# BIRDS OF ASH ISLAND

**A D Stuart** 

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## Birds of Ash Island

(western end of Kooragang Island, Hunter River, NSW)

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In recent years, ornithological information about Ash Island has increased substantially. This report reviews the status for each of the species recorded on Ash Island since 1980. It is clear that Ash Island is a very important component of the wetland habitat of the Hunter estuary, supporting many threatened species. Ash Island is presently unprotected from future industrial development.

#### Introduction

Ash Island in the estuary of the Hunter river, NSW, is a very important bird habitat. 181 species have been recorded there since 1980, and several other species historically (for example, in rainforest that is now being recreated). The species list since 1980 includes 28 species nominated in either the Japan-Australia Migratory Birds Agreement (JAMBA) or the analogous Agreement with China (CAMBA), and 11 species listed as Endangered or Vulnerable by the NSW Scientific Committee. Also, 16 species occurring on Ash Island are listed under the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act) and 20 species have reporting rates of less than 3% in NSW (Maddock, 2002), suggesting that they could be vulnerable to further significant habitat loss.

Highlighting the importance of Ash Island are the frequent large counts of birds there. 1000+ migratory waders are often present, and 500-1000 other waders. Counts of around 1000 waterbirds (ducks, herons, egrets and so on) regularly occur. A recent example that illustrates the value of the Ash Island habitat comes from a survey by Hunter Bird Observers Club on December 15, 2002. Approximately 3500 birds were present, including 1715 migratory waders, 692 other waders (2407 total waders), 777 teal (Chestnut Teal and Grey Teal) and around 300 other waterbirds.

Through a process of drainage and earthworks in the late 1960's, that was driven by the NSW government's industrial development plans, several islands in the Hunter estuary, including Ash Island, now form one continuous land mass called Kooragang Island. However, the name Ash Island has been retained for the western part of Kooragang Island. Figure 1 relates Ash Island and Kooragang Island to the overall Hunter estuary. Figure 2 provides a detailed map of Ash Island including the names of the main geographic features.

As indicated in Figure 2, one area of Ash Island forms part of the Kooragang Nature Reserve (which also includes land around Fullerton Cove, Kooragang Island and the Hunter River). The main part of the Island is owned by the NSW Department of Public Works and at present is leased to the Kooragang Wetland Rehabilitation Project (KWRP). The area known as Deep Pond is on land owned by private industry. Ecologically, Ash Island cannot be considered separately from the overall Hunter Estuary and Kooragang Nature Reserve, as its ecological processes form an integral component of the total estuarine system. The boundary between Ash Island and the Nature Reserve is merely an arbitrary line drawn on the map which bears no relationship to the continuity of natural process across the line.

Ash Island was formerly used for dairying and other forms of agriculture, and much of it remains covered by introduced grasses such as kikuyu. The Island is low-lying, and high tides or heavy rain cause many parts of it to be submerged for brief periods and the site forms an important part of the Kooragang floodway of the Hunter Estuary which carries up to 40% of the overland flow in large floods (Patterson Britton and Partners 1996). There are several creeks on the Island; these are tidal but in some cases the tidal flow has been much restricted for a long time. One of the objectives of the KWRP is to open up the Ash Island creeks to tidal flushing.

The main habitat types on Ash Island, in addition to grassy paddocks that sometimes are water-logged, are ephemeral freshwater swales (open and reed swamps), salt marsh, mudflats and mangroves. The Island generally is fringed by Grey Mangrove, which also lines the banks of the tidal creeks.

In recent years, ornithological information about Ash Island has increased substantially, in part because the accessibility of the Island has improved and so the numbers of visitors providing information on the avian fauna have escalated.

This report reviews the status for each of the species recorded on Ash Island since 1980. A list of the species is presented in Table 1. The report draws heavily on information presented in the annual Hunter Region Bird Reports, supplemented by records held by the author and by other individuals and the Hunter Bird Observers Club. HBOC has been publishing the Hunter Region Bird Reports since 1993. The report also makes use of the extensive data collected by HBOC since April 1999 from systematic monthly surveys of high tide wader roost sites in the Hunter estuary. Ash Island is a very important roost site for migratory and endemic wader species, closely integrated with the roosting patterns within the Nature Reserve.

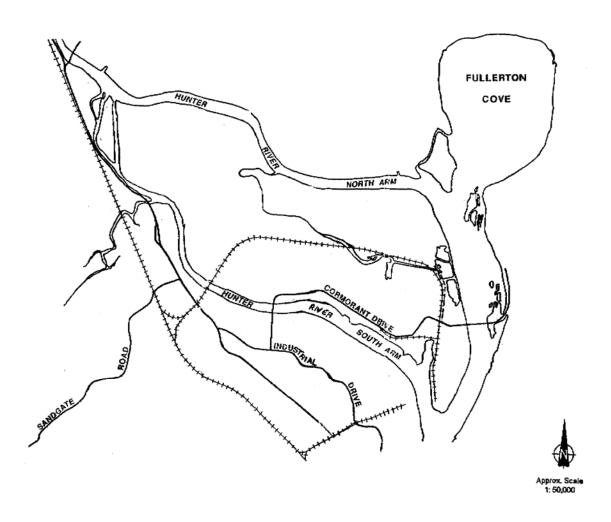


Figure 1 Kooragang Island in the Hunter River (western part is Ash Island)

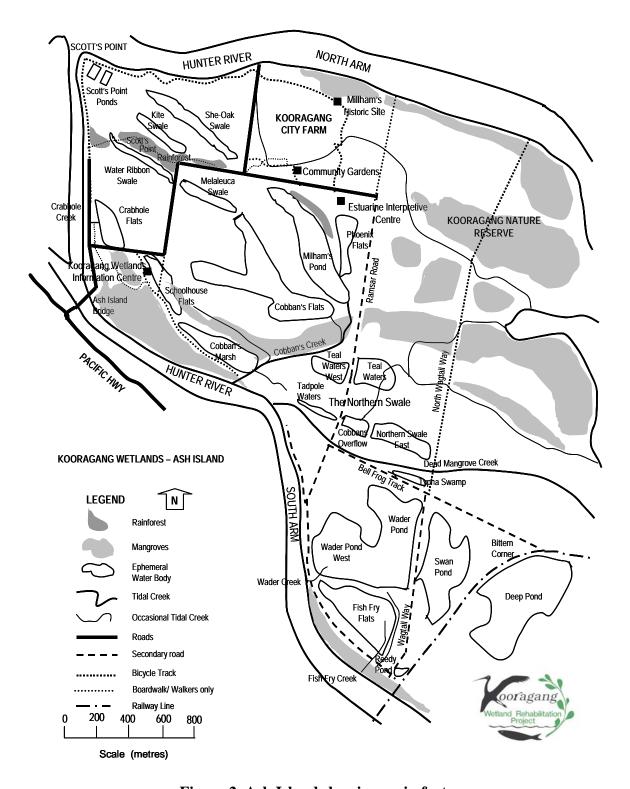


Figure 2 Ash Island showing main features

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## Table 1 Ash Island Birdlist

(Species recorded since 1980)

Brown Quail Magpie Goose Blue-billed Duck Musk Duck Freckled Duck Black Swan Australian Shelduck Australian Wood Duck Pacific Black Duck Australasian Shoveler Northern Shoveler Grey Teal Chestnut Teal Pink-eared Duck Hardhead Australasian Grebe Hoary-headed Grebe Darter

Little Pied Cormorant Pied Cormorant Little Black Cormorant **Great Cormorant** Australian Pelican White-faced Heron Little Egret White-necked Heron

Great Egret Intermediate Egret Cattle Egret Striated Heron Nankeen Night Heron Black Bittern Australasian Bittern Australian White Ibis Straw-necked Ibis Royal Spoonbill Yellow-billed Spoonbill Black-necked Stork

Black-shouldered Kite Black Kite Whistling Kite Brahminy Kite

Osprey

White-bellied Sea-Eagle

Spotted Harrier Swamp Harrier Brown Goshawk Collared Sparrowhawk Wedge-tailed Eagle Brown Falcon Australian Hobby Peregrine Falcon Nankeen Kestrel Buff-banded Rail Lewin's Rail

Baillon's Crake Australian Spotted Crake Spotless Crake Purple Swamphen Dusky Moorhen Black-tailed Native Hen

**Eurasian Coot** Latham's Snipe Black-tailed Godwit Bar-tailed Godwit Little Curlew Whimbrel Eastern Curlew Marsh Sandpiper Common Greenshank Lesser Yellowlegs Terek Sandpiper Common Sandpiper Grey-tailed Tattler Ruddy Turnstone Red Knot Red-necked Stint Pectoral Sandpiper Sharp-tailed Sandpiper

Curlew Sandpiper Ruff

Painted Snipe Black-winged Stilt Banded Stilt Red-necked Avocet Pacific Golden Plover Grey Plover Red-capped Plover Double-banded Plover Black-fronted Dotterel Red-kneed Dotterel Banded Lapwing Masked Lapwing Silver Gull Gull-billed Tern

Caspian Tern Crested Tern Whiskered Tern White-winged Black Tern Rock Dove Spotted Turtle-Dove Crested Pigeon Peaceful Dove

Bar-shouldered Dove Galah

Sulphur-crested Cockatoo Rainbow Lorikeet Eastern Rosella Red-rumped Parrot Pallid Cuckoo Fan-tailed Cuckoo Horsfield's Bronze-Cuckoo Shining Bronze-Cuckoo Channel-billed Cuckoo

Southern Boobook Masked Owl Barn Owl White-throated Needletail Azure Kingfisher Laughing Kookaburra

Sacred Kingfisher

Common Koel

White-throated Treecreeper Superb Fairy-wren Striated Pardalote White-browed Scrubwren Brown Gerygone Mangrove Gerygone Brown Thornbill Yellow-rumped Thornbill Yellow Thornbill Red Wattlebird Little Wattlebird Striped Honeyeater Noisy Friarbird Noisy Miner Yellow-faced Honeyeater

Brown Honeveater White-cheeked Honeyeater Eastern Spinebill White-fronted Chat Rufous Whistler Grey Shrike-thrush Black-faced Monarch Restless Flycatcher Magpie-lark Rufous Fantail Grey Fantail Willie Wagtail Spangled Drongo Black-faced Cuckoo-shrike White-winged Triller

