

## Waterbird Guilds at Perry Lakes

| Water depth | Dominant feeding method | Bird species        | <i>Scientific name</i>         | Probability of Observation (L, M, H) | Diet  | Nesting requirements  | Comments   |
|-------------|-------------------------|---------------------|--------------------------------|--------------------------------------|---|---|--|
| 1-2m        | Deep divers             |                     |                                |                                      |   |   |  |
|             |                         | Musk Duck           | <i>Biziura lobata</i>          | M (6)                                | Carnivorous. Dives in deep water for aquatic invertebrates. Occasionally ducklings and small vertebrates eaten.   | Old reed clumps standing in water at least 1m deep, or a hollow in a log that is over water.  |  |
|             |                         | Blue-billed Duck    | <i>Oxyura australis</i>        | M (7)                                | Omnivorous. Dives for aquatic invertebrates. Strips seeds and leaves from aquatic plants.   | Female builds nest in od, very dense, long unburnt typha reedbeds where masses of old dead leaves tangle near the water level. Well camouflaged.  | Rarely seen ashore. Freshwater only (not marine) |
|             |                         | Australasian Darter | <i>Anhinga novaehollandiae</i> | L (3)                                | The Darter catches fish with its sharp bill partly open while diving in water deeper than 60 cm. The fish is pierced from underneath, flicked onto the water's surface and then swallowed head first. Smaller items are eaten underwater and large items may be carried to a convenient perch and then swallowed. Insects and other aquatic animals, including tortoises, may also be | It builds its nests in trees standing in water and will move to deeper waters if the waters begin to dry up. May nest in colonies including with other species. Male mostly builds the nest about 3.5m above water. |  |

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|-----------|-----------------------|------------------------|------------------------------------|--------|--|--|--|
|           |                       |                        |                                    |        | eaten, as well as some vegetable matter. In hot weather, adult birds may pour water from their bills into the gullets of their young chicks when they are still in the nest.   |  |  |
|           |                       | Little Black Cormorant | <i>Phalacrocorax sulcirostris</i>  | M (8)  | Feed on fish. Sometimes feed in frenzy following schools of fish.  | Breed colonially in waterside trees.   | Can occur in large flocks to several thousand. |
|           |                       |                        |                                    |        |  |  |  |
| 0.8 -1.0m | <b>Shallow Divers</b> |                        |                                    |        |  |  |  |
|           |                       | Eurasian Coot          | <i>Fulica atra</i>                 | H (12) | Feeds on aquatic vegetation, including on land adjacent to wetlands.   | Nests in wetlands surrounded by water. Nests are made of aquatic vegetation and may float or attached to submerged stump or log. |  |
|           |                       | Australasian Grebe     | <i>Tachybaptus novaehollandiae</i> | H (11) | Food consists mainly of small fish and water insects. Prey is normally caught during deep underwater dives, but some are taken on the surface. Like other grebes, the Australasian Grebe is often seen eating its own feathers and feeding them to its young. This behaviour is thought to help prevent injury from any sharp fish bones that are swallowed. | Nest is a floating mound of vegetation, normally anchored to a submerged branch or reed.   |  |

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|          |                        | Little Pied Cormorant  | <i>Microcarbo melanoleucos</i>     | M (6) | Forages for invertebrates (including yabbies) in relatively shallow water.   | Nest in loose colonies in waterside trees.   |  |
|          |                        | Hardhead               | <i>Aythya australis</i>            | M (6) | Diet includes aquatic plants and animals, especially mussels and freshwater shellfish. They dive to feed.  | Nest in low thick vegetation along rivers and channels.  | Wary. Keeps away from shore.                       |
|          |                        |                        |                                    |       |  |  |  |
|          |                        |                        |                                    |       |  |  |  |
| 0.8-1.2m | <b>Surface feeders</b> | Pink-eared Duck        | <i>Malacorhynchus membranaceus</i> | M (5) | Pink-eared Ducks feed in shallow warmish waters. The highly specialised bill is fringed with fine lamellae (grooves) to filter out the microscopic plants and animals which make up the bulk of its diet. Water is sucked through the bill-tip, then expelled through grooves along the side of the bill, filtering out tiny invertebrates in the process. | Breeding can take place all year round and is dependent on floodwaters. The nest is a rounded mass of down placed in a hollow or on a stump above the water. Pink-eared Ducks usually take over nests built by other birds, especially the Eurasian Coot, <i>Fulica atra</i> , and the Black-tailed Native Hen, <i>Gallinula ventralis</i> . Pink-eared Ducks form monogamous, probably life-long pair-bonds. The female incubates the eggs, and both parents brood the young. |  |
|          |                        | Australasian Shoveller | <i>Anus rhynchos</i>               | M (9) | Omnivore eating insects, crustaceans and seeds. Filter feeds mostly at night.  |  | Relatively shy and requires vegetation for refuge. |

