Wetland Birds *of North East Victoria*

An Identification and Habitat Management Guide

Wetlands of North East Victoria provide habitat for a diverse array of migratory and non-migratory wetland birds including threatened species and some that migrate from the northern hemisphere. Unfortunately, many wetland-dependent bird species are declining at an alarming rate. Of the 52 species shown in this brochure, 14 are threatened and are protected under the national Environment Protection & Biodiversity Conservation Act and/or Victoria's Flora and Fauna Guarantee Act. Ephemeral (or temporary) wetlands occurring across the region are productive because organic matter decomposes in the drying cycle, 'fuelling' the wetland once it refills. A broad range of habitats are created, which change over cycles of flooding and drying. Permanent wetlands and waterways provide important year-round habitat and drought refuges for itinerant wetland birds. Both permanent and ephemeral wetlands are critical for biodiversity and ecological productivity. These wetland systems are also breeding areas for native fish, insects, crustaceans, reptiles and amphibians – essential food sources for wetland birds.

Unfortunately, vast areas of wetlands have been drained or cultivated causing wetland birds to decline. The worst affected species are those that nest close to the ground as they have lost key habitat attributes and are highly susceptible to predation. However, on-ground work has already begun to protect and restore wetland habitat in the region through environmental watering, fencing, predator control and other appropriate management. Conservation and restoration of wetland habitats is critical to support populations of wetland birds now and into the future.

Victorian Conservation Status: Listed under the Flora and Fauna Guarantee Act 1988 (FFG 1988). **CR** Critically Endangered. **EN** Endangered. **VU** Vulnerable.

YOU CAN HELP

Ensure wetland areas receive and hold water

Flooding is the driving factor responsible for the existence and productivity of wetland birds. Wetlands in this region have variable flooding cycles depending on whether they are on a major waterway floodplain (e.g. Murray River) or from rainfall runoff. It is important to develop a strategy to ensure that every wetland receives adequate water (e.g. banks do not interfere with the flow).

Get involved in wetland bird conservation initiatives

Consider getting involved in pest animal eradication around wetlands (e.g. spring fox drive), participate in bird surveys, submit records of birds you have seen to the Birdata (BirdLife Australia), or join or support a community group or conservation organisation such as Landcare, BirdLife Australia, RiverConnect (Shepparton area) or Swamps River Ranges.

For further information

Department of Energy, Environment and Climate Action: deeca.vic.gov.au
Benalla (03) 5761 1611; Wodonga (02) 6071 6201; Alexandra (03) 5772 0200

North East Catchment Management Authority: necma.vic.gov.au
Local Call: (02) 6043 7600

Goulburn Broken CMA: gbcma.vic.gov.au
Local Call: (03) 5822 7700

Swamps, Rivers and Ranges: swampsriversandranges.org.au

River Connect: riverconnect.com.au

Cover photograph: Australasian Bittern (Mel Mitchell).

Bird photography: All bird photographs supplied by Chris Tzaros, otherwise Daniel Pendavingh (DP) or Mel Mitchell (MM).

Habitat photography: Mathew Herring, otherwise Daniel Pendavingh and Lachlan King.

Content: Brochure concept, content and photography has been adapted from Wetland Birds of the Central Riverina. New South Wales An Identification and Habitat Management Guide by Chris Tzaros, Ian Davidson (Regeneration Solutions Pty. Ltd.) and Andrea Mitchell (Corowa District Landcare), 2016.

ISBN 978-1-76136-888-1 (pdf/online/MS word). © Design - colourfield.com.au

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of North East Victoria

An Identification and Habitat Management Guide

birdlife AUSTRALIA

VICTORIA State Government — Energy, Environment and Climate Action

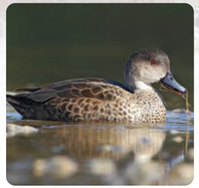
River Connect

North East Catchment Management Authority

Goulburn Broken Catchment Management Authority

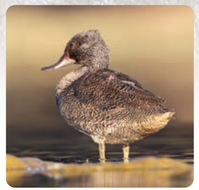
Swamps, Rivers & Ranges

Shallow wetlands & marshes (canegrass, low rushes, nardoo & grassy meadows)



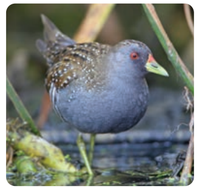
Grey Teal
Anas gracilis

Pink-eared Duck
Malacorhynchus membranaceus



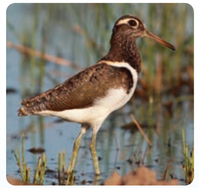
Freckled Duck
Stictonetta naevosa – **EN**

Yellow-billed Spoonbill
Platalea flavipes



Australian Spotted Crake
Porzana fluminea

Black-tailed Native-hen
Gallinula ventralis



Australian Painted Snipe
Rostratula australis – **CR**

Shallow wetlands

Shallow wetlands typically experience seasonal drying and provide wildlife habitat (incl. reptiles and amphibians) that differs from that provided by permanent wetlands. These wetland environments provide important habitat for exciting birds such as Australian Painted Snipe and Australian Spotted Crake.