Fiabird

White-breasted Woodswallow

Grey Butcherbird Pied Butcherbird Australian Magpie Pied Currawong Australian Raven **Torresian Crow** Skylark Richard's Pipit Yellow Wagtail House Sparrow Red-browed Finch

Olive-backed Oriole

Chestnut-breasted Mannikin European Goldfinch Mistletoebird Welcome Swallow

Tree Martin Fairy Martin Clamorous Reed-Warbler

Tawny Grassbird Little Grassbird Rufous Songlark Brown Songlark Golden-headed Cisticola

Silvereye Common Starling Common Myna

Number of species = 181

# Table 2. JAMBA/CAMBA Species Occurring on Ash Island

Northern Shoveler Great Egret Cattle Egret

White-bellied Sea-Eagle

Latham's Snipe
Black-tailed Godwit
Bar-tailed Godwit
Little Curlew
Whimbrel
Eastern Curlew
Marsh Sandpiper
Common Greenshank
Terek Sandpiper
Common Sandpiper
Grey-tailed Tattler
Ruddy Turnstone

Red Knot

Red-necked Stint Pectoral Sandpiper Sharp-tailed Sandpiper Curlew Sandpiper

Ruff

Pacific Golden Plover

Grey Plover Caspian Tern Crested Tern

White-throated Needletail

Yellow Wagtail

Number of species = 28

# Table 3. NSW Endangered and Vulnerable Species Occurring on Ash Island

Magpie Goose Blue-billed Duck Freckled Duck Black Bittern Australasian Bittern Black-necked Stork

Osprey

Black-tailed Godwit Terek Sandpiper Painted Snipe Masked Owl

Number of species = 11

# Table 4. Species Listed in the EPBC Act Occurring on Ash Island

White-bellied Sea-Eagle

Latham's Snipe Black-tailed Godwit Bar-tailed Godwit

Whimbrel
Eastern Curlew
Marsh Sandpiper
Common Greenshank
Terek Sandpiper
Ruddy Turnstone
Curlew Sandpiper
Painted Snipe

Pacific Golden Plover White-throated Needletail Black-faced Monarch Rufous Fantail

Number of species = 16

## Table 5. Species Occurring on Ash Island with Reporting Rates of <3% in NSW\*

Blue-billed Duck Freckled Duck Australian Shelduck Australasian Shoveler

Black Bittern

Australasian Bittern Black-necked Stork

Osprey

Buff-banded Rail Lewin's Rail Baillon's Crake

Australian Spotted Crake

Spotless Crake

Black-tailed Native-hen Pectoral Sandpiper

Ruff

Painted Snipe Banded Stilt Grey Plover Banded Lapwing

Number of species = 20

\*Reporting rates are from surveys by NSW Bird Atlassers

## **Review of Ash Island Bird Species**

## Brown Quail Coturnix ypsilophora

Small parties have often been recorded at well-grassed locations around Ash Island, and also near the western end of Bellfrog Track (A. Stuart pers. obs., HBOC records). Sightings at the latter location occur frequently, and the site is sometimes referred to as "Quail Corner". The species almost certainly is a breeding resident although no evidence of breeding has been reported.

## Magpie Goose Anseranas semipalmata

This species has occasionally been recorded in daylight on Ash Island, around areas of freshwater swamp. The most recent record was of a single bird at the freshwater wetland to the south of Swan Pond on February 8 1999 (R Cooper pers. comm. to P. Svoboda.). A pair is reported to have nested at this location in the early 1990s (N. Ward pers. comm. to P. Svoboda). At the nearby Shortland swamps, where up to 100 birds are resident and breeding, flocks have frequently been recorded as flying towards Ash Island around dark (Maddock, 2002). There have been no systematic evening or night-time surveys to ascertain whether some areas are used for night roosting or foraging or both.

The Magpie Goose is listed as Vulnerable under the NSW Scientific Committee's Schedule 2, and is classified as a local resident in the Hunter region (Stuart, 2001).

## Blue-billed Duck Oxyura australis

The only known confirmed record of Blue-billed Duck on Ash Island is of a single bird there in April 1983 (reported in Australian Birds, 1983). The species was not listed in the Van Gessel and Kendall lists for Kooragang Island (1972-1974).

The Blue-billed Duck is listed as Vulnerable under the NSW Scientific Committee's Schedule 2, and is classified as accidental in the Hunter region (Stuart, 2001). The reporting rate of the species in NSW is only 0.53%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Musk Duck Biziura lobata

Small numbers (1-3 birds) are sometimes present on Deep Pond. The birds often remain at this location for several months, but then can be absent for periods of a year or more. It seems that Ash Island provides part of the suite of habitat options for this species in the Hunter estuary.

The Musk Duck is classified as a local resident in the Hunter region (Stuart, 2001).

#### Freckled Duck Stictonetta naevosa

Three birds were recorded on Deep Pond on February 8 1999 (Stuart, 1999) and several from February 27 to March 10 2000, with a peak count of five birds (Stuart, 2000). Deep Pond, to which access has been limited prior to around 1995, is close to the Shortland swamps for which there are several records of Freckled Duck (including 73 birds present in 1983, and sightings in both 2001 and 2002). It seems likely that Ash Island is an important part of the overall Hunter estuary option for this species when it seeks coastal refuges at times of inland drought.

The Freckled Duck is listed as Vulnerable under the NSW Scientific Committee's Schedule 2, and is classified as rare in the Hunter region (Stuart, 2001). The reporting rate of the species in NSW is only 1.18%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Black Swan Cygnus atratus

Up to 10 birds are often present at any of the medium to large ponds around Ash Island, but much greater numbers are sometimes recorded on Swan Pond and Deep Pond. 30-50 birds are often present on Swan Pond, and occasionally up to 80 birds (HBOC records, A. Stuart pers. obs.). Over 100 birds are frequently present on Deep Pond, and with many counts of 200-400 birds (HBOC records, A. Stuart pers. obs.). There are regular breeding records, from several of the ponds around the Island (HBOC records).

The Black Swan is a common resident of the Hunter region, often recorded in counts of up to 20 birds throughout the region (Stuart, 2001). The frequency of much greater counts on Swan Pond and Deep Pond highlight the importance of these Ash Island ponds to the species locally.

## Australian Shelduck Tadorna tadornoides

A single bird was recorded on the southern end of Swan Pond on December 31 1995 (Stuart, 1995) and two birds on Deep Pond on December 21 2001 (Stuart, 2001). There is only one other known record of this species in the Hunter estuary since 1980 (at Tarro, 1999). However, 4-5 birds were present on Kooragang Island during March-May 1973 (van Gessel and Kendall, 1974).

The Australian Shelduck is classified as accidental in the Hunter region (Stuart, 2001). The reporting rate of the species in NSW is only 0.65%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Australian Wood Duck Chenonetta jubata

Although a common resident of the Hunter region and regularly recorded in counts of up to 20 birds (Stuart, 2001), birds occur only occasionally on Ash Island, and in counts of <5 birds.

## Pacific Black Duck Anas superciliosa

This duck is a common resident of the Hunter region and is regularly recorded in counts of up to 20 birds throughout the region (Stuart, 2001). Small numbers (5-10 birds) are usually present on Ash Island, with pairs or small parties occurring at any of the medium to large ponds. The counts are sometimes greater on Deep Pond, with up to 20 birds sometimes recorded there and 100+ birds present on July 7 2001 (Stuart, 2001).

## Australasian Shoveler Anas rhynchotis

This species utilises four ponds on Ash Island. The most important is Deep Pond, where up to 20 birds are often present and greater counts frequently occur. 150-200 birds were on Deep Pond during the winter months of both 2001 and 2002, with numbers having steadily increased over the preceding 3-4 months (HBOC records). 172 birds also were on Deep Pond on January 11 2002 (HBOC records).

Up to 20 birds are sometimes present on Swan Pond and Teal Waters, and occasionally there are counts of up to 50 birds on both of these ponds. Some birds also occur on Wader Pond occasionally – this is the least frequently utilised of the four ponds.

Ash Island is the most important location for Australasian Shoveler in the Hunter region, where it is considered a local resident and bird of passage. Records of more than 10 birds are quite uncommon in the Hunter region (Stuart, 2001).

## Northern Shoveler Anas clypeata

This Australian rarity occurred on Ash Island between July 28 and August 1 2002. The male bird was mostly present on Deep Pond but sometimes it moved to Teal Waters. There have been only a small number of confirmed records of this species in Australia, and previously none of these have been for the Hunter region.

The Northern Shoveler is protected under the China Australia Migratory Birds Agreement.

## Grey Teal Anas gracilis

Although sometimes absent for periods of 2-3 months, this species is generally very common on Ash Island, with several hundred birds often present and counts of 500+ birds not uncommon (HBOC records). The main ponds utilised are Teal Waters, Swan Pond and Wader Pond, all of which frequently have 200-300 birds on them. Up to 20 birds are sometimes present on Deep Pond. Small numbers are sometimes present at other ponds around the Island.

The Grey Teal is a common resident of the Hunter region, often recorded in counts of up to 50 birds throughout the region (Stuart, 2001). The frequency of much greater counts on Ash Island highlights the importance of the ponds on the Island to the species locally.

## Chestnut Teal Anas castanea

Although occasionally absent for brief periods, this species is generally very common on Ash Island, with many hundreds of birds often present and counts of 1000+ birds not uncommon (HBOC records). The main ponds utilised are Teal Waters, Swan Pond and Wader Pond, all of which frequently have 300-400 birds on them, and Deep Pond, which sometimes has 800-1000 birds. Deep Pond is mostly used for roosting, with birds clustering in dense groups around the banks on the shallower southern and eastern edges of the pond. There have been occasional breeding records for the species from Ash Island (HBOC records).

The Chestnut Teal is a common resident of the Hunter region, often recorded in counts of up to 50 birds throughout the region (Stuart, 2001). The frequency of much greater counts on Ash Island highlights the importance of the ponds on the Island to the species locally.