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|          |                               | Grey Teal           | <i>Anus gracilis</i>         | H (10) | Diet includes midge lava, mosquitoes, water beetles, caddis flies and seeds of aquatic plants.            | Usually nest in a hollow limb, but also on ground or in used nests.                                  | Versatile in habitat use.   |
|          |                               | Pacific Black Duck  | <i>Anus superciliosa</i>     | H (12) | Surface dabbles and filter feeders  | Nest in tree hollows often using nests of other species. Also next in trampled reeds close to water. | Occur in a diverse range of wetlands from puddles to large open waterbodies.  |
|          |                               |                     |                              |        |   |  |   |
|          | <b>Benthic browsers</b>       |                     |                              |        |   |  |   |
| 0.5-0.8m |                               | Black Swan          | <i>Cygnus atratus</i>        | H (12) | Vegetarian - usually algae and weeds up to 1m depth.  |  | Black Swans prefer larger salt, brackish or fresh waterways and permanent wetlands, requiring 40m or more of clear water to take off. Outside the breeding season, Black Swans are generally sedentary although may travel quite large distances. Birds fly at night. |
|          |                               | Australian Shelduck | <i>Tardorna tardornoides</i> | H (12) | Omnivorous. Mostly grazing on grass on land or in shallow water, also eating algae, insects and molluscs. | Nests on ground or in tree hollows.  |   |
| 0.2-0.5m | <b>Shallow water foragers</b> |                     |                              |        |   |  |   |

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|  |  | Yellow-billed Spoonbill | <i>Platalea flavipes</i>        | M (7)  | Feeds by striding through shallow water sweeping bill from side to side. Eats small fish, crustaceans, molluscs and aquatic insects.     | Colonial nesting usually with loosely built nests in trees near water.                          |   |
|  |  | Great Egret             | <i>Ardea alba</i>               | M (6)  | Usually solitary when hunting fish however they have been in hunting groups (up to 35) at Perry Lakes.                                   | Nest colonially in flooded or fringing tree.  |   |
|  |  | White-faced Heron       | <i>Egretta novaehollandiae</i>  | H (12) | The White-faced Heron feeds on a wide variety of prey, including fish, insects and amphibians.   | The nest is an untidy structure of sticks, placed in a tree near water. Often roost colonially. | The White-faced Heron is particularly versatile. It can be seen in many different wetland habitats: they occur on reefs, in rock pools and mudflats by the coast, in estuaries and saltmarsh, swamps, rivers, drains and at farm dams; they even occur in pasture and hypersaline wetlands. |
|  |  | White-necked Heron      | <i>Ardea pacifica</i>           | M (6)  | White-necked Herons feed by wading in shallow water or stalking through wet grass looking for fish, amphibians, crustaceans and insects. | Nest is a loose platform in trees over-hanging water, either solitary or in loose colonies.     |   |
|  |  | Black-winged Stilt      | <i>Himantopus leucocephalus</i> | H (10) | Carnivorous including molluscs, small crustaceans, flies and aquatic insects.  | Small platform of plant material built in a shallow depression in the ground.                   | Separate subspecies for SW WA   |

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|          |                               | Nankeen Night-heron      | <i>Nycticorax caledonicus</i>    | M (8) | Nankeen Night-Herons feed at night in shallow water on a wide variety of insects, crustaceans, fish and amphibians.   | The Nankeen Night-Heron breeds throughout the year, depending on food availability. Breeding takes place in colonies, often together with egrets and cormorants. The nest is a loose stick platform over water. |   |
|          |                               |                          |                                  |       |   |   |   |
|          | <b>Wetland margin forager</b> |                          |                                  |       |   |   |   |
| 0.0-0.2m |                               | Australian Spotted Crake | <i>Porzana fluminea</i>          | L (2) | Diet is seeds, molluscs, insects, crustaceans and spiders.  | Nests in reed beds just above the waterline.  | Mostly in shallow water with some exposed silt or mud. Will require stable water levels during breeding season (Aug-Feb.) |
|          |                               | Spotless Crake           | <i>Porzana tabuensis</i>         | L (4) | Forages in shallow water and in mud. Diet is omnivorous including seeds, fruits and leaves of aquatic plants plus a wide variety of invertebrates including worms, spiders and beetles. | Nest is a bowl of reed stems hidden in dense vegetation close to water.   | Requires dense vegetation cover, especially <i>Thypha</i> .   |
|          |                               | Baillon's Crake          | <i>Porzana pusilla</i>           | L (2) | Diet is mostly insects and aquatic animals.   |   |   |
|          |                               | Buff-banded Rail         | <i>Hypotaenidia philippensis</i> | M (8) | The Buff-banded Rail feeds on crustaceans, molluscs, insects, seeds, fruit, frogs, carrion and refuse. It mostly feeds early in the morning and the evening.                            | Buff-breasted Rail nests in long grass, tussocks, rushes or crops. It makes an unlined cup-shaped nest of grasses or reeds.   |   |