These hard to spot birds use shrubs for shelter and roosting, and forage in the surrounding shallow muddy areas.

Areas of slightly deeper water are the favoured feeding ground of Freckled and Pink-eared Ducks and Yellow-billed Spoonbill.

Black-fronted Dotterel
Elseyornis melanops

Red-kneed Dotterel
Erythrogonys cinctus

White-fronted Chat
Ephthianura albifrons

Little Grassbird
Megalurus gramineus

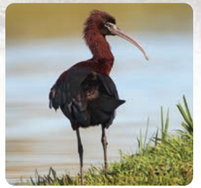
Royal Spoonbill
Platalea regia (MM)

Shallow wetlands & marshes (canegrass, low rushes, nardoo & grassy meadows)

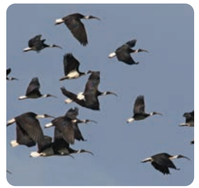
Swamp Harrier
Circus approximans

White-necked Heron
Ardea pacifica

Australian Shelduck
Tadorna tadarnoides



Glossy Ibis
Plegadis falcinellus



Straw-necked Ibis
Threskiornis spinicollis

Brolga
Grus rubicunda – **EN**

Latham's Snipe
Gallinago hardwickii

Shallow marshes

Shallow marshes occur as low lying depressions in flood prone areas and are not often recognisable as 'wetlands' except following rainfall or flood. Once marshes are flooded, wetland plants establish quickly and birds colonise. As water levels recede, shallow marshes are habitat for species that forage on insects on the water's surface, emergent foliage and areas of damp ground. Brolga breed almost exclusively in large open shallow marshes that are only flooded for 2-6 months at a time. Species such as Black-winged Stilt and Whiskered Tern commence breeding in these wetlands 3 months after inundation and require water for a further 6 months for success.

Sharp-tailed Sandpiper
Calidris acuminata

Black-winged Stilt
Himantopus himantopus

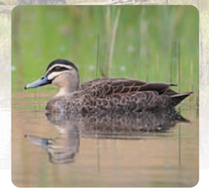
Masked Lapwing
Vanellus miles

Whiskered Tern
Chlidonias hybridus

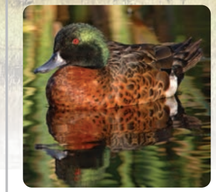
Golden-headed Cisticola
Cisticola exilis

Timbered wetlands and watercourses (River Red Gum, Grey or Black Box)

Australian Wood Duck
Chenonetta jubata



Pacific Black Duck
Anas superciliosa

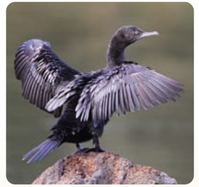


Chestnut Teal
Anas castanea

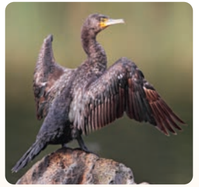
White-bellied Sea Eagle
Haliaeetus leucogaster – **EN** (DP)

Darter
Anhinga melanogaster

Little Pied Cormorant
Phalacrocorax melanoleucos



Little Black Cormorant
Phalacrocorax sulcirostris



Great Cormorant
Phalacrocorax carbo

Treed wetlands

Large trees growing in wetlands and along watercourses are a significant ecological asset. Red Gums in particular offer an enormous range of habitat resources – shelter, feeding areas, resting perches, sticks for nest building, nesting sites in branches and hollow limbs. Tree-lined watercourses act as corridors for birds to forage and move through the landscape. Wetland birds associated with Red Gum, Grey and Black Box wetlands, include Nankeen Night-Heron, Pacific Black Duck, Darter and Cormorant. Living and dead trees provide essential habitat and maintaining flows to waterways is vital.

Australian Pelican
Pelecanus conspicillatus – (MM)

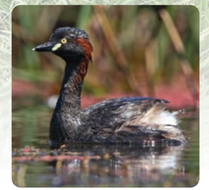
Great Egret
Ardea alba

Nankeen Night Heron
Nycticorax caledonicus

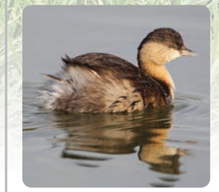
White-faced Heron
Egretta novaehollandiae

Tall marshes (tall reed beds, spike rush dominated)