#### Pink-eared Duck Malacorhynchus membranaceus

1-5 birds were often recorded on Swan Pond and Teal Waters during 2001, and the numbers grew during the winter months to a peak count of 200 birds on July 8 (Stuart, 2001). 67 birds were present on March 6 1999 and also some birds (<5) on March 5 2000 (Hunter Region Bird Reports). There were no records of the species on Ash Island over 1993-1998 (Hunter Region Bird Reports), and only occasional reports over 1980-1992 (HBOC records).

The Pink-eared Duck is generally recognised as an inland species and has been considered a bird of passage in the Hunter region (Stuart, 2001) but there are records from several other locations of many hundreds of birds at certain times. The presence of 200 birds on Ash Island in 2001 is noteworthy for the region and the Island can be considered as an important refuge when large numbers of the species visit the Hunter region during severe periods of inland drought.

## Hardhead Aythya australis

Up to 50 birds are sometimes present on Deep Pond, and up to 20 birds occasionally on Swan Pond and Teal Waters. 102 birds were on Deep Pond on November 17 2001.

The Hardhead is a resident of the Hunter region, moderately often recorded at medium to large waters as counts of up to 10 birds. The numbers present on Ash Island are noteworthy, although much greater counts are frequently recorded at a number of other locations around the region.

## Australasian Grebe Tachybaptus novaehollandiae

Up to five birds are usually present on Deep Pond, and very occasionally 1-2 birds are present on other freshwater ponds around Ash Island.

## Hoary-headed Grebe Poliocephalus poliocephalus

Up to five birds are usually present on Deep Pond, making it one of the most reliable locations for this species which is generally uncommon in the Hunter region (Stuart, 2001). 10 birds were present there on May 11 2002 (HBOC Records).

## Darter Anhinga melanogaster

Birds are very occasionally recorded at Swan Pond and Deep Pond (A. Stuart pers. obs., HBOC records) or flying over.

#### Little Pied Cormorant Phalacrocorax melanoleucos

1-2 birds are often present near the southern end of Wagtail Way and around the banks of the south arm of the Hunter River, including up to 50m downstream in the creeks that are opened to tidal flow(A. Stuart pers. obs.). Birds have also been observed on a number of occasions perched on trees (M. Maddock pers. comm.).

## Pied Cormorant Phalacrocorax varius

There are no known records of birds utilising Ash Island; however, 1-2 birds are occasionally seen flying over the Island.

## Little Black Cormorant Phalacrocorax sulcirostris

Up to 20 birds are frequently present on Deep Pond, and some birds also roost on a pipeline that crosses onto the Island from the south. Also, 1-2 birds are occasionally seen flying over the Island.

## Great Cormorant Phalacrocorax carbo

Up to 10 birds are often present on Deep Pond, and some birds also roost on a pipeline that crosses onto the Island from the south. Also, 1-2 birds are occasionally seen flying over the Island.

## Australian Pelican Pelecanus conspicillatus

Up to 20 birds are often present on Ash Island, with Swan Pond and Deep Pond the two preferred locations. The counts frequently are greater, with 21-50 birds often present and 51-100 birds occasionally. A significant count of around 300 birds was present on Deep Pond on February 10 2001 (Stuart, 2001).

The Australian Pelican is a common resident of the Hunter region and frequently recorded in counts of up to 50 birds. However, reports of the presence of in excess of >100 birds are uncommon, except for the roost locations on the Stockton dykes, and thus the report of 300 birds on Ash Island is quite noteworthy.

## White-faced Heron Egretta novaehollandiae

The White-faced Heron is a common resident of the Hunter region, widely recorded in counts of up to 20 birds at some favoured locations (Stuart, 2001). However, Ash Island is the most significant location for this species within the region. 40+ birds are regularly present there, utilising the widespread wet paddocks and wetland margins. On many occasions, in excess of 50 birds are present and records of 100-200 birds occur frequently (Hunter Region Bird Reports, A Stuart pers. obs.).

## Little Egret Egretta garzetta

Up to five birds are often present around Swan Pond, Wader Pond and Fish Fry Flats, and near the mouth of the several creeks that are opened to tidal flow. Occasionally, in the summer months, the numbers rise to 10 or so birds and there are records of 15-20 birds (Hunter Region Bird Reports), mainly due to the use of Ash island as a foraging site by birds nesting at the Wetlands Centre colony during the breeding season. Records of more than 5 birds are uncommon in the Hunter region, hence Ash Island is a significant location for this species.

## White-necked Heron Ardea pacifica

This species is a regular visitor to Ash Island, with 1-2 birds intermittently present around the widespread wet paddocks and wetland margins. Occasionally, the numbers rise, to peak counts of 5-7 birds (Hunter Region Bird Reports). Ash Island is therefore a significant location for this species within the region, as records from elsewhere of more than three birds are quite uncommon generally.

## Great Egret Ardea alba

Birds are regularly present on Ash Island, usually in total counts of 6-10 birds around the various ponds; however, 10-20 birds are frequently recorded on the Island and 20+ birds were present there April 16 and December 30 2000 (Hunter Region Bird Reports). Although 1-2 individuals can occur at several of the ponds around the Island, the preferred locations are Swan Pond and the freshwater areas immediately to the south, where 10-15 birds sometimes congregate. Ash Island is a significant location for this species within the region, as records from elsewhere of more than five birds are quite uncommon. It is particularly critical as a foraging location for birds nesting at the Wetlands Centre colony during the summer breeding season. A regular day-long traffic of the species flying between the colony and Ash Island has been observed throughout the nesting season (M. Maddock pers. comm.).

The Great Egret is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement.

## Intermediate Egret Ardea intermedia

Some Intermediate Egret are occasionally present on Ash Island, but generally in low counts (<5 birds, and usually 1-2 birds). 5+ birds were there in late April 2001 and on July 7 2001. These counts are quite noteworthy for a species that seems in decline locally (for example, the number of pairs nesting at nearby Shortland has decreased from 453 pairs in 1987/88 to 14 pairs in 2001/1 (M. Maddock pers. comm.). Ash Island is a significant foraging location for birds nesting at the colony at the Wetlands Centre during the summer months, with regular traffic between these locations observed (M. Maddock pers. comm.).

## Cattle Egret Ardea ibis

Flocks of up to 50 birds are regularly present in the grassy paddocks towards the northwestern end of the Island, where some cattle and horses still are kept. The Island is used as a foraging location to support the birds nesting at the Wetlands Centre Colony during the summer months, as well as a winter location (M. Maddock pers. comm.)

The Cattle Egret is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement.

## Striated Heron Butorides striatus

1-2 birds are sometimes present along the bank on the south arm of the Hunter River or slightly downstream of the mouths of Fish Fry Creek and Wader Creek.

## Nankeen Night Heron Nycticorax caledonicus

The only known daytime record of Nankeen Night Heron on Ash Island is of some birds present in mangroves near Tadpole Waters on November 16 2002 (HBOC records). However, birds have also been observed to be feeding on Ash Island when night surveys have occasionally been carried out (A Morris pers. comm. to M Maddock). A large colony roosts each day at a nearby paperbark swamp in Shortland, and it seems likely that birds would quite often feed on Ash Island. Numbers of 100+ birds have been recorded departing the Wetlands Centre just after dark and flying towards Ash Island (M. Maddock pers. comm.).

## Black Bittern Ixobrychus flavicollis

A single bird was seen stalking prey in a tidal creek within the Nature Reserve, near Wagtail Way, on February 7 1999 (Stuart, 1999).

The Black Bittern is listed as Vulnerable under the NSW Scientific Committee's Schedule 2. The reporting rate of the species in NSW is only 0.18%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002). It is classified as rare in the Hunter region (Stuart, 2001). On average, there has been an average of 1.5 confirmed sightings per year for this species in the Hunter region between 1993 and 2001 (Hunter Region Bird Reports). The 1999 record from Ash Island is therefore very significant in the regional ecological context.

## Australasian Bittern Botaurus poiciloptilus

During the period June to October 2001, there were many records of a bird occurring within a small area near to Swan Pond (Stuart, 2001). During September-October 2002, there were again several sightings from this same area (HBOC records). The bird was utilising a reed-lined freshwater swamp at the north-east corner of Swan Pond, and the freshwater swamps immediately to the north of this. This area is now generally known as "Bittern Corner". On May 15 1999, a single bird was also recorded nearby – on this occasion, the bird was hunting in "Typha Swamp" – an area to the northwest of the intersection of Bellfrog Track and Wagtail Way.

The Australasian Bittern is listed as Vulnerable under the NSW Scientific Committee's Schedule 2. The Heron Specialist Group of Wetlands International has classified the global conservation status for *B. poiciloptilus* as Critically Endangered (Maddock, 2002). The reporting rate for this species in NSW is only 0.53% (Maddock, 2002), suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

Prior to the many reports from Ash Island in 2001, there had only been 11 confirmed reports for this species in the Hunter region between 1993 and 2000. Several of these records were from nearby

wetlands at Shortland. Little is known of the breeding biology and movements for this very cryptic species. It seems possible that birds might move between the Ash Island and Shortland locations depending on the availability of food or to find a partner for breeding. The importance of the Ash Island habitat for Australasian Bittern cannot be ignored.

## Australian White Ibis Threskiornis molucca

Up to 50 birds are often present on Ash Island, utilising the widespread wet paddocks and wetland margins. Counts of up to 100 birds are not uncommon, and several hundreds of birds have been present on Ash Island many times. In recent years, many hundreds of birds were frequently present on the Island during March-April 1999, March-May 2000 and January-June 2001 (Hunter Region Bird Reports). Flocks are regularly observed flying from the Wetlands Centre night roost site to Ash Island in early morning and returning during the hour before dusk, with particularly large numbers represented during the winter months when the local population increases, probably by migrating in from inland breeding areas (M. Maddock, A. Lindsey pers. comm.).

The Australian White Ibis is a common resident of the Hunter region, often recorded in counts of up to 50 birds throughout the region (Stuart, 2001). The regular occurrence of much greater counts highlights the importance of Ash Island to the species locally.

#### Straw-necked Ibis Threskiornis spinicollis

Up to 20 birds are frequently present on Ash Island, utilising the widespread wet paddocks and wetland margins. When conditions are favourable, counts of 50-100 birds are not uncommon. 200 birds were recorded on February 12 1998 and 100+ birds on March 4 1998 and July 15 2000 (Hunter Region Bird Reports). Flocks are regularly observed departing the Wetlands Centre night roost for Ash Island and returning in the hour before dusk , predominantly during winter, when very large numbers are found in the region because of seasonal inward migration from the inland (M. Maddock, A. Lindsey pers. comm.).

## Royal Spoonbill Platalea regia

Up to 10 birds are frequently present on Ash Island, in counts of 1-2 birds at any of the medium to large ponds. Sometimes 15-20 birds are at the eastern ponds system (Swan Pond, Wader Pond, Fish Fry Flats), while 22 birds were at these ponds on April 17 1999 and 37 birds on February 8 2001.

The Royal Spoonbill is a common resident of the Hunter region, often recorded in counts of up to 20 birds (Stuart, 2001). The record of 37 birds is noteworthy, although similar or higher counts do occur at some other wetlands in the region (Hunter Region Bird Reports).

## Yellow-billed Spoonbill Platalea flavipes

Up to 3 birds are occasionally present on Ash Island, occurring usually individually at any of the medium to large ponds. This is in keeping with the general status for the species in the Hunter region (Stuart, 2001). Noteworthy records are of 5 birds present on June 22 1994 and April 17 1999, and 7 birds present on May 16 1999.

## Black-necked Stork Ephippiorhynchus asiaticus

Since late 1999, the Black-necked Stork has become a frequently occurring species on Ash Island. On November 11, 1999, an immature bird was recorded there, and then 1-2 birds often for the remainder of the year and during January to March 2000. There were no further reports until October 2000, and then 1-2 birds were often present during October and November. 1-2 birds were also present in May and November 2001, and in June to August 2002 (Hunter Region Bird Reports, HBOC records).

On January 22 2000, a pair and a juvenile bird were present. On April 25 2001, four birds were within 300m of each other on ponds off Ramsar Rd. These were a pair together on Cobbans Overflow and an adult male and a second bird together on Tadpole Waters (G O'Connor pers. comm.).

The birds utilise nearly all of the wetlands of Ash Island but the most frequent sightings of them are around the ponds either side of Ramsar Rd, Swan Pond, Wader Pond and the freshwater wetlands immediately to the north of Bellfrog Track East. On August 4 2002, a bird was hunting on the southwestern side of Deep Pond.

The Black-necked Stork is listed as Endangered under the NSW Scientific Committee's Schedule 1, and the NSW population may be as few as 35-43 birds (Maddock, 2002). The reporting rate for this species in NSW is only 1.06%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

Prior to 1999, there had been no records of Black-necked Stork in the Hunter estuary since 1986 (Maddock, 2002). Since 1993, there have only been occasional sightings of the species from further to the south (for example, in the Morisset/Dora Creek area) and the Ash Island area may at present be the southern limit of viable territory for the Black-necked Stork in NSW.

Although there have been many sightings on Ash Island since 1999, the birds also are absent for lengthy periods. It seems clear that Ash Island forms only part of the territory for the local population and that there is regular movement to other parts of the territory. Sightings reported from the Tomago, Shortland and Hexham Swamp areas (Hunter Region Bird Reports, M. Maddock pers. comm.) are presumably of the same birds.

The importance of the Ash Island habitats for the conservation of the Black-necked Stork population in NSW is significant, with perhaps 10% of the total population in NSW having been recorded to be utilising Ash Island.

## Osprey Pandion haliaetus

The Osprey has occasionally been recorded on Ash Island, most recently in July 2002 when a pair was present regularly for 3-4 weeks and utilising the Nature Reserve and the areas to the north and south of Bellfrog Track East. It is a rare visitor to the Island, and also it is only infrequently recorded in the Hunter estuary.

The Osprey is listed as Vulnerable under the NSW Scientific Committee's Schedule 2. The reporting rate of the species in NSW is only 1.12%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002). In the Hunter region it is present at several of the estuaries in the northern part of the region and is a breeding resident at some of them. A pair is probably also resident on Lake Macquarie, further to the south of the Hunter estuary, as there have been many reports over the past 5-6 years, and a 2002 nesting record. Hence, the paucity of records from the Hunter estuary is noteworthy, and suggests a limited area of suitable habitat. The habitat on Ash Island is therefore an important component of its local support base.

## Black-shouldered Kite Elanus axillaris

At least one pair of Black-shouldered Kite is regularly present on Ash Island and is known to breed there. Occasional reports of 3-4 birds possibly include the immature offspring from this pair.

## Black Kite Milvus migrans

The Black Kite is a rare visitor to Ash Island. Five birds were soaring over the Island on May 2 2002 (P Svoboda pers. comm.), coinciding with an uncommon coastal influx of the species.

## Whistling Kite Haliastur sphenurus

This species is common on Ash Island and is recorded all year, more frequently on the eastern part of the Island. Usually 1-2 birds are present; occasionally the counts rise to 3 or 4 birds. Parents were feeding a dependent young bird on November 30 2000 (Stuart, 2000), while nests have been found both to the north and south of the Scotts Point Rainforest area (P. Svoboda pers. comm.).

## Brahminy Kite Haliastur indus

Although the Brahminy Kite is resident in the north-east of the Hunter region, it is a rare species in the Hunter estuary and hence on Ash Island. Since 1993, the only sightings for Ash Island occurred in 1999, when single birds were present on May 15, July 18 and August 11. Over 1993-2001, there have been only 7 other records of Brahminy Kite utilising the Hunter estuary (Hunter Region Bird Reports).

## White-bellied Sea-Eagle Haliaeetus leucogaster

This species is common on Ash Island and is recorded all year especially around the eastern ponds system (Deep Pond, Swan Pond, Wader Pond). Usually 1-2 birds are present; occasionally the counts rise to 3 or 4 birds. Six immature birds were present on February 24 2001 (Hunter Region Bird Reports).

The White-bellied Sea-Eagle is protected under the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory terrestrial and the marine provisions of the Act).

## Spotted Harrier Circus assimilis

The Spotted Harrier, which is an uncommon resident of the Hunter region, has been recorded 10 times on Ash Island since late 1999. Single birds were present there on November 11 and November 20 1999, February 23 and September 8 2000, April 26 2001, January 2 2002, July 31 2002, October 7, 27 and 28 2002. There are no known records for Ash Island over the period 1993-1998, but birds were at nearby Shortland on some occasions during this time (Hunter Region Bird Reports).

## Swamp Harrier Circus approximans

This species is common on Ash Island and is recorded all year from locations all over the Island. Usually 1-2 birds are present; occasionally a third bird is also there (HBOC Records, A Stuart pers. obs.).

## Brown Goshawk Accipiter fasciatus

The Brown Goshawk is an uncommon visitor to Ash Island. Single birds have occasionally been seen hunting there, or flying over (HBOC records, A Stuart pers. obs.).

#### Collared Sparrowhawk Accipiter cirrhocephalus

The Collared Sparrowhawk is a rare visitor to Ash Island. Single birds have occasionally been seen flying over (A Stuart pers. obs.).

## Wedge-tailed Eagle Aquila audax

The Wedge-tailed Eagle is a rare visitor to Ash Island, and to the Hunter estuary generally. Single birds have occasionally been seen hunting around Ash Island, most recently in April 2001 when a bird was active around the western edge of Wader Pond (HBOC records).

## Brown Falcon Falco berigora

This species is common on Ash Island and is recorded all year from locations all over the Island. A pair of birds is present (HBOC Records, A Stuart pers. obs.).

#### Australian Hobby Falco longipennis

The Australian Hobby is an uncommon visitor to Ash Island. Single birds have occasionally been seen hunting there, or flying over (HBOC records A Stuart pers. obs.).

## Peregrine Falcon Falco peregrinus

The Peregrine Falcon is an uncommon visitor to Ash Island. Single birds and pairs have occasionally been seen hunting there, or flying over (HBOC records A Stuart pers. obs.). It has also been recorded nesting in the nearby Tomago buffer area (G. Little pers. comm. to M Maddock).

## Nankeen Kestrel Falco cenchroides

The Nankeen Kestrel is common on Ash Island and is recorded all year from locations all over the Island. Usually 1-2 birds are present; occasionally a third bird is also there (HBOC Records, A Stuart pers. obs.).

#### Buff-banded Rail Gallirallus philippensis

Reports of Buff-banded Rail from Ash Island are infrequent but the bird is cryptic and probably is often overlooked. It most likely is resident on Ash Island. Most reports have been of single birds but occasionally two birds are seen. All of the sightings have occurred at the freshwater ponds to the north-east and north-west of Swan Pond, or at locations along Bellfrog Track. The most recent record is of two birds near Bittern Corner on October 28 2002 (N Livanos pers. comm.).

The reporting rate of the species in NSW is only 1.77%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Lewin's Rail Rallus pectoralis

Single birds were present at the freshwater pond to the south of Swan Pond on March 3 2001 and at Wader Pond West in 2001 (A Morris pers. comm. to M Maddock). The reporting rate of the species in NSW is only 0.12%, suggesting that it is vulnerable to further significant habitat loss (M Maddock pers. comm.).

#### Baillon's Crake Porzana pusilla

A single bird was seen on three occasions over October 27-29 2002 near Bittern Corner (N Livanos, pers. comm.). A single bird was also recorded at Wader Pond West in 2001 (A Morris pers. comm. to M Maddock).

The reporting rate of the species in NSW is only 2.54%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Australian Spotted Crake Porzana fluminea

This species is often recorded at a freshwater pond ("Crake Corner") to the north-east of Swan Pond, with up to 4 birds present there on many occasions. 1-2 birds are sometimes also present around the southern and south-western margins of Swan Pond.

The reporting rate of the species in NSW is only 1.65%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Spotless Crake Porzana tabuensis

Single birds have been recorded at the freshwater ponds to the north-east and the south of Swan Pond on March 3 and November 28 2001 and March 16 2002 (A Morris pers. comm. to M Maddock). The reporting rate of the species in NSW is only 1.83%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

#### Purple Swamphen Porphyrio porphyrio

Small numbers of Purple Swamphen are often present around the margins of the medium to large freshwater ponds around Ash Island, in particular to the north-east of Swan Pond ("Bittern Corner") and the ponds to the north of this, and have been recorded to be breeding there (A Morris pers. comm. to M Maddock).