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|  |  | Purple Swamphen       | <i>Porphyrio melanotus</i>     | H (12) | The diet of the Purple Swamphen includes the soft shoots of reeds and rushes and small animals, such as frogs and snails. However, it is a reputed egg stealer and will also eat ducklings when it can catch them. The Purple Swamphen uses its long toes to grasp food while eating.                         | Nest is in a clump of reeds just above water level (July-Dec).                    |   |
|  |  | Dusky Moorehen        | <i>Gallinula tenebrosa</i>     | H (12) | Diet is mostly seeds, fruits of shrubs, grasses and molluscs.   | Nest is a bulky bowl of sticks, reeds, bark and grass just above the water level. |   |
|  |  | Straw-necked Ibis     | <i>Threskionis spinicollis</i> | M (9)  | Feeds mostly in open grassland or wetland margins. Eat invertebrates (up to 2,000 insects daily).   | Colonial nesting on dense reedbeds, including <i>Thypha</i> .                     |   |
|  |  | Australian White Ibis | <i>Threskiornis moluccus</i>   | H (11) | The Australian White Ibis' range of food includes both terrestrial and aquatic invertebrates and human scraps. The most favoured foods are crayfish and mussels, which the bird obtains by digging with its long bill. Mussels are opened by hammering them on a hard surface to reveal the soft body inside. | Colonial nesting on dense reedbeds, including <i>Thypha</i> .                     | Australian White Ibis nest in large colonies, often with the Straw-necked Ibis, <i>T. spinicollis</i> . Young are born naked and helpless. One or two broods may be reared in a year. |

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|  |                                    | Black-fronted Dotterel  | <i>Eseyornis melanops</i>     | L      | Diet includes crustaceans, insects and seeds.  | Nest is a small depression in the grounds near a waterbody.    | Usually found on firm bare substrates on fringe of freshwater wetlands. Avoids wading into water of any depth. |
|  |                                    |                         |                               |        |  |  |  |
|  | <b>Fringing Vegetation Forager</b> |                         |                               |        |  |  |  |
|  |                                    | Australian Reed Warbler | <i>Arcocephalis australis</i> | H (11) | Diet includes insects, spiders, molluscs and seeds.  | Nest is a woven cup in reedbeds.                               | Difficult to see but easily identified by call. Commonly in <i>Typha</i> .                                     |
|  |                                    | Little Grassbird        | <i>Megalurus gramineus</i>    | H (11) | Diet is insects and arthropods   | Nest is deep cup with domes roof attached to reeds.            | Requires dense vegetation close to water.  |
|  |                                    | Sacred Kingfisher       | <i>Todiraamphus sanctus</i>   | L (1)  | Diet is mostly invertebrates but also lizards and occasionally fish.                       | Nest is usually in tree hollows.                               | Commonly in wooded habitats near water. Regionally migratory.  |
|  |                                    | Glossy Ibis             | <i>Plegadis falcinellus</i>   | L (4)  | Feeds in shallow fresh water or adjacent grassland. Takes insects by probing and sweeping. | Colonial nesting in crown of paperbarks or low dense reedbeds. |  |
|  |                                    | Australian Wood Duck    | <i>Chenonetta jubata</i>      | M (9)  | Feeds on green herbage near water.   | Usually nests in tree hollows.                                 | Often seen in large family groups. Occurs a diverse range of habitats mostly associated with water.            |

**Sources of information:**

1. Menkhorst, P. et al. (2019), *The Australian Bird Guide*. CSIRO Publishing
2. Morcombe, M, *The Michael Morcombe eGuide to Australian Birds*
3. BirdLife Australia website: <https://birdlife.org.au/bird-profiles/>