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	26	3	1	632879.4	6163014.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	11	32	4	1	632875.6	6163023.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	23	3	1	632884.0	6163023.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632887.8	6163014.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	632897.7	6163022.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	19	4	1	632892.0	6163032.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	11	31	4	1	632897.8	6163029.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	9	23	2	3	632907.7	6163031.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	632916.5	6163028.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632935.7	6163033.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	4	1	632923.5	6163037.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632986.2	6163021.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	27	5	1	632976.5	6163029.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	9	29	4	1	632897.2	6162989.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	23	3	1	632899.3	6162925.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	34	4	1	632905.5	6162914.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	23	3	1	632911.3	6162910.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	34	4	1	632923.8	6162918.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632916.4	6162920.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	632918.7	6162911.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632877.1	6162957.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	632871.3	6162965.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632861.4	6162961.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632875.5	6162984.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	11	31	4	1	632877.6	6162992.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	632882.6	6162995.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	632882.2	6163003.6

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	26	3	1	632887.6	6163002.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632898.5	6163005.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	10	23	3	1	632904.0	6163014.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	11	32	4	1	632907.1	6163023.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	632913.4	6163017.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	19	4	1	632920.7	6163013.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632930.0	6163009.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632935.1	6163024.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632944.0	6163026.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	1	1	632950.9	6163029.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	27	5	1	632959.8	6163034.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632969.5	6163023.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632963.7	6162996.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	10	34	4	1	632933.2	6162963.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632946.8	6162951.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	632966.2	6162932.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632992.1	6162952.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	632963.3	6162965.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	28	3	1	632956.2	6162984.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	632913.2	6162939.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	3	1	632970.4	6162914.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	25	4	1	633135.8	6162824.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	633124.0	6162829.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	633144.1	6162821.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	633145.3	6162838.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	26	3	1	633147.5	6162854.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	11	32	4	1	633150.1	6162865.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	633147.9	6162883.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	633134.2	6162887.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	633133.4	6162900.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	19	4	1	633119.6	6162899.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	633119.8	6162843.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	1	1	633130.1	6162840.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	24	2	1	633093.1	6162864.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	633070.3	6162856.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	633072.0	6162866.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	9	29	4	1	633082.0	6162848.2

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	633071.7	6162848.4
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	10	34	4	1	633090.2	6162835.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	10	23	3	1	633099.5	6162831.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	10	34	4	1	633091.9	6162848.1
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Alive	11	31	4	1	633110.3	6162834.6
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	80	RRG	Alive	9	29	4	1	633104.6	6162843.0
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Dead	9	28	3	1	633016.7	6162952.9
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	10	35	5	1	633088.5	6162958.7
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Dead	9	28	3	1	633095.5	6162967.0
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	12	25	4	1	633096.1	6162937.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	11	31	4	1	633087.3	6162939.7
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Alive	11	32	4	1	633095.9	6162925.8
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	95	RRG	Alive	12	25	4	1	633111.3	6162934.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	26	3	1	633104.7	6162957.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	633113.3	6162970.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	633114.6	6162923.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	633088.0	6162920.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	633092.8	6162910.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	19	4	1	633114.4	6162875.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	31	4	1	633126.6	6162869.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	4	1	633126.9	6162856.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	633131.3	6162857.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	10	43	2	1	633115.0	6162887.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	633119.9	6162880.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	27	5	1	633115.9	6162912.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	633128.8	6162954.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	633082.6	6162885.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	34	4	1	633145.3	6162904.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	23	3	1	633103.0	6162871.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	34	4	1	633113.8	6162906.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	633132.3	6162922.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	633131.6	6162943.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	28	3	1	633121.6	6162967.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	35	5	1	633106.2	6162885.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	28	3	1	633063.4	6163093.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	12	25	4	1	633057.2	6163101.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	633049.2	6163093.7

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	633033.0	6163097.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	25	4	1	633090.7	6163040.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	26	3	1	633070.9	6162998.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	32	4	1	633062.2	6163074.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	23	3	1	633068.2	6163083.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	32	4	1	633072.8	6163060.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	633086.5	6163053.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	19	4	1	633036.8	6163085.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	11	31	4	1	633025.5	6163085.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	633050.5	6163084.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	633057.7	6163037.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	633058.8	6163047.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	633068.7	6163046.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	633056.1	6163064.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	633070.1	6163009.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	2	1	633076.4	6163037.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	633046.3	6163063.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	43	2	1	633052.8	6163004.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	633088.8	6163010.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	633103.3	6162990.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	12	27	5	1	633096.7	6162980.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	9	29	4	1	633091.4	6162984.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632996.3	6163094.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	632986.5	6163102.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	632997.5	6163113.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	34	4	1	632965.4	6163134.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632974.0	6163052.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	9	29	4	1	632972.2	6163061.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	28	3	1	632971.9	6163073.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	632981.0	6163094.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	632971.2	6163092.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	25	4	1	632979.2	6163107.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	632970.0	6163116.4
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	32	4	1	632952.1	6163135.3
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	25	4	1	632957.1	6163141.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632953.8	6163048.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632949.5	6163058.5

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	632958.4	6163095.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	11	32	4	1	632959.1	6163109.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632954.8	6163118.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632926.7	6163112.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	11	31	4	1	632913.0	6163147.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632847.6	6163084.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	4	1	632875.3	6163090.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	23	2	3	632874.9	6163103.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632858.8	6163108.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632902.2	6163114.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632903.3	6163129.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632899.7	6163146.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	9	24	2	1	632866.5	6163129.7
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	24	1	1	632840.1	6163109.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	24	2	1	632903.8	6163091.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	4	1	632907.3	6163061.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	632886.2	6163062.8
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	95	RRG	Dead	10	43	2	1	632887.9	6163081.9
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Dead	9	24	2	1	632921.9	6163049.6
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	9	24	2	1	632946.8	6163075.6
Cantala	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	9	24	2	1	632938.8	6163101.2
Cantala	Great Cormorant	Phalacrocorax carbo	1	Y	80	RRG	Alive	12	27	5	1	632940.6	6163123.2
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	9	29	4	1	632938.1	6163082.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	10	23	3	1	632915.2	6163134.8
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	99	RRG	Alive	10	34	4	1	632935.5	6163043.5
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Dead	10	23	3	1	632938.2	6163059.6
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	10	34	4	1	632960.1	6163075.4
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	11	31	4	1	632946.2	6163098.2
Cantala	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	9	29	4	1	632918.7	6163102.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	28	3	1	632822.1	6163086.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	10	35	5	1	632811.9	6163093.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	28	3	1	632811.6	6163111.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632804.2	6163104.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632805.3	6163114.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	32	4	1	632794.0	6163118.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	25	4	1	632790.3	6163128.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	26	3	1	632779.4	6163129.1

Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	11	32	4	1	632838.8	6163119.0
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632847.9	6163133.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	32	4	1	632788.4	6163201.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	11	32	4	1	632777.2	6163210.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	19	4	1	632766.9	6163215.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632770.6	6163198.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632777.4	6163190.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	632809.9	6163197.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	24	2	1	632829.3	6163178.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	28	3	1	632746.1	6163205.9
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	24	2	1	632805.8	6163181.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	632847.7	6163155.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	27	5	1	632836.3	6163149.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	9	29	4	1	632826.6	6163158.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	632829.6	6163128.4
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Alive	10	34	4	1	632749.0	6163163.3
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Dead	10	23	3	1	632707.1	6163157.1
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	34	4	1	632705.3	6163171.8
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	11	31	4	1	632662.5	6163165.5
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	29	4	1	632776.3	6163148.2
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	9	28	3	1	632787.9	6163170.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	10	35	5	1	632766.0	6163182.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	99	RRG	Dead	9	28	3	1	632819.0	6163147.6
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	95	RRG	Alive	12	25	4	1	632813.0	6163173.7
Cantala	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	632735.0	6163183.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632709.2	6163199.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Alive	12	25	4	1	632719.4	6163193.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	632728.4	6163206.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632702.4	6163210.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	23	3	1	632668.7	6163189.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	632725.7	6163218.5
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	32	4	1	632737.5	6163223.2
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	632753.3	6163225.9
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Alive	11	31	4	1	632767.6	6163159.1
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632805.3	6163149.8
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	43	2	1	632848.0	6163175.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	632692.0	6163202.8

Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	632678.2	6163201.0
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	99	RRG	Dead	9	28	4	1	632752.9	6163194.6
Cantala	Great Cormorant	Phalacrocorax carbo	4	Y	95	RRG	Dead	9	23	3	3	632765.3	6163173.9
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	7	8	2	1	632825.0	6163382.8
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	7	8	2	1	632816.5	6163382.8
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	90	RRG	Alive	12	96	4	1	632832.6	6163389.2
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	5	6	1	1	632813.0	6163380.6
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	4	Y	70	RRG	Alive	5	6	1	1	632846.2	6163381.5
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	5	6	1	1	632836.5	6163382.0
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	6	5	1	1	632809.9	6163378.1
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	7	6	2	2	632819.9	6163371.9
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	5	6	1	1	632807.4	6163373.3
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	6	5	2	1	632813.6	6163374.7
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	4	Y	70	RRG	Alive	5	6	1	1	632830.3	6163376.7
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	4	Y	70	RRG	Alive	5	6	1	1	632830.7	6163384.2
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	7	6	2	1	632821.4	6163377.5
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	5	6	2	1	632847.8	6163386.4
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	5	6	2	1	632860.3	6163383.0
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	5	6	1	1	632864.6	6163385.8
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	4	Y	80	RRG	Alive	7	6	2	1	632867.7	6163379.9
Cantala	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	5	6	1	1	632856.0	6163388.8
Cantala	Yellow-billed Spoonbill	Platalea flavipes	2	Y	40	RRG	Alive	19	106	13	1	632338.9	6163373.0
Cantala	Yellow-billed Spoonbill	Platalea flavipes	3	Y	70	RRG	Alive	17	109	13	1	632325.4	6163367.1
Cantala	Yellow-billed Spoonbill	Platalea flavipes	2	Y	70	RRG	Alive	18	120	14	1	632331.4	6163376.9
Hattah	Australasian Darter	Anhinga novaehollandiae	5	N	60	RRG	Dead	11	18	3	1	623573.6	6152994.5
Hattah	Australian White Ibis	Threskiornis molucca	2	Y	95	RRG	Alive	12	22	4	1	623774.5	6152834.8
Hattah	Australian White Ibis	Threskiornis molucca	2	Y	95	RRG	Alive	12	22	4	1	623723.5	6152774.5
Hattah	Australian White Ibis	Threskiornis molucca	2	Y	60	RRG	Alive	12	22	4	1	623751.4	6152900.9
Hattah	Australian White Ibis	Threskiornis molucca	3	Y	80	RRG	Alive	12	22	4	1	623773.4	6152868.9
Hattah	Australian White Ibis	Threskiornis molucca	2	Y	95	RRG	Alive	12	22	4	1	623762.0	6152894.9
Hattah	Australian White Ibis	Threskiornis molucca	2	Y	50	RRG	Alive	12	22	4	1	623686.7	6152819.8
Hattah	Australian White Ibis	Threskiornis molucca	3	Y	60	RRG	Dead	11	18	3	1	623724.6	6152801.9
Hattah	Australian White Ibis	Threskiornis molucca	2	Y	60	RRG	Alive	12	22	4	1	623677.2	6152879.6
Hattah	Australian White Ibis	Threskiornis molucca	3	Y	60	RRG	Dead	11	18	3	1	623673.3	6152862.9
Hattah	Australian White Ibis	Threskiornis molucca	3	Y	60	RRG	Dead	11	18	3	1	623674.9	6152807.2
Hattah	Australian White Ibis	Threskiornis molucca	2	Y	70	RRG	Alive	12	22	4	1	623734.8	6152802.6
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	70	RRG	Alive	12	22	4	1	623732.5	6152827.6

Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Alive	12	22	4	1	623696.5	6152819.6
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	RRG	Alive	12	22	4	1	623716.7	6152796.0
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Alive	12	22	4	1	623659.3	6152881.3
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	30	RRG	Alive	12	22	4	1	623733.6	6152836.2
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	12	22	4	1	623748.1	6152837.8
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	12	22	4	1	623701.6	6152838.4
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	80	RRG	Dead	11	18	3	1	623655.9	6152871.5
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Dead	11	18	3	1	623689.9	6152842.7
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Dead	11	18	3	1	623697.0	6152797.4
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Dead	11	18	3	1	623739.1	6152901.6
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	1	Y	60	RRG	Dead	11	18	3	1	623695.3	6152864.6
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Dead	11	18	3	1	623690.1	6152877.1
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Dead	11	18	3	1	623700.5	6152852.2
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Dead	11	18	3	1	623693.7	6152849.4
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Dead	11	18	3	1	623741.3	6152819.9
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Dead	11	18	3	1	623718.3	6152786.2
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Dead	11	18	3	1	623756.0	6152845.7
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	60	RRG	Dead	11	18	3	1	623674.7	6152841.6
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Dead	11	18	3	1	623739.1	6152823.3
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	RRG	Dead	11	18	3	1	623754.4	6152835.0
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Dead	11	18	3	1	623687.2	6152868.2
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	60	RRG	Dead	11	18	3	1	623688.0	6152860.0
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	60	RRG	Dead	11	18	3	1	623670.4	6152872.4
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	RRG	Alive	12	22	4	1	623746.1	6152847.9
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	RRG	Alive	12	22	4	1	623760.9	6152837.3
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Alive	12	22	4	1	623696.5	6152843.0
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	60	RRG	Alive	12	22	4	1	623701.7	6152847.3
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Alive	12	22	4	1	623737.5	6152898.4
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Alive	12	22	4	1	623722.9	6152819.7
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Alive	12	22	4	1	623685.7	6152801.7
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	RRG	Alive	12	22	4	1	623679.9	6152819.2
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Dead	11	18	3	1	623668.0	6152880.1
Hattah	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	12	22	4	1	623743.6	6152830.1
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	95	RRG	Alive	12	22	4	1	623741.6	6152795.1
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	80	RRG	Alive	12	22	4	1	623769.4	6152823.2
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Dead	11	18	3	1	623761.3	6152824.9
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	12	22	4	1	623759.4	6152819.6

Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	4	Y	80	RRG	Dead	11	18	3	1	623757.5	6152815.4
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	95	RRG	Alive	12	22	4	1	623756.4	6152801.0
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	95	RRG	Alive	12	22	4	1	623743.5	6152904.3
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	1	Y	95	RRG	Alive	12	22	4	1	623735.0	6152788.9
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	95	RRG	Alive	12	22	4	1	623765.4	6152817.5
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	95	RRG	Alive	12	22	4	1	623761.8	6152830.6
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	30	RRG	Alive	12	22	4	1	623736.9	6152852.5
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	60	RRG	Alive	12	22	4	1	623688.0	6152812.1
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	80	RRG	Alive	12	22	4	1	623712.0	6152852.4
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	12	22	4	1	623683.5	6152793.4
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	70	RRG	Dead	11	18	3	1	623702.4	6152813.3
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	60	RRG	Dead	11	18	3	1	623712.7	6152790.8
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	20	RRG	Dead	11	18	3	1	623736.2	6152902.2
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	1	Y	70	RRG	Dead	11	18	3	1	623695.7	6152810.0
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	30	RRG	Dead	11	18	3	1	623755.1	6152852.2
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	30	RRG	Dead	11	18	3	1	623768.8	6152842.8
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	60	RRG	Dead	11	18	3	1	623664.5	6152888.3
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	30	RRG	Alive	12	22	4	1	623748.4	6152854.8
Hattah	Little Pied Cormorant	Phalacrocorax melanoleucos	1	Y	60	RRG	Dead	11	18	3	1	623698.3	6152874.3
Hattah	Nankeen Night Heron	Nycticorax caledonicus	1	N	90	RRG	Alive	12	22	4	1	623729.1	6152811.9
Hattah	Nankeen Night Heron	Nycticorax caledonicus	1	N	90	RRG	Alive	11	25	4	1	623708.7	6152805.5
Hattah	Nankeen Night Heron	Nycticorax caledonicus	1	N	100	RRG	Alive	12	18	4	1	623281.6	6153374.3
Hattah	Nankeen Night Heron	Nycticorax caledonicus	2	N	80	RRG	Alive	10	19	3	1	623748.7	6152823.4
Hattah	Nankeen Night Heron	Nycticorax caledonicus	1	N	90	RRG	Alive	12	22	4	1	623700.8	6152773.8
Kornardin	Australasian Darter	Anhinga novaehollandiae	4	N	80	RRG	Alive	11	34	3	1	623825.1	6159993.1
Kornardin	Australian White Ibis	Threskiornis molucca	2	Y	80	RRG	Alive	12	22	4	1	624096.4	6159824.7
Kornardin	Australian White Ibis	Threskiornis molucca	2	Y	80	RRG	Alive	11	34	3	1	624092.0	6159858.7
Kornardin	Australian White Ibis	Threskiornis molucca	3	Y	40	RRG	Alive	11	34	3	1	624121.5	6159845.8
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	15	58	3	1	624161.5	6160160.7
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	70	RRG	Alive	12	22	4	1	624033.7	6160128.5
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Alive	12	22	4	1	623981.8	6159952.7
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	22	4	1	623900.4	6159935.6
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	34	4	1	623950.0	6159976.0
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	36	1	1	624133.4	6160142.8
Kornardin	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	12	53	9	1	623913.8	6160059.3
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	624109.3	6160114.3
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	3	1	624107.1	6160140.2

Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Alive	13	35	2	4	624027.3	6159979.0
Kornardin	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	12	53	9	1	623930.9	6160065.7
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	35	3	1	624040.6	6160139.1
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	34	4	1	623914.2	6160049.2
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	32	5	6	623942.1	6160016.7
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	34	4	1	624016.5	6160131.1
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	12	34	4	1	624018.0	6159952.4
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	70	RRG	Alive	12	34	4	1	624006.5	6159952.0
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Alive	12	34	4	1	623977.2	6159963.5
Kornardin	Great Cormorant	Phalacrocorax carbo	5	Y	70	RRG	Alive	13	36	2	1	623982.5	6160007.8
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	70	RRG	Alive	13	36	2	1	624074.0	6159983.7
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	18	3	1	624033.7	6159988.6
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	18	3	1	623981.4	6159936.2
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	34	1	2	624103.5	6160165.4
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	9	34	3	2	623966.1	6159988.0
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	34	1	2	623967.7	6159949.8
Kornardin	Great Cormorant	Phalacrocorax carbo	2	Y	70	RRG	Alive	11	34	3	1	624000.9	6159983.3
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	624005.4	6159937.3
Kornardin	Great Cormorant	Phalacrocorax carbo	2	Y	60	RRG	Alive	11	34	3	1	624048.6	6159989.6
Kornardin	Great Cormorant	Phalacrocorax carbo	2	Y	70	RRG	Alive	11	34	3	1	624013.4	6159968.8
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	70	RRG	Alive	11	34	3	1	623979.2	6159973.3
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	623987.9	6159946.5
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	12	29	4	1	623930.8	6159962.8
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	29	4	1	624006.2	6160128.0
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	7	6	2	1	623891.4	6160047.5
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Alive	13	44	2	1	624150.2	6160059.6
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	13	44	2	1	624026.8	6159965.1
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	624119.0	6160172.4
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	624038.8	6159963.5
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	11	34	3	5	623988.6	6159960.9
Kornardin	Great Cormorant	Phalacrocorax carbo	2	Y	70	RRG	Alive	11	34	3	1	623896.8	6160056.5
Kornardin	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Alive	11	34	3	1	623896.5	6159940.3
Kornardin	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	34	3	1	624031.8	6159981.9
Kornardin	Great Cormorant	Phalacrocorax carbo	5	Y	70	RRG	Alive	10	31	4	1	623875.2	6160048.5
Kornardin	Whistling Kite	Haliastur sphenurus	3	N	80	RRG	Alive	17	114	13	1	624239.4	6159840.6
Kornardin	White-necked Heron	Ardea pacifica	2	Y	80	RRG	Alive	12	22	4	1	624125.7	6159820.2
Kornardin	White-necked Heron	Ardea pacifica	3	Y	80	RRG	Alive	9	34	3	2	624141.2	6159827.1