## Black-tailed Native-hen Gallinula ventralis

A single bird was present on Swan Pond on March 24 2002, a period that corresponded with very dry conditions inland. The bird was in tall dank grass on a promontory in the southern part of Swan Pond (HBOC records).

This record is quite significant and highlights the importance of the Ash Island habitat as a coastal refuge for inland birds in times of drought. The species is classified as an accidental visitor to the Hunter region and prior to the above sighting there had been only two confirmed reports in the region since 1993 (Hunter Region Bird Reports). The reporting rate of Black-tailed Native-hen in NSW is only 0.12%, suggesting that it is highly vulnerable to further significant habitat loss (Maddock, 2002).

#### Dusky Moorhen Gallinula tenebrosa

Small numbers of Dusky Moorhen are sometimes present around the margins of the medium to large freshwater ponds around Ash Island, in particular to the north-east of Swan Pond and the ponds to the north of this (A Stuart pers. obs.).

## Eurasian Coot Fulica atra

Up to 50 birds are often present on Deep Pond and with the numbers rising to 100+ birds occasionally (Stuart, 2001, A Stuart pers. obs.). Lesser numbers of birds are sometimes present on Swan Pond and occasionally on Wader Pond.

## Latham's Snipe Gallinago hardwickii

In the summer months, 1-2 birds are occasionally flushed from around the margins of freshwater wetlands around Ash Island, where sufficient cover of grass is present (A Stuart pers. obs.). However, there have been no systematic surveys for this cryptic species and the birds probably are present in moderate numbers, as there seems to be a good extent of suitable habitat for them.

The Latham's Snipe is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act). Observation records in the Hunter Region since the 1970s have revealed that the number of Latham's Snipe during their summer migration for the Australian summer have declined significantly (M Maddock, pers. comm.). In view of this trend, the Ash Island habitat is of potentially significant importance to the survival of the species.

## Black-tailed Godwit Limosa limosa

Between August and April inclusive, up to 5 birds are occasionally present on Swan Pond and Wader Pond and sometimes on Teal Waters. The birds generally seem to be roosting or loafing, rather than feeding. On September 16 2000, a single bird was loafing on the eastern margin of Deep Pond (HBOC records).

The Black-tailed Godwit is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act). Also, the species is listed as Vulnerable under the NSW Scientific Committee's Schedule 2 and has been assigned a Shorebird Conservation Status of Rank 4, International Importance (Watkins 1993). Long-term records reveal that the numbers have declined significantly since the 1970s (Maddock 2000). Evidence cited in the Atlas of Australian Birds (Barrett et al 2000) indicates that this decline is in keeping with a national trend. The Ash Island habitat is therefore of significant importance to this species.

#### Bar-tailed Godwit Limosa Iapponica

Some birds were present at the eastern ponds system in 2001 (A Morris pers. comm. to M Maddock). The Bar-tailed Godwit is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act).

## Little Curlew Numenius minutus

Three birds were recorded on Swan Pond on October 28 2001 (Stuart, 2001). The following day they were no longer able to be located and it is presumed that they used Ash Island as a resting/feeding stop in transit to another location.

An additional report, of a single bird present on Ash Island on October 18 1994, has not yet been able to be confirmed.

The Little Curlew is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement. The species is classified as an accidental visitor to the Hunter estuary (Stuart, 2001), and the only known prior records for the Hunter estuary are of 3 birds present during September 1968 and a single bird present December 12 1969 (van Gessel, 1972).

#### Whimbrel Numenius phaeopus

Single birds were present on August 29 and December 15 2001, and January 11 2002, and two birds on September 8 2001 (HBOC records). The birds were utilising Wader Pond and Swan Pond. Birds have also been seen at Scotts Point in small mangroves beside the North Arm of the Hunter River (S. Rostas pers. comm.).

The Whimbrel is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act).

## Eastern Curlew Numenius madagascariensis

Birds are often present on Ash Island, all year round. The largest count in recent years was of 153 birds present on Wader Pond on March 10 2001 (HBOC records). 80 birds were present there July 30 2002, representing 60% of the total population of Eastern Curlew recorded present in the Hunter estuary in that month (HBOC records: a count of 130 birds on July 13 2002).

Wader Pond is the preferred location for the species on Ash Island, with counts of 20-50 birds occurring frequently and of 10-20 birds often. However, up to 50 birds also sometimes roost by night on Milham's Pond and small numbers are occasionally present there in daytime (A Stuart pers. obs.) Small numbers of birds also utilise Swan Pond and Fish Fry Flats, and 1-2 birds occasionally occur at other medium to large ponds around the Island.

The Eastern Curlew is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act). In the Hunter estuary overall, between 500-800 birds are present during the main migration period. In winter months, when the adult population returns to the breeding grounds, the juvenile birds remain in the estuary, in numbers of around 100-150 birds. The Ash Island ponds, particularly Wader Pond and Milham's Pond but not discounting some of the other ponds, are a significant habitat for Eastern Curlew.

## Marsh Sandpiper Tringa stagnatilis

Significant numbers of Marsh Sandpiper are often present on Ash Island between September and March inclusive, with some birds arriving in August and some birds remaining until late April. During the main migration period, up to 30 birds are frequently present but greater numbers sometimes occur. The largest count in recent years was of 314 birds present on December 15 2002; also there were 150 birds present on January 11 2002, 78 birds on December 15 2001, 63 birds on December 11 1999 and 60 birds on February 16 2002 (HBOC records).

Swan Pond and Wader Pond are the preferred locations for the species on Ash Island, and they account for most of the records. Birds sometimes are also present on Deep Pond, including 150 birds were there on January 11 2002.

Ash Island is a very important site for Marsh Sandpiper within the Hunter estuary, sometimes accounting for a large majority of the birds present during regular wader surveys conducted since 1999 (see Table 6). The surveys are conducted at high tide since many of the wader species disperse

widely around the estuary at other times: this is less of the case for Marsh Sandpiper. That is, they utilise the Ash Island habitat for both feeding and roosting.

The Marsh Sandpiper is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act).

Table 6. Some High Tide Counts of Marsh Sandpiper in the Hunter Estuary

Date	Count on Ash Island	Count in Hunter estuary	% on Ash Island
Dec 11 1999	63	236	27%
Jan 22 2000	34	176	19%
Feb 19 2000	31	117	26%
Feb 24 2001	37	38	97%
Nov 17 2001	19	35	54%
Dec 15 2001	78	90	87%
Feb 16 2002	60	98	61%
Mar 16 2002	30	39	77%
Nov 16 2002	53	81	65%
Dec 15 2002	314	324	97%

## Common Greenshank Tringa nebularia

Moderate numbers of Common Greenshank are often present on Ash Island between September and April inclusive, with some birds arriving in August and some birds remaining until early May. During the main migration period, up to 20 birds are frequently present but greater numbers sometimes occur. The largest count since regular surveys have been undertaken in recent years was of 129 birds present on December 15 2002; also there were 68 birds present on March 10 2001, 64 birds on September 12 1999 and 57 birds on December 15 2001 (HBOC records).

Swan Pond and Wader Pond are the preferred locations for the species on Ash Island, and they account for most of the records. Birds sometimes are also present on Milham's Pond and it seems probable that they sometimes roost there at night. Ash Island is an important site for Common Greenshank within the Hunter estuary, sometimes accounting for the majority of the birds present during regular wader surveys conducted since 1999 (see Table 7).

The Common Greenshank is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act).

## Lesser Yellowlegs Tringa flavipes

A single bird was present on Swan Pond over September 13-15 2001 before disappearing overnight. The presence of this Australian rarity generated much interest nationally, and many observers visited Ash Island at this time. The bird spent most of the time on the eastern side of the pond, loafing and feeding in the company of Marsh Sandpiper. It is presumed that the bird used the Island as a resting/feeding stop in transit to another location.

Table 7. Some High Tide Counts of Common Greenshank in the Hunter Estuary

Date	Count on Ash Island	Count in Hunter estuary	% on Ash Island
Sep 12 1999	64	66	97%
Dec 11 1999	21	186	11%
Sep 16 2000	13	24	54%
Oct 14 2000	27	115	23%
Mar 10 2001	68	101	67%
Apr 21 2001	23	24	96%
Dec 15 2001	57	174	33%
Feb 16 2002	19	100	19%
Dec 15 2002	129	182	71%

## Terek Sandpiper Xenus cinereus

The Terek Sandpiper is a rare visitor to Ash Island. The most recent record was of some birds present on January 11 2002 (G O'Connor pers. comm.). The birds were on the eastern side of Swan Pond.

The Terek Sandpiper is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act). Also, it is listed as Vulnerable under the NSW Scientific Committee's Schedule 2 and has been assigned a Shorebird Conservation Status of Rank 5, International Importance (Watkins 1993). The Australian Bird Atlas (Barrett et al. 2002) indicates that the species is in decline nationally.

## Common Sandpiper Actitis hypoleucos

Between September and March, 1-2 Common Sandpiper frequently roost at high tide at Scotts Point, close to the water's edge (A Stuart pers. obs.) This is a reliable location for this species, which is generally uncommon in the Hunter estuary. It has been estimated that only 4 birds migrate each year to the estuary (Stuart, 2001), which matches with findings in the 1970's (van Gessel, 1974). Ash Island is therefore an important component of the support habitat for the species in the estuary.

The Common Sandpiper is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement.

## Grey-tailed Tattler Heteroscelus brevipes

The Grey-tailed Tattler is an uncommon visitor to Ash Island. At low tides between September and March, 1-2 birds are occasionally found feeding along the edges of the south arm of the Hunter river.

The Grey-tailed Tattler is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement.

## Ruddy Turnstone Arenaria interpres

The Ruddy Turnstone is a rare visitor to Ash Island. The only known record since 1993 is of a single bird present on Swan Pond during December 2001 (HBOC records). The species is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act).

## Red Knot Calidris canutus

The Red Knot is a rare visitor to Ash Island. The most recent record was of 20+ birds present on January 11 2002 (G. O'Connor pers. comm.). The birds were on the eastern side of Swan Pond. The species is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement.

#### Red-necked Stint Calidris ruficollis

The Red-necked Stint is often present on Ash Island from September to March inclusive, in counts of up to 20 birds. In December 2001, counts rose throughout the month peaking at 94 birds present on December 31 (Stuart, 2001). The high counts continued well into January 2002 (A. Stuart, pers. obs.). 10 birds were present on May 11 2002 (Stuart, 2001). These birds are presumed to have been on migration passage since no birds were recorded in the Hunter estuary in surveys of all known roost sites on April 21 and May 26 (Stuart, 2001).

In recent years, Ash Island has been a key location for Red-necked Stint in the Hunter region. Most counts from outside of the Hunter estuary have been of <5 birds. 100+ birds are sometimes recorded elsewhere in the Hunter estuary and it is supposed that these are the same birds that utilise Ash Island. The species is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement.

## Pectoral Sandpiper Calidris melanotos

Single birds were present during February 1998 and January 2001, utilising Swan Pond and Wader Pond (Hunter Region Bird Reports). An additional report from February 5 2000 has not yet been able to be confirmed.

The Pectoral Sandpiper is protected under the Japan Australia Migratory Birds Agreement. It is classified as a rare visitor to the Hunter region and there have been only 6 other confirmed reports of it since 1993 (Hunter Region Bird Reports). The reporting rate of the species in NSW is only 1.65%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Sharp-tailed Sandpiper Calidris acuminata

Sharp-tailed Sandpiper can be recorded on Ash Island between September and April inclusive. The numbers utilising the Island fluctuate substantially. In some years, very few birds are present – including in the overall Hunter estuary. Most years, counts of up to 50 birds are recorded. However, in other years, many hundreds of birds are sometimes present on Ash Island. For example, 465 birds were present on January 11 1995, several hundreds over February – early March 1998 and 400-500 birds in January 2001 and between November 2001 and February 2002. In March 2002, over 1000 birds were present with the peak count being of 1165 birds on March 16. On April 13, the count was still high, with 390 birds present. Counts are again in excess of 1000 birds in late 2002, with the peak count being of 1183 birds on December 15 (HBOC records).

The birds mostly utilise Swan Pond and Wader Pond. However, they also are sometimes present in small to medium numbers at Teal Waters, Cobbans Overflow and Milham's Pond. Around 50 birds were at Cobbans Overflow during March 2002, and 120 birds at Teal Waters during December 2002, on both occasions when very high counts of birds overall were on the Island (A Stuart pers. obs.).

Sharp-tailed Sandpiper are sometimes recorded at other shallow wetlands in the Hunter region, but normally in counts of <20 birds. The significance of the Ash Island ponds for the species, particularly during times of dry conditions inland, is therefore very clear.

The species is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement.

## Curlew Sandpiper Calidris ferruginea

Curlew Sandpiper are sometimes recorded on Ash Island between September and March inclusive. The birds utilise Swan Pond and Wader Pond. In the migration period, when 200-400 birds are in the Hunter estuary, the counts on Ash Island are generally low and birds frequently are absent. Higher counts occur, however, including, in recent years, 46 birds were present on October 9 1999 and 69 birds on December 15 2001.

There is also an occurrence of 63 birds on the Island on May 14 2001 (Stuart, 2001). These birds are presumed to have been on migration passage since no birds were recorded in the Hunter estuary in surveys of all known roost sites on April 21 and May 26 (Stuart, 2001).

The occasional high counts of Curlew Sandpiper are an indication of the importance of Ash Island as a supplementary habitat for this species in the Hunter estuary during the main migration period. The utilisation of the habitat by birds on passage migration is also very noteworthy. The species is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act).

## Ruff Philomachus pugnax

Single birds were recorded on Ash Island on February 9 1998, February 28 1998, and several times during September 2001 (Hunter Region Bird Reports). The birds utilised Swan Pond and Wader Pond.

The Ruff is protected under the China Australia Migratory Birds Agreement. It is classified as a rare visitor to the Hunter region and there have been only three other confirmed reports of it in the region since 1993 (Hunter Region Bird Reports). The reporting rate of the species in NSW is only 1.36%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Painted Snipe Rostratula benghalensis

A single male bird was recorded on Ash Island on December 10, 1996 (Stuart, 1996). The bird was utilising Dead Mangrove Creek, near Wagtail Way.

The Painted Snipe is listed as Vulnerable under the NSW Scientific Committee's Schedule 2, and is protected under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act). The reporting rate of the species in NSW is only 0.47%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002). It is classified as rare in the Hunter region (Stuart, 2001) and there have only been two other records for the region since 1993 (Hunter Region Bird Reports).

## Black-winged Stilt *Himantopus himantopus*

The numbers of Black-necked Stilt in the Hunter estuary vary dramatically depending on the conditions elsewhere especially inland. At times, many hundreds of birds are present, and few or no birds at other times. The counts on Ash Island are often quite high, and the Island frequently accommodates the majority of the birds present in the Hunter estuary. This is shown in Table 8, from data collected during regular wader surveys conducted since 1999. The surveys are conducted at high tide since many of the wader species disperse widely around the estuary at other times; this is less of the case for Black-necked Stilt.

It is uncommon for there to be no Black-winged Stilt present on Ash Island. They mostly utilise Wader Pond, Swan Pond and Deep Pond, but up to 20 birds can be present at any of the other medium to large ponds around the Island. Birds were nesting during January 2001 (Stuart, 2001).

Black-winged Stilt are sometimes recorded at other shallow wetlands in the Hunter region, but normally in counts of <20 birds. The significance of the Ash Island ponds for the species, particularly during times of dry conditions inland, is therefore very clear.

Table 8. Some High Tide Counts of Black-necked Stilt in the Hunter Estuary

Date	Count on Ash Island	Count in Hunter estuary	% on Ash Island
Apr 17 1999	319	694	46%
May 16 1999	412	552	75%
Jun 26 1999	177	417	42%
Aug 14 1999	307	405	76%
Oct 9 1999	314	329	95%
Nov 13 1999	106	207	51%
Dec 11 1999	130	154	84%
Jan 22 2000	274	345	79%
Feb 19 2000	335	525	64%
Mar 19 2000	224	350	64%
Feb 24 2001	525	552	95%
May 26 2001	156	360	43%
Nov 17 2001	182	256	71%
Dec 15 2001	266	332	80%
Jan 11 2002	443	617	72%
Feb 16 2002	525	697	75%
Mar 16 2002	407	541	75%
Apr 13 2002	407	691	59%
May 11 2002	411	761	54%
Nov 16 2002	1312	1665	79%
Dec 15 2002	239	412	58%

## Banded Stilt Cladorhynchus leucocephalus

A single adult bird was present on Ash Island from late November 2001 until late February 2002 (HBOC records), utilising Wader Pond and Swan Pond. On several occasions in January-February 2002, an immature bird was also observed to be present. It seems probable that this second bird was always on Ash Island during November-February but that it was overlooked amidst the many hundreds of Black-winged Stilt that also were there.

The Banded Stilt is classified as an accidental visitor in the Hunter region (Stuart, 2001) and there have been only 3 other records of the species in the region since 1993 (Hunter Region Bird Reports). Each of the previous records also involved 1-2 birds that remained at a location for an extended time. The reporting rate of the species in NSW is only 0.41%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

#### Red-necked Avocet Recurvirostra novaehollandiae

The numbers of Red-necked Avocet in the Hunter estuary vary dramatically depending on the conditions elsewhere especially inland. At times, up to 2000 birds are present in the estuary, and few or no birds at other times. When birds are present in the estuary in large numbers, the counts on Ash Island typically range between 50 and 150 birds. 380 birds were present on December 15 2002, 200 birds on January 11 2002, 192 birds on February 16 2002 and 191 birds on August 18 2001. The birds mostly utilise Wader Pond, Swan Pond, Deep Pond and, less frequently, Milham's Pond.

## Pacific Golden Plover Pluvialis fulva

Pacific Golden Plover can be recorded on Ash Island between August and April inclusive. The counts fluctuate considerably with up to 40 birds sometimes present but no birds recorded at other times. In part this may be because the cryptic behaviour of the birds causes them to be overlooked. Around 300 birds were present on Ash Island on March 8 1998 (Stuart, 1998), 77 birds on February 24 2001, 42 birds on October 20 2001 and 48 birds on December 2 2001 (HBOC records).

Birds are often present on the grassy islands and margins of Wader Pond, and occasionally on Swan Pond. Also, 20-40 birds frequently roost at high tide at Scotts Point (A Stuart, pers. obs.). There have also been occasional sightings in the paddocks and salt marsh areas near the former School House (now the KWRP office and Visitors Centre). Despite the variation in the numbers present, Ash Island has been the most reliable location for Pacific Golden Plover in the Hunter estuary for several years.

The species is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement (in both cases, it is listed as Eastern Golden Plover *Pluvialis dominica*, from which *P. fulva* subsequently was elevated to specific status). The species is also protected under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory wetland and the marine provisions of the Act).

## Grey Plover Pluvialis squatarola

A single bird was present on Ash Island November 5 2001 (Stuart, 2001), utilising Wader Pond. The Grey Plover is classified as an accidental visitor to the Hunter region (Stuart, 2001) and the Ash Island sighting was the first confirmed record of the species in the region since the 1980's.

The Grey Plover is protected under the China Australia Migratory Birds Agreement. The reporting rate of the species in NSW is only 0.35%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Red-capped Plover Charadrius ruficapillus

1-5 birds are sometimes present on Ash Island, utilising Wader Pond and Swan Pond. This matches with the general status in the Hunter region (Stuart, 2001). However, 32 birds were present on December 9 2000 and 14 birds on April 21 2001 (HBOC records), which indicates that the Ash Island habitat is at times a significant one for this species locally.

The Red-capped Plover is also known to breed on Ash Island – nests with eggs were present on November 23 2000 (Stuart, 2000), January 2002 (N Livanos pers. comm.) and November 2002 (S Rostas pers. comm.).

## Double-banded Plover Charadrius bicinctus

Single birds were present on March 31 and April 8 2001 and February 22 1998, 3 birds on March 4 2000 and 4 birds on April 13 2002. The birds were utilising Swan Pond and Wader Pond. Ash Island is one of a number of sites around the lower Hunter estuary that are used by Double-banded Plover when they migrate to the region from New Zealand in winter.

## Black-fronted Dotterel Elseyornis melanops

1-5 birds are often present on Ash Island. This matches with the general status in the Hunter region (Stuart, 2001). However, greater counts frequently occur: 43 birds were present on April 13 2002; 30-40 birds during April 2001; and 20-30 birds on May 22 1994, April 1 1997, April 17 2000 and often during March and May 2001. There are also many records of 10-20 birds (Hunter Region Bird Reports).

These frequent high counts indicate that the Ash Island habitat is a very significant one at times for Black-fronted Dotterel locally. Birds mostly occur at the margins of four ponds on the Island – Wader Pond, Swan Pond, Fish Fry Creek Pond and Teal Waters.

## Red-kneed Dotterel Erythrogonys cinctus

The numbers of Red-kneed Dotterel on Ash Island vary substantially depending on the conditions elsewhere especially inland. There have been particularly high counts in 2002. Since 1993, from which time records in the Hunter region have been collated systematically, there have been only 4 years when no birds were recorded on Ash Island (1993, 1995, 1997, 2000). 1-5 birds were often present in the other years, and with several instances of greater counts. Thus, 10+ birds were present during May-September 2001, with a peak count of 15 birds on August 3; 20+ birds were present on June 22 1994; and 6+ birds on June 3 1996 (Hunter Region Bird Reports).

In 2002 there was a significant influx of Red-kneed Dotterel onto Ash Island, as shown by the data presented in Table 9 below. There were no records from wetlands elsewhere within the Hunter estuary of more than 10 birds during this period, which is in accord with the generally accepted status for this species in the Hunter region. Thus, the counts from Ash Island are very significant for the region and serve to highlight the importance of the Ash Island habitat for Red-kneed Dotterel during times of inland drought.

When present in large counts, most birds utilise Swan Pond, Wader Pond and Milham's Pond. However, small numbers of birds are often found at many of the wetlands around Ash Island.

Count on Date Ash Island January 11 0 February 16 0 March 16 17 April 13 84 May 11 148 June 15 58 July 13 7 August 10 80 September 21 0 October 19 39 November 16 1 19 December 15

Table 9. Counts of Red-kneed Dotterel on Ash Island in 2002

## Banded Lapwing Vanellus tricolor

Two Banded Lapwing were present on Wader Pond on August 2 2002. This is the first record of the species on Ash Island but there are previous records from Kooragang Island in 1993 and 1994 (Hunter Region Bird Reports).

This record is quite significant and highlights the importance of the Ash Island habitat as a coastal refuge for inland birds in times of drought. The species is classified as a rare visitor to the Hunter region and there have been only 5 confirmed reports (all of these being of several birds) in the region since 1993 (Hunter Region Bird Reports). The reporting rate of Banded Lapwing in NSW overall is only 1.18%, suggesting that it is vulnerable to further significant habitat loss (Maddock, 2002).

## Masked Lapwing Vanellus miles

The Masked Lapwing is common on Ash Island, with pairs or small parties utilising the widespread wet paddocks and wetland margins. On many occasions, in excess of 30 birds are present and records of up to 50 birds occur often (Hunter Region Bird Reports, A Stuart pers. obs.). 50+ birds were present on September 25 2001 (Stuart 2001). The species breeds on Ash Island, with a number of breeding records reported.

Although occurring at many locations around the Island, 10-20 birds are often present at the grassy margins of Wader Pond, while sometimes, 30+ birds roost at Scotts Point (A Stuart, pers. obs.).

The Masked Lapwing is a common resident of the Hunter region, widely recorded in counts of 1-5 birds and with up to 20 birds at some favoured locations (Stuart, 2001). Therefore, Ash Island is a significant location for this species within the region.

## Silver Gull Larus novaehollandiae

In excess of 100 Silver Gull are often present on Ash Island, occurring in small to medium counts around the larger ponds and waterways. Occasionally, many hundreds of birds are present, and there were counts of 500+ birds on April 1 1997 and April 21 2001 and of over 2000 birds on January 29 1996 and February 6 2000. When the high counts occur, the birds are mainly present at Swan Pond and Deep Pond.

The Silver Gull is a common species in the Hunter region, and counts of >100 birds occur frequently. However, the records of 500+ birds, and particularly those of 2000+ birds, are very significant for the region.

#### Gull-billed Tern Sterna nilotica

The Gull-billed Tern occurs occasionally on Ash Island, at any time of the year. Usually 1 or 2 birds are recorded, but sometimes up to 4 birds are present. There were 7 birds on September 10 1998. Birds are found at any of the major ponds around the Island.

During September 14-16 2001 there were an estimated 50 birds present, mainly feeding and resting at Swan Pond and also some birds were feeding on Wader Pond. This period coincided with a large influx of other tern species, and migratory waders, to Ash Island and particularly to Swan Pond. High counts, peaking at 38 birds, were again present in August 2002 (HBOC records).

Since 1993, there have been no counts of more than 10 Gull-billed Tern at other locations in the Hunter region except sometimes from Kooragang Island and Stockton Sandspit both of which are also in the Hunter estuary. 20-40 birds have been recorded at these locations on 5 occasions since 1993. The count of 50 birds on Ash Island is therefore very significant for the Hunter region.

#### Caspian Tern Sterna caspia

1-2 birds are occasionally recorded on Ash Island, usually in the vicinity of Swan Pond and Wader Pond where the birds both feed and rest. The Caspian Tern is protected under the China Australia Migratory Birds Agreement.

## Crested Tern Sterna bergii

Small numbers of Crested Tern are very occasionally recorded on Ash Island, particularly at Deep Pond and Swan Pond, or birds are seen flying over the Island. The species is protected under the Japan Australia Migratory Birds Agreement.

## Whiskered Tern Chlidonias hybridus

100+ birds were recorded at Ash Island over September/October 2002, with a peak count of 219 birds on October 1 (S. Roderick pers. comm.). 38 birds were also present over October 29-30 2001, 9 birds on September 14 2001 and 7 birds on December 20 1998 (Hunter Region Bird Reports). There are also records of 1-2 birds on the Island on November 19 1997, September 27 2000, 3 birds on May 14 2001 and 4-5 birds over Sep 10-13 2001 and on September 21 2002.

The Whiskered Tern occurs irregularly in the Hunter region and is classified as uncommon (Stuart, 2001), and reports of more than 2 birds are infrequent. An exception was in 1994, when there were many reports of >30 birds around Kooragang Island. The very high counts on Ash Island in 2001 and 2002 are very significant ones for the region, and Ash Island is an important habitat for this species.

## White-winged Black Tern Chlidonias leucopterus

Two White-winged Black Tern were present on Ash Island on November 16 2001 and some birds were also present there September 11 2001 (Stuart, 2001). The birds were utilising Swan Pond. These are believed to be the first confirmed records for the Island. The White-winged Black Tern is protected under the Japan Australia Migratory Birds Agreement.

## Rock Dove Columba livia

There are no known records of birds utilising Ash Island; however, some birds are occasionally seen flying over the Island.

## Spotted Turtle-Dove Streptopelia chinensis

1-2 birds are occasionally present on Ash Island. The species does not seem to be resident there.

## Crested Pigeon Ocyphaps lophotes

1-5 birds are occasionally present on Ash Island. The species does not seem to be resident there.

## Peaceful Dove Geopelia striata

A single bird was present on a track to the east of Swan Pond in late February 2000 (A Stuart, pers. obs.). There are no other known records from Ash Island.

#### Bar-shouldered Dove Geopelia humeralis

Small numbers of Bar-shouldered Dove are occasionally recorded on Ash Island, particularly on the eastern part of it where they sometimes are observed feeding on the tracks that are present there.

## Galah Cacatua roseicapilla

Small numbers of Galah are sometimes present on Ash Island, or are seen flying over it.

#### Sulphur-crested Cockatoo Cacatua galerita

Small numbers of Sulphur-crested Cockatoo are sometimes seen flying over Ash Island.

#### Rainbow Lorikeet Trichoglossus haematodus

The Rainbow Lorikeet is an uncommon visitor to Ash Island. Small flocks have occasionally been seen there, or flying over (A Stuart pers. obs.).

## Eastern Rosella Platycercus eximius

This species is recorded all year from locations in the west and the north of the Island. Usually 5-10 birds are present in total (HBOC Records, A Stuart pers. obs.). A pair were regularly seen with a young bird near the Information Centre during October 2002 and are considered likely to have nested in nearby mangroves (P. Svoboda pers. comm.)

#### Red-rumped Parrot Psephotus haematonotus

The Red-rumped Parrot is an uncommon visitor to Ash Island. 1-2 birds have occasionally been seen there (A Stuart pers. obs, M. Maddock pers. comm.).

#### Pallid Cuckoo Cuculus pallidus

This species is an uncommon visitor to Ash Island.

#### Fan-tailed Cuckoo Cacomantis flabelliformis

1-2 birds are sometimes present particularly in locations in the west and the north of the Island.

## Horsfield's Bronze-Cuckoo Chrysococcyx basalis

Single birds were recorded at Ash Island on September 16 and October 14 2000 and on September 14 2001 (Hunter Region Bird Reports). Three birds were together on Wagtail Way on June 15 2002 (HBOC records).

## Shining Bronze-Cuckoo Chrysococcyx lucidus

1-2 birds are sometimes heard or seen in areas of mangrove throughout the Island.

## Common Koel Eudynamys scolopacea

This species is a rare visitor to Ash Island.

## Channel-billed Cuckoo Scythrops novaehollandiae

This species is an uncommon visitor to Ash Island.

#### Southern Boobook Ninox novaeseelandiae

Birds have sometimes been heard calling on Ash Island at night. Little is known of how the birds are utilising the Ash Island habitat.

## Masked Owl Tyto novaehollandiae

A dead bird was found near the bridge onto Ash Island on June 30 2002 (A Lindsey pers. comm.). It is possible therefore that Ash Island forms part of a territory for a resident bird or pair of birds. The Masked Owl is listed as Vulnerable under the NSW Scientific Committee's Schedule 2, and is classified as rare in the Hunter region (Stuart, 2001).