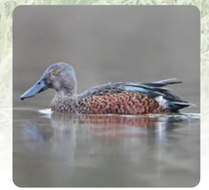
Black Swan
Cygnus atratus



Australasian Grebe
Tachybaptus novaehollandiae

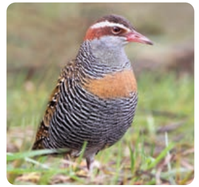


Hoary-headed Grebe
Poliocephalus poliocephalus



Australasian Shoveler
Anas rhynchotis – **VU**

Australasian Bittern
Botaurus poiciloptilus – **EN**



Buff-banded Rail
Gallirallus philippensis

Baillon's Crake
Porzana pusilla

Tall marshes

Wetland margins that support emergent clumps of cumbungi, reeds and tall spike rush provide habitat that is useful to a suite of wetland birds; those that prefer to live in deep shelter (Bittern and Rail), those that use 'ribbons' of aquatic vegetation for nesting material or platforms to forage (Swan, Grebe and Crake), and those that forage in deeper water close to fringing reed beds (e.g. Swamphen, Moorhen and Coot). The Australian Reed-Warbler, whose lovely song can be heard bursting from the reed beds during spring and summer, occurs exclusively in this habitat where it attaches its nest to stems of reeds and tall rushes. Spike rush responds quickly to shallow flooding (5-50cm) and the underground tubers are a favoured food source of Brolga. Cumbungi and reeds prefer deeper, more permanent water, especially over summer.

Spotless Crake
Porzana tabuensis

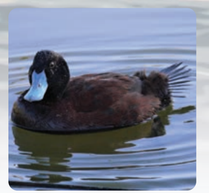
Purple Swamphen
Porphyrio porphyrio

Dusky Moorhen
Gallinula tenebrosa

Eurasian Coot
Fulica atra

Australian Reed-Warbler
Acrocephalus stentoreus

Deepwater wetlands

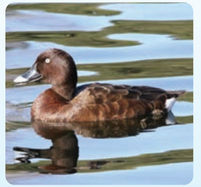


Blue-billed Duck
Oxyura australis – **VU** (DP)

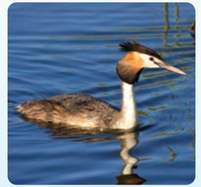
Musk Duck
Biziura lobata – **VU** (MM)

Deepwater wetlands

Deepwater wetlands, dams and lakes are typically categorised by permanent, open bodies of still water which are not impeded by tall trees, shrubs or other terrestrial vegetation (although may be bounded by cumbungi-dominant areas). These waterbodies are deep and cold, sustaining a variety of aquatic and benthic vegetation and diverse invertebrate populations. These areas provide habitat for species which are habitually aquatic, diving waterbirds that feed nearly exclusively underwater (Musk Duck, Hardhead, Blue-billed Duck). These wetlands are prone to habitat degradation from invasive European Carp (*Cyprinus carpio*) which destroy benthic vegetation, reduce invertebrate populations, deteriorate water quality and prevent the regeneration of wetland vegetation.



Hardhead
Aythya australis – **VU** (MM)



Great Crested Grebe
Podiceps cristatus (DP)

Creating a wetland from your farm dam

Most existing farm dams have insufficient habitat to support wetland birds, but species such as the Australian Wood Duck, Yellow-billed Spoonbill and Australasian Grebe do occur. Simple changes to farm dams can improve their habitat value. Creating shallow margins (<50cm) to part of a dam will allow sunlight to penetrate and promote aquatic plant growth for a wider range of wetland species. Fencing these areas from grazing will encourage vegetation to flourish, providing excellent habitat for birds such as Great Egret, White-necked and White-faced Heron, Australian Spotted Crake, Black-winged Stilt and Red-kneed Dotterel. Consider restoring your farm dam into a wetland oasis when next re-digging or desilting.

Australian Wood Duck and Yellow-billed Spoonbill commonly occur on basic farm dams.

Wetland management and revegetation guides

Seasonal Herbaceous Wetlands Handbook:
Identification and Management (GBCMA/NECMA)

Sustainable Farms:
Farm Dams Technical Guide (Online at: sustainablefarms.org.au)

Goulburn-Broken CMA Revegetation Guide:
Wetlands (Online at: gbcma.vic.gov.au/revegetation)

North East CMA Revegetation Guide (Online at: necma.vic.gov.au/Solutions-Resources/Plants-Animals/Vegetation-communities-revegetation)

Managing invasive species in wetlands (Online at: ari.vic.gov.au/research/-pests-weeds-and-overabundant-species/managing-invasive-species-in-wetlands)

Wetland weeds

Aquatic (such as Cabomba, *Cabomba caroliniana* var.*caroliniana*, Salvinia, *Salvinia molesta*, Alligator Weed, *Alternanthera philoxeroides*, Arrowhead, *Sagittaria platyphylla*, Water hyacinth, *Eichhornia crassipes*, and Parrots Feather, *Myriophyllum aquaticum*), semi-aquatic (ie. Water Couch, *Paspalum distichum*) and terrestrial weeds (such as Willows, *Salix* spp.) form dense infestations, compete with native shrubs and change the ecological character, composition and habitat suitability of wetlands.

Shallow vegetated margins of improved farm dams provide habitat for Plumed Whistling Duck and nesting conditions for Black-winged Stilt and Australian Painted Snipe.