Kornardin	White-necked Heron	Ardea pacifica		2	Y		70	RRG	Alive	17	95	13	1	624259.7	6159810.8
Kornardin	White-necked Heron	Ardea pacifica		2	Y		50	RRG	Alive	16	94	12	1	624046.9	6159743.1
Kornardin	Yellow-billed Spoonbill	Platalea flavipes		3	Y		70	RRG	Alive	16	94	12	1	624044.4	6159754.4
Little Hattah	Great Cormorant	Phalacrocorax carbo			Y			RRG	Alive	11	36	1	1	623273.0	6153805.1
Little Hattah	Yellow-billed Spoonbill	Platalea flavipes	2		Y	70		RRG	Alive	18	105	13	1	623256.3	6153663.7
Lockie	Great Cormorant	Phalacrocorax carbo		4	Y		80	Coobah	Dead	9	24	3	1	624845.3	6155678.3
Lockie	Great Cormorant	Phalacrocorax carbo		4	Y		80	Coobah	Alive	9	24	4	1	625614.8	6156838.8
Lockie	Great Cormorant	Phalacrocorax carbo		4	Y		80	Coobah	Alive	9	27	5	2	625719.5	6156878.4
Lockie	Great Cormorant	Phalacrocorax carbo		3	Y		80	Coobah	Dead	8	23	3	1	624874.9	6155616.5
Lockie	Great Cormorant	Phalacrocorax carbo		4	Y		80	Coobah	Dead	8	23	3	1	624878.5	6155609.7
Lockie	Great Cormorant	Phalacrocorax carbo		3	Y		80	Coobah	Alive	7	24	3	2	625707.3	6156863.7
Lockie	Great Cormorant	Phalacrocorax carbo		4	Y		80	Coobah	Alive	7	23	3	1	624954.9	6155539.0
Lockie	Great Cormorant	Phalacrocorax carbo		4	Y		70	RRG	Alive	14	41	3	2	625699.5	6156379.8
Marramook	Australasian Darter	Anhinga novaehollandiae		4	N		70	RRG	Alive	12	42	4	1	625349.4	6152670.8
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		80	RRG	Dead	9	24	2	1	624098.4	6158335.7
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		80	RRG	Dead	9	24	2	1	623990.8	6158220.3
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	11	28	3	1	623962.1	6158200.4
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		80	RRG	Dead	11	28	3	1	624034.0	6158314.8
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	9	24	2	1	624053.8	6158232.9
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	9	24	2	1	624016.1	6158236.8
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	9	24	1	1	623984.5	6158347.9
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		90	RRG	Dead	11	28	3	1	623844.3	6158192.6
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		70	RRG	Dead	10	43	2	1	623650.1	6158182.6
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		80	RRG	Dead	10	43	2	1	623804.2	6158186.1
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	10	43	2	1	624058.7	6158332.5
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	9	24	2	1	624074.8	6158304.7
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	9	24	2	1	624087.6	6158246.3
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		90	RRG	Dead	11	28	3	1	623947.2	6158229.6
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		90	RRG	Dead	10	33	2	1	623067.1	6158176.1
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	11	28	3	1	623887.8	6158161.5
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		80	RRG	Dead	11	28	3	1	623973.7	6158317.1
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		90	RRG	Dead	11	28	3	1	623959.2	6158272.2
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		80	RRG	Dead	9	24	1	1	624041.3	6158399.8
Mournpall	Great Cormorant	Phalacrocorax carbo		3	Y		80	RRG	Dead	9	24	2	1	623797.3	6158162.2
Mournpall	Great Cormorant	Phalacrocorax carbo		4	Y		80	RRG	Dead	9	24	2	1	623787.5	6158189.5

Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	37	2	2	623733.5	6158189.2
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	623950.8	6158184.2
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	624012.1	6158375.8
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	624118.9	6158434.9
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	10	43	2	1	623707.9	6158175.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	10	33	1	1	623049.6	6158176.5
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	33	2	2	623590.7	6158204.5
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	624082.2	6158425.6
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	60	RRG	Dead	9	21	2	1	623908.3	6158195.2
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	624054.6	6158371.2
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	23	2	3	624013.1	6158281.7
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	624103.7	6158373.2
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	624041.1	6158279.0
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	43	2	1	623981.6	6158175.3
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	10	31	2	1	623765.4	6158162.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	1	1	624058.1	6158299.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	23	2	3	624118.6	6158266.8
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	23	2	1	623864.1	6158213.2
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	10	33	1	1	623064.4	6158162.3
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	624007.9	6158341.9
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	624002.9	6158185.0
Mournpall	Great Cormorant	Phalacrocorax carbo	5	Y	90	RRG	Dead	10	43	2	1	624072.9	6158395.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	43	2	1	623993.3	6158251.9
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	624101.8	6158580.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	624099.0	6158461.5
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	1	1	624080.1	6158620.1
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	623886.3	6158193.0
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	28	3	1	624020.2	6158771.9
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	624042.0	6158766.9
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	624095.7	6158659.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	624033.2	6158653.5
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	623927.0	6158208.5
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	624121.4	6158571.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	624059.6	6158703.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	624130.8	6158560.8
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	624088.0	6158726.6
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	624130.3	6158521.4

Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	624018.3	6158811.5
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	623981.7	6158849.9
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	624021.9	6158499.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	624010.7	6158791.7
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	623961.8	6158872.2
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	623971.0	6158792.0
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	623962.6	6158843.8
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	32	4	1	623967.7	6158879.7
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	624068.5	6158523.3
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	624075.0	6158489.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	11	32	4	1	624097.0	6158633.5
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	624106.2	6158560.2
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	31	4	1	624044.4	6158467.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	624025.5	6158782.2
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	28	3	1	623906.2	6158307.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	24	2	1	624055.8	6158714.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	11	28	3	1	624001.0	6158430.2
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	27	5	1	623991.8	6158411.7
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	624029.8	6158759.0
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	23	3	1	624066.6	6158689.7
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	34	4	1	623999.0	6158820.9
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	10	23	3	1	623936.5	6158342.9
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	10	34	4	1	623978.0	6158807.3
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	624044.2	6158734.1
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	9	29	4	1	624074.2	6158653.9
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	624079.7	6158572.0
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	35	5	1	624002.7	6158771.5
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	28	3	1	624049.7	6158634.9
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	624101.9	6158533.2
Mournpall	Great Cormorant	Phalacrocorax carbo	5	Y	80	RRG	Alive	11	31	4	1	624000.3	6158840.9
Mournpall	Great Cormorant	Phalacrocorax carbo	2	Y	80	RRG	Alive	11	32	4	1	624040.8	6158718.7
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	12	25	4	1	624111.3	6158495.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Dead	9	26	3	1	624024.4	6158794.7
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Dead	11	32	4	1	623542.1	6158221.4
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	23	3	1	624050.0	6158759.6
Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	32	4	1	624064.7	6158730.5
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	11	32	4	1	624011.8	6158688.2