## Barn Owl Tyto alba

There have been occasional records of Barn Owl on Ash Island, for example in the area of woodland and mangroves along Ramsar Road (HBOC records).

## White-throated Needletail Hirundapus caudacutus

Occasionally in the summer months, flocks of White-throated Needletail are seen hawking for food over Ash Island. The species is protected under the Japan Australia Migratory Birds Agreement and the China Australia Migratory Birds Agreement, and under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory terrestrial and the marine provisions of the Act).

## Azure Kingfisher Alcedo azurea

This species is a rare visitor to Ash Island, and was last recorded on 9 December 1999 (S Hamonet pers. comm. to M Maddock).

#### Laughing Kookaburra Dacelo novaeguineae

This species is recorded all year from locations in the west and the north of the Island. Usually up to 5 birds are present in total (HBOC Records, A Stuart pers. obs.).

## Sacred Kingfisher Todiramphus sanctus

The Sacred Kingfisher is generally present in small numbers on Ash Island between September and April. However, it is not uncommon for at least one bird to remain over the winter period. Ash Island is one of the few locations in the Hunter region where this occurs.

## White-throated Treecreeper Cormobates leucophaeus

This species is an uncommon visitor to Ash Island.

## Superb Fairy-wren Malurus cyaneus

The Superb Fairy-wren is common on Ash Island, with small parties utilising the widespread native and introduced vegetation around the Island. On many occasions, in excess of 30 birds are present and records of up to 50 birds occur often (Hunter Region Bird Reports, A Stuart pers. obs.).

#### Striated Pardalote Pardalotus striatus

This species is a rare visitor to Ash Island (S Hamonet pers. comm. to M Maddock).

## White-browed Scrubwren Sericornis frontalis

Small numbers of White-browed Scrubwren now appear to be resident on Ash Island, utilising in particular the re-established rainforest area at the western end of Milham Road.

## Brown Gerygone mouki

Small numbers of Brown Gerygone now appear to be resident on Ash Island, utilising in particular the re-established rainforest area at the western end of Milham Road.

## Mangrove Gerygone Gerygone levigaster

This species is recorded all year in areas of mangrove around Ash Island. Usually up to 5 birds are present in total (HBOC Records, A Stuart pers. obs.).

#### Brown Thornbill Acanthiza pusilla

Small numbers of Brown Thornbill now appear to be resident on Ash Island, utilising in particular the re-established rainforest area at the western end of Milham Road.

## Yellow-rumped Thornbill Acanthiza chrysorrhoa

At least one party of Yellow-rumped Thornbill is present on Ash Island, usually recorded in the western part of the Island.

#### Yellow Thornbill Acanthiza nana

The Yellow Thornbill is common on Ash Island, with small parties utilising the widespread native and introduced trees, including mangroves, around the Island. On many occasions, in excess of 30 birds are present and records of up to 50 birds occur often (Hunter Region Bird Reports, A Stuart pers. obs.).

#### Red Wattlebird Anthochaera carunculata

This species is an uncommon visitor to Ash Island.

## Little Wattlebird Anthochaera chrysoptera

This species is an uncommon visitor to Ash Island.

## Striped Honeyeater Plectorhyncha lanceolata

This species is an uncommon visitor to Ash Island.

## Noisy Friarbird Philemon corniculatus

This species is a rare visitor to Ash Island.

## Noisy Miner Manorina melanocephela

This species is an uncommon visitor to Ash Island.

## Yellow-faced Honeyeater Lichenostomus chrysops

This species is an uncommon visitor to Ash Island.

#### Brown Honeyeater Lichmera indistincta

This species is an uncommon visitor to Ash Island.

#### White-cheeked Honeyeater Phylidonyris nigra

This species is a rare visitor to Ash Island.

## Eastern Spinebill Acanthorhynchus tenuirostris

This species is a rare visitor to Ash Island.

## White-fronted Chat Epthianura albifrons

Up to 20 birds White-fronted Chat are regularly present on Ash Island and birds are known to breed there (recent breeding records in 1995 and 1997). Counts of 20+ birds occur often, and the peak count is of 62 birds present on April 21 2001 (Stuart, 2001).

The White-fronted Chat is classified as a local resident in the Hunter region, only occurring at some favoured sites having apparently suitable habitat. Ash Island is the most reliable location for the species in the region.

## Rufous Whistler Pachycephala rufiventris

Small numbers of Rufous Whistler are present in mangrove and woodland areas up until mid-May and then again from mid-August each year.

## Grey Shrike-thrush Colluricincla harmonica

Small numbers of Grey Shrike-thrush are present in mangrove and woodland areas all year.

#### Black-faced Monarch Monarcha melanopsis

In the past 2-3 years, Black-faced Monarch has occasionally been recorded in the Scotts Point Rainforest (A Morris pers. comm. to M Maddock). The species is protected under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory terrestrial and the marine provisions of the Act).

## Restless Flycatcher Myiagra inquieta

This species is a rare visitor to Ash Island. A single bird was recorded near Swan Pond in 2001 (A Stuart pers. obs.).

## Magpie-lark Grallina cyanoleuca

10-20 birds are regularly present on Ash Island, in small numbers around the many wetland margins and wet paddocks.

#### Rufous Fantail Rhipidura rufifrons

The Rufous Fantail is a rare visitor to Ash Island. The most recent record is of a single bird in the City Farm area on October 21 2002 (N Livanos pers. comm.). The species is protected under the Commonwealth Environment Protection and Biodiversity Conservation Act (species covered under the migratory terrestrial and the marine provisions of the Act).

#### Grey Fantail Rhipidura fuliginosa

5-10 birds are regularly present in small numbers in mangrove and woodland areas of Ash Island. A pair was nesting in remnant rainforest near Crabhole Flats during October 2002 (P. Svoboda pers. comm.).

## Willie Wagtail Rhipidura leucophrys

5-10 birds are regularly present on Ash Island, occurring in small numbers around most parts of the Island. 20+ birds were present on August 3 and August 9 2001 (Stuart, 2001)

## Spangled Drongo Dicrurus bracteatus

The only known record is of a single bird seen near the Interpretive Centre (M. and H. Maddock pers. comm.).

#### Black-faced Cuckoo-shrike Coracina novaehollandiae

Small numbers of birds are frequently present on Ash Island, particularly at locations in the western part of the Island.

## White-winged Triller Lalage sueurii

This species is an uncommon visitor to Ash Island. In October 2001, 4 birds were present at an area being rehabilitated on the northern side of Milham Road (A Stuart pers. obs.) and two birds were again present in this area in late September 2002.

## Olive-backed Oriole Oriolus sagittatus

This species is an uncommon visitor to Ash Island, with the most recent record being of a single bird there December 31 1996 (HBOC records).

## Figbird Sphecotheres viridis

This species is a rare visitor to Ash Island

## White-breasted Woodswallow Artamus leucorynchus

Up to 10 birds are usually present at locations in the western part of Ash Island each year until late April and then from September onwards.

## Grey Butcherbird Cracticus torquatus

1-2 birds are regularly present in small numbers in mangrove and woodland areas of Ash Island.

## Pied Butcherbird Cracticus nigrogularis

This species is an uncommon visitor to Ash Island.

## Australian Magpie Gymnorhina tibicen

Up to 10 birds are regularly present on Ash Island, mostly in locations in the western and central parts of the Island. Birds nest on the Island, with the most recent records being of two pairs nesting at different locations during October 2002 (P. Svoboda pes. comm.).

## Pied Currawong Strepera graculina

This species is an uncommon visitor to Ash Island.

## Australian Raven Corvus coronoides

5-10 birds are generally present, occurring in groups of 1-2 birds at many locations around Ash Island.

## Torresian Crow Corvus orru

1-2 birds have been recorded several times on Ash Island in 2002, there being no known records from previous years. The species is considered to be increasing its range within the Hunter region, where it previously was confined to the Port Stephens area and locations further to the north and north-west.

## Skylark Alauda arvensis

A single bird was present on Ash Island on August 24 1996. A report of three birds there on August 4 2001 has not yet been able to be confirmed. The Skylark is classified as an accidental visitor to the Hunter region (Stuart, 2001) and there has only been one other record since 1993 – of 1-2 birds present on Kooragang Island during August-September 1994 (Stuart, 1995).

## Richard's Pipit Anthus novaeseelandiae

5-10 birds are regularly present on Ash Island, utilising the widespread areas of low grass and saltmarsh.

#### Yellow Wagtail Motacilla flava

During February in 1998 and again during February 2000-2002, one or more birds have been present on Ash Island (Hunter Region Bird Reports). The count peaked at 7 birds in 1998, with some birds present until at least March 4. Two birds were present in 2000, with one bird remaining until at least April 1. In 2001 and 2002, single birds were present for periods of 2-3 weeks. The birds have utilised the south-western and north-eastern parts of Swan Pond and the area between Swan Pond and Deep Pond.

The only other known records for Yellow Wagtail in the Hunter region are of a single bird at Kooragang Island in December 1993 and two birds at Shortland in January 1998. Prior to 1998, its

status in the Hunter region was considered to be an accidental visitor, but now the status is uncertain. The Yellow Wagtail is protected under the China Australia Migratory Birds Agreement.

## House Sparrow Passer domesticus

This species is an uncommon visitor to Ash Island.

## Red-browed Finch Neochmia temporalis

This species is an uncommon visitor to Ash Island (A Stuart pers. obs.). 20+ birds were present near the western end of Bellfrog Track on January 11 2002 (G O'Connor pers. comm.)

## Chestnut-breasted Mannikin Lonchura castaneothorax

This species is a rare visitor to Ash Island (D. Rogers pers. comm. to M Maddock).

## European Goldfinch Carduelis carduelis

This species is an uncommon visitor to Ash Island, with up to 5 birds sometimes present at various locations around the Island (HBOC records, A Stuart pers. obs.).

## Mistletoebird Dicaeum hirundinaceum

This species is an uncommon visitor to Ash Island.

#### Welcome Swallow Hirundo neoxena

20