Mournpall	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	10	19	4	1	624068.9	6158750.1
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	31	4	1	624007.9	6158824.7
Mournpall	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Dead	9	24	2	1	623985.5	6158840.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626437.2	6155379.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	37	3	4	626437.2	6155379.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	4	4	626437.2	6155379.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626437.2	6155379.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	36	1	1	626536.9	6155350.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626405.5	6155500.1
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	37	3	4	626405.5	6155500.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626405.5	6155500.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626405.5	6155500.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	35	3	4	626412.7	6155598.6
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	12	35	2	4	626412.7	6155598.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	35	3	4	626412.7	6155598.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	12	35	4	4	626412.7	6155598.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	31	13	3	626331.7	6155421.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	31	13	3	626331.7	6155421.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	31	13	3	626331.7	6155421.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	31	3	2	626529.1	6155596.1
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	31	4	2	626529.1	6155596.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	11	36	1	1	626587.8	6155194.2
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	60	5	3	626507.3	6155231.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	60	1	3	626507.3	6155231.6
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	13	60	3	3	626507.3	6155231.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	31	2	1	626549.7	6155387.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	31	3	2	626566.1	6155582.7
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	31	4	2	626566.1	6155582.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	33	13	4	626510.7	6155503.9
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	33	13	4	626510.7	6155503.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	33	13	4	626510.7	6155503.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	33	13	4	626510.7	6155503.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	70	RRG	Alive	16	48	3	3	626360.2	6155177.1
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	16	48	4	3	626360.2	6155177.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	70	RRG	Alive	16	48	3	3	626360.2	6155177.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	31	13	3	626348.2	6155450.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	31	13	3	626348.2	6155450.6

Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	31	13	3	626348.2	6155450.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626402.4	6155437.2
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	37	4	4	626402.4	6155437.2
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626402.4	6155437.2
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626402.4	6155437.2
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	13	37	3	4	626510.4	6155181.0
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	13	37	4	4	626510.4	6155181.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	13	37	3	4	626510.4	6155181.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	13	37	3	4	626510.4	6155181.0
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	Coobah	Dead	5	26	2	6	626589.1	6155333.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	26	2	6	626589.1	6155333.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	Coobah	Dead	5	26	2	6	626589.1	6155333.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	26	2	6	626589.1	6155333.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	26	2	6	626589.1	6155333.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	70	RRG	Alive	11	36	1	1	626488.1	6155279.4
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	14	37	4	3	626386.1	6155160.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	14	37	3	3	626386.1	6155160.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	14	37	3	3	626386.1	6155160.5
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	13	60	1	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	1	Y	90	RRG	Alive	13	60	2	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	60	2	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	60	3	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	60	3	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	60	4	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	60	4	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	60	3	3	626578.1	6155273.3
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	13	39	2	5	626325.7	6155274.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	3	5	626325.7	6155274.7
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	39	3	5	626325.7	6155274.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	4	5	626325.7	6155274.7
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	39	4	5	626325.7	6155274.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	5	5	626325.7	6155274.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	4	5	626325.7	6155274.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	31	3	2	626558.3	6155434.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	31	4	2	626558.3	6155434.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	31	3	2	626479.7	6155589.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	31	4	2	626479.7	6155589.5

Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626418.5	6155464.1
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	37	2	4	626418.5	6155464.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626418.5	6155464.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626418.5	6155464.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626417.1	6155572.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	37	2	4	626417.1	6155572.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626417.1	6155572.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	4	4	626417.1	6155572.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	31	3	2	626535.2	6155524.2
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	31	4	2	626535.2	6155524.2
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	15	37	4	3	626373.7	6155175.7
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	15	37	3	3	626373.7	6155175.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	15	37	3	3	626373.7	6155175.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	26	3	4	626614.2	6155324.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	Coobah	Dead	5	26	3	4	626614.2	6155324.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	26	3	4	626614.2	6155324.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	26	3	4	626614.2	6155324.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Dead	11	31	3	2	626582.0	6155432.7
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Dead	11	31	4	2	626582.0	6155432.7
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	13	39	2	5	626318.4	6155338.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	2	5	626318.4	6155338.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	39	3	5	626318.4	6155338.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	3	5	626318.4	6155338.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	4	5	626318.4	6155338.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	39	4	5	626318.4	6155338.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	39	5	5	626318.4	6155338.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	42	3	3	626334.4	6155379.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	42	3	2	626334.4	6155379.1
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	13	42	3	3	626334.4	6155379.1
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	42	3	3	626417.7	6155258.2
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	42	3	2	626417.7	6155258.2
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	RRG	Alive	13	42	3	3	626417.7	6155258.2
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626333.0	6155498.9
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	37	3	4	626333.0	6155498.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626333.0	6155498.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	2	4	626333.0	6155498.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626516.7	6155287.3

Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	13	37	4	4	626516.7	6155287.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626516.7	6155287.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	RRG	Alive	13	37	3	4	626516.7	6155287.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	13	37	3	4	626528.3	6155185.0
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	13	37	4	4	626528.3	6155185.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	13	37	3	4	626528.3	6155185.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	13	37	3	4	626528.3	6155185.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	50	RRG	Alive	15	57	3	4	626399.6	6155136.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	50	RRG	Alive	15	57	3	3	626399.6	6155136.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	50	RRG	Alive	15	57	3	3	626399.6	6155136.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Alive	6	10	1	2	626628.9	6155297.0
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	Coobah	Dead	4	10	2	3	626649.2	6155307.5
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	Coobah	Dead	4	10	2	3	626649.2	6155307.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	4	10	2	3	626649.2	6155307.5
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	Coobah	Dead	4	10	2	3	626649.2	6155307.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	70	Coobah	Dead	5	10	2	4	626661.4	6155297.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	70	Coobah	Dead	5	10	2	4	626661.4	6155297.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	5	10	3	4	626661.4	6155297.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	5	10	1	4	626661.4	6155297.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	Coobah	Dead	5	10	1	4	626661.4	6155297.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	Coobah	Dead	5	10	1	4	626661.4	6155297.5
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	90	RRG	Alive	10	35	4	1	626701.5	6155284.3
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	70	Coobah	Dead	3	6	1	1	626684.5	6155296.7
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	60	Coobah	Dead	5	10	1	4	626682.0	6155298.7
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	60	Coobah	Dead	5	10	1	4	626682.0	6155298.7
Roonki	Great Cormorant	Phalacrocorax carbo	1	Y	70	Coobah	Dead	5	10	2	4	626682.0	6155298.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	70	Coobah	Dead	5	10	1	4	626682.0	6155298.7
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	5	10	1	4	626682.0	6155298.7
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	Coobah	Dead	5	10	1	4	626682.0	6155298.7
Roonki	Great Cormorant	Phalacrocorax carbo	5	Y	90	Coobah	Dead	3	6	1	3	626736.5	6155386.2
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	70	Coobah	Dead	4	10	2	2	626675.9	6155370.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	4	10	2	2	626675.9	6155370.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	4	10	2	2	626675.9	6155370.9
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	5	10	2	1	626683.4	6155381.1
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	70	Coobah	Dead	4	10	2	3	626639.3	6155392.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	4	10	2	3	626639.3	6155392.5
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	4	10	2	3	626639.3	6155392.5

Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	70	Coobah	Dead	5	10	1	3	626634.6	6155401.3
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	70	Coobah	Dead	5	10	1	3	626634.6	6155401.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	5	10	1	3	626634.6	6155401.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	5	10	1	3	626634.6	6155401.3
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	10	3	2	626629.0	6155392.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	10	2	2	626629.0	6155392.6
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	3	10	1	1	626616.4	6155405.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	6	10	2	4	626605.7	6155410.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	6	10	2	4	626605.7	6155410.0
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	Coobah	Dead	6	10	3	4	626605.7	6155410.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	6	10	2	4	626605.7	6155410.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	6	10	3	4	626605.7	6155410.0
Roonki	Great Cormorant	Phalacrocorax carbo	2	Y	90	Coobah	Dead	6	10	3	4	626605.7	6155410.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	6	10	2	4	626605.7	6155410.0
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	70	Coobah	Dead	5	10	2	2	626603.4	6155419.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	5	10	3	2	626603.4	6155419.9
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	90	Coobah	Dead	5	10	2	2	626603.4	6155419.9
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	70	Coobah	Dead	3	10	1	1	626633.1	6155436.6
Roonki	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	3	10	1	1	626592.6	6155561.8
Roonki	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	3	6	1	3	626709.5	6155565.1
Roonki	White-necked Heron	Ardea pacifica	3	Y	80	RRG	Alive	18	94	12	3	626434.9	6155049.3
Roonki	White-necked Heron	Ardea pacifica	3	Y	80	RRG	Alive	18	94	13	3	626434.9	6155049.3
Roonki	White-necked Heron	Ardea pacifica	3	Y	80	RRG	Alive	18	94	13	3	626434.9	6155049.3
Woterap	Australasian Darter	Anhinga novaehollandiae	4	N	80	RRG	Alive	7	8	2	1	624266.5	6162796.1
Yelwell	Australasian Darter	Anhinga novaehollandiae	4	N	60	RRG	Alive	12	34	4	1	625062.2	6158928.2
Yelwell	Australasian Darter	Anhinga novaehollandiae	4	N	50	RRG	Alive	12	34	4	1	625099.4	6158951.4
Yelwell	Australasian Darter	Anhinga novaehollandiae	3	N	80	RRG	Alive	11	34	3	1	625586.5	6159280.3
Yelwell	Australasian Darter	Anhinga novaehollandiae	4	N	50	Coobah	Alive	9	27	3	7	625081.2	6158953.6
Yelwell	Australasian Darter	Anhinga novaehollandiae	4	N	50	Coobah	Alive	7	22	2	6	625040.6	6158928.1
Yelwell	Australasian Darter	Anhinga novaehollandiae	4	N	70	RRG	Alive	14	44	4	1	625253.4	6159221.2
Yelwell	Australasian Darter	Anhinga novaehollandiae	3	N	80	Coobah	Alive	7	22	3	5	625170.9	6159198.9
Yelwell	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	7	24	4	1	625458.9	6159412.5
Yelwell	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	7	24	4	1	625482.5	6159356.1
Yelwell	Great Cormorant	Phalacrocorax carbo	3	Y	80	Coobah	Dead	7	24	4	1	625450.2	6159431.7
Yelwell	Great Cormorant	Phalacrocorax carbo	4	Y	70	Coobah	Dead	7	24	4	1	625427.1	6159458.5
Yelwell	Great Cormorant	Phalacrocorax carbo	4	Y	80	RRG	Alive	11	34	3	1	625360.5	6159403.4
Yelwell	Great Cormorant	Phalacrocorax carbo	4	Y	80	Coobah	Dead	7	24	4	1	625476.8	6159414.8

Yelwell	Great Cormorant	Phalacrocorax carbo	4	Y	60	RRG	Alive	12	32	4	6	624881.1	6159014.5
Yelwell	Great Cormorant	Phalacrocorax carbo	3	Y	40	RRG	Alive	12	41	3	1	624920.8	6158965.5
Yelwell	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	12	32	5	6	624904.4	6158998.7
Yelwell	Great Cormorant	Phalacrocorax carbo	3	Y	80	RRG	Alive	21	108	12	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	RRG	Alive	12	31	4	3	624975.0	6158935.3
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	70	RRG	Alive	15	78	7	7	624824.8	6158978.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	70	RRG	Alive	15	78	8	7	624824.8	6158978.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Alive	15	78	8	7	624824.8	6158978.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Alive	15	78	9	7	624824.8	6158978.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Alive	15	78	9	7	624824.8	6158978.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	90	RRG	Alive	15	78	10	7	624824.8	6158978.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	90	RRG	Alive	15	78	10	7	624824.8	6158978.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	40	Coobah	Alive	9	27	3	7	625081.2	6158953.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	40	Coobah	Alive	9	27	4	7	625081.2	6158953.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	40	Coobah	Alive	9	27	3	7	625081.2	6158953.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	40	Coobah	Alive	9	27	4	7	625081.2	6158953.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	40	Coobah	Alive	9	27	3	7	625081.2	6158953.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	40	Coobah	Alive	9	27	3	7	625081.2	6158953.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	40	Coobah	Alive	9	27	3	7	625081.2	6158953.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	70	RRG	Alive	18	97	5	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	70	RRG	Alive	18	97	6	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	18	97	6	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	18	97	7	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	18	97	7	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	18	97	8	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	18	97	8	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	70	RRG	Alive	18	97	8	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	70	RRG	Alive	18	97	9	9	624740.9	6159079.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	Coobah	Alive	7	22	3	5	625040.6	6158928.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	80	Coobah	Alive	7	22	3	5	625040.6	6158928.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	Coobah	Alive	7	22	2	5	625040.6	6158928.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	Coobah	Alive	7	22	3	5	625040.6	6158928.1
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Alive	12	24	5	1	624845.6	6159000.8
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	80	RRG	Alive	12	31	4	3	624953.6	6158909.4
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Alive	12	26	5	1	624858.8	6159001.3
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	60	RRG	Alive	18	134	6	4	624789.2	6159035.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2	Y	70	RRG	Alive	18	134	7	4	624789.2	6159035.6

Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	70	RRG	Alive	18	134	8	4	624789.2	6159035.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	70	RRG	Alive	18	134	8	4	624789.2	6159035.6
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	50	RRG	Alive	17	108	7	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	50	RRG	Alive	17	108	7	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	50	RRG	Alive	17	108	7	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	50	RRG	Alive	17	108	9	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	50	RRG	Alive	17	108	8	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	50	RRG	Alive	17	108	8	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	60	RRG	Alive	17	108	8	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	60	RRG	Alive	17	108	9	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	60	RRG	Alive	17	108	9	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	60	RRG	Alive	17	108	9	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	70	RRG	Alive	17	108	10	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	70	RRG	Alive	17	108	10	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	70	RRG	Alive	17	108	11	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	70	RRG	Alive	17	108	12	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	80	RRG	Alive	17	108	12	16	624814.3	6159018.2
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	80	RRG	Alive	12	31	4	3	624970.4	6158904.8
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	60	RRG	Alive	16	34	9	1	624711.3	6159166.3
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	70	RRG	Alive	12	32	3	6	624981.6	6158947.4
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	70	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	70	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	70	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	70	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	80	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	80	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	80	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	80	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	90	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	90	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4Y	90	RRG	Alive	18	135	12	11	624790.4	6159002.9
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	50	RRG	Alive	12	36	4	3	624951.9	6158938.4
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	80	RRG	Alive	12	32	4	6	624999.5	6158939.8
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	50	RRG	Alive	21	108	2	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	2Y	50	RRG	Alive	21	108	7	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	50	RRG	Alive	21	108	8	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3Y	60	RRG	Alive	21	108	9	9	624817.3	6158997.7

Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	60	RRG	Alive	21	108	10	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	60	RRG	Alive	21	108	10	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	70	RRG	Alive	21	108	11	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	4	Y	70	RRG	Alive	21	108	12	9	624817.3	6158997.7
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	12	36	4	3	624913.6	6158981.4
Yelwell	Little Black Cormorant	Phalacrocorax sulcirostris	3	Y	70	RRG	Alive	12	36	4	3	624941.8	6158946.6
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	70	RRG	Alive	12	22	4	1	625096.6	6158951.6
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	20	RRG	Alive	12	22	4	1	624846.7	6158827.6
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	60	RRG	Alive	12	53	9	1	625095.2	6158952.4
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	12	53	9	1	625096.4	6158949.1
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	12	34	4	1	624937.4	6158839.6
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	60	RRG	Alive	12	34	4	1	625097.8	6158954.0
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	70	RRG	Alive	12	34	4	1	625098.2	6158950.0
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	13	36	2	5	625064.7	6158923.8
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	80	RRG	Alive	13	36	4	5	625064.7	6158923.8
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	RRG	Alive	13	36	2	5	625064.7	6158923.8
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	90	RRG	Alive	13	36	4	5	625064.7	6158923.8
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	90	RRG	Alive	13	36	4	5	625064.7	6158923.8
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	20	Coobah	Dead	7	24	4	1	625100.4	6158953.0
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	7	Y	20	Coobah	Alive	7	22	2	7	624987.2	6158901.5
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	Coobah	Alive	7	16	3	1	624869.2	6158973.3
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	Coobah	Alive	7	22	3	5	625170.9	6159198.9
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	80	Coobah	Alive	7	22	2	5	625170.9	6159198.9
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	3	Y	80	Coobah	Alive	7	22	3	5	625170.9	6159198.9
Yelwell	Little Pied Cormorant	Phalacrocorax melanoleucos	2	Y	80	Coobah	Alive	7	22	3	5	625170.9	6159198.9
Yelwell	Pied Cormorant	Phalacrocorax varius	3	Y	80	RRG	Alive	12	32	6	6	624791.6	6159072.3
Yelwell	Pied Cormorant	Phalacrocorax varius	4	Y	60	RRG	Alive	17	108	10	16	624814.3	6159018.2
Yelwell	White-necked Heron	Ardea pacifica	3	Y	70	RRG	Alive	12	53	9	1	625382.9	6159145.2
Yelwell	White-necked Heron	Ardea pacifica	1	Y	80	RRG	Alive	12	34	4	1	625379.4	6159159.4
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	2	Y	80	RRG	Alive	12	22	4	1	625401.6	6159124.9
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	2	Y	70	RRG	Alive	12	53	9	3	624760.4	6159013.1
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	2	Y	80	RRG	Alive	12	53	9	3	624760.4	6159013.1
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	1	Y	80	RRG	Alive	12	53	9	3	624760.4	6159013.1
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	2	Y	80	RRG	Alive	12	53	9	1	625391.6	6159168.2
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	2	Y	80	RRG	Alive	12	34	4	1	625409.4	6159176.1
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	3	Y	80	RRG	Dead	11	18	3	1	625403.6	6159158.4
Yelwell	Yellow-billed Spoonbill	Platalea flavipes	2	Y	60	RRG	Alive	17	95	13	1	625412.7	6159194.7

Yelwell	Yellow-billed Spoonbill	Platalea flavipes	2	Y	60	RRG	Alive	12	29	4	1	625396.9	6159191.2

Appendix C

Incidental and Threatened Species records.

Incidental and Threatened Species records

Site	Date	Common Name	Scientific Name	Number	FFG Act Status	EPBC Act Status	Breeding Activity?
Cantala	25/01/2022	Blue-billed Duck	*Oxyura australis*	1	VU	-	-
Cantala	25/01/2022	Blue-billed Duck	*Oxyura australis*	1	VU	-	-
Cantala	26/01/2022	Blue-billed Duck	*Oxyura australis*	1	VU	-	-
Cantala	26/01/2022	Blue-billed Duck	*Oxyura australis*	1	VU	-	-
Cantala	26/01/2022	Blue-billed Duck	*Oxyura australis*	2	VU	-	-
Cantala	26/01/2022	Blue-billed Duck	*Oxyura australis*	3	VU	-	-
Cantala	26/01/2022	Blue-billed Duck	*Oxyura australis*	1	VU	-	-
Bitterang	26/01/2022	Lace Monitor	*Varanus varius*	1	EN	-	-
Bitterang	26/01/2022	Royal Spoonbill	*Platalea regia*	1	-	-	-
Woterap	30/01/2022	Blue-billed Duck	*Oxyura australis*	2	VU	-	-
Woterap	30/01/2022	Musk Duck	*Biziura lobata*	2	VU	-	Recently fledged
Little Hattah	1/02/2022	White-bellied Sea-eagle	*Haliaeetus leucogaster*	1	EN	-	Recently fledged
Lockie	2/02/2022	Musk Duck	*Biziura lobata*	1	VU	-	-
Lockie	2/02/2022	Musk Duck	*Biziura lobata*	2	VU	-	-
Kornardin	21/02/2022	Freckled Duck	*Stictonetta naevosa*	1	EN	-	-
Mournpall	22/02/2022	White-bellied Sea-eagle	*Haliaeetus leucogaster*	1	EN	-	-

Site	Date	Common Name	Scientific Name	Number	FFG Act Status	EPBC Act Status	Breeding Activity?
Cantala	23/02/2022	Blue-billed Duck	*Oxyura australis*	1	VU	-	-
Cantala	23/02/2022	Musk Duck	*Biziura lobata*	1	VU	-	-
Cantala	23/02/2022	Royal Spoonbill	*Platalea regia*	2	-	-	Nesting
Mournpall	11/03/2022	White-bellied Sea-eagle	*Haliaeetus leucogaster*	1	EN	-	-
Cantala	22/3/2022	Blue-billed Duck	*Oxyura australis*	11	VU	-	5 young

Appendix D

Images of breeding waterbirds and nests.

Appendix D – Images of breeding waterbirds and nests.

Image 1. Great Cormorant nests in dead River Red Gums at Lake Mournpall

Image 2. Great Cormorant nest with chicks in live River Red Gum at Lake Konardin

Image 3. Great Cormorant nests with chicks in dead River Red Gum at Lake Cantala

Image 4. Great Cormorant nest in a very large old live River Red Gum at Lake Cantala

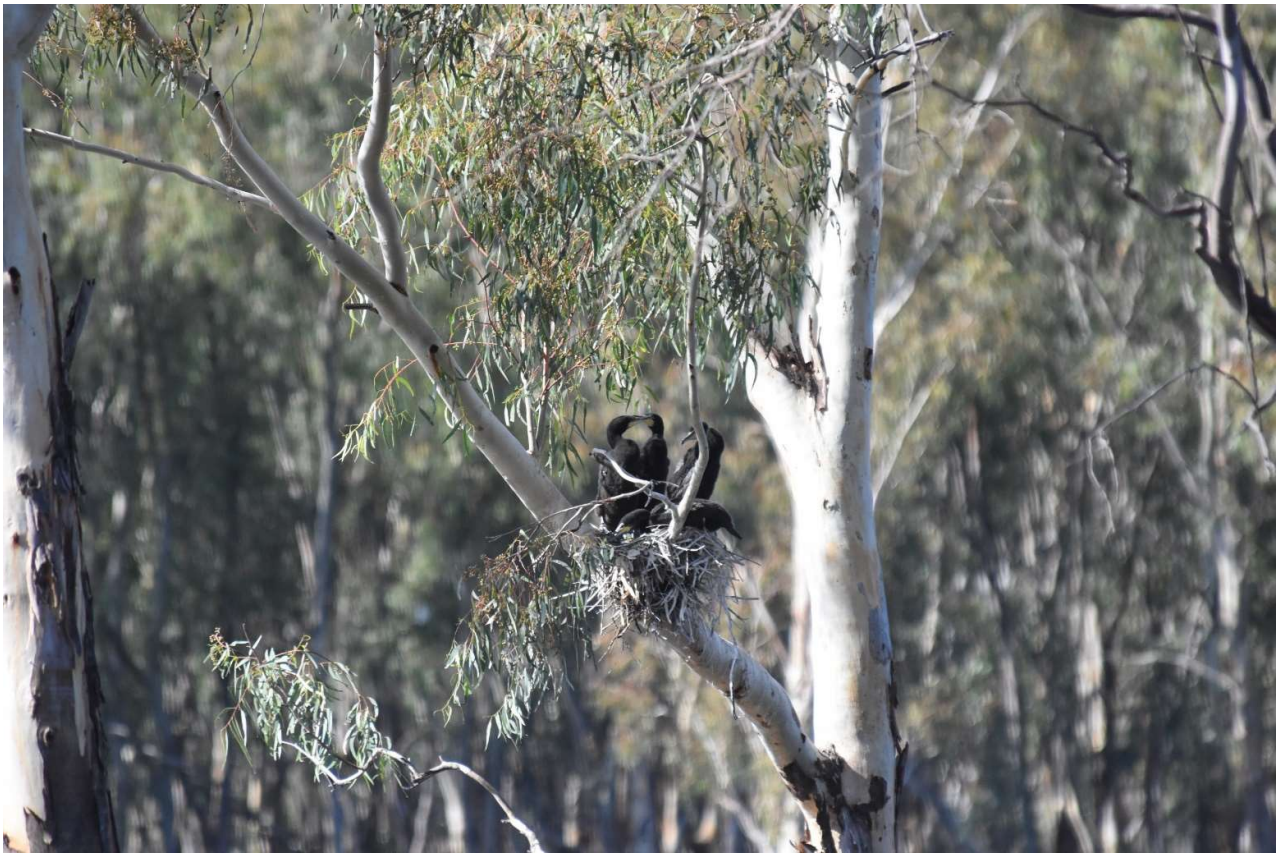


Image 5. Great Cormorant nests with chicks in live River Red Gum at Lake Roonki

Image 6. Mixed colony of Little Pied Cormorant nests and one Australasian Darter nest with chicks in live Coobah at Lake Yelwell

Image 7. Mixed colony of Little Pied Cormorant nests and one Australasian Darter nest with chicks in live Coobah at Lake Yelwell

Image 8. Mixed colony of Little Black and Little Pied Cormorant nests, some with chicks in a large live River Red Gum at Lake Yelwell

Image 9. Mixed colony of Little Black and (not visible in this image) Little Pied Cormorant nests, some with chicks in a large live River Red Gum at Lake Yelwell

Image 10. Mixed colony of Little Black and (not visible in this image) Little Pied Cormorant nests, with chicks in a large live River Red Gum at Lake Yelwell

Image 11. Pied Cormorant on nest in part of a mixed colony with Little Black and Little Pied Cormorant nests in a large live River Red Gum at Lake Yelwell

Image 12. Yellow-billed Spoonbill on nest in a large live River Red Gum at Lake Cantala

Image 13. Yellow-billed Spoonbill chicks in nest in a large live River Red Gum at Lake Cantala

Image 14. Pink-eared Duck chicks at Lake Woterap.

Image 14. Musk Duck chicks at Lake Woterap.

Image 14. Two male Blue-billed Ducks at Little Lake Hattah.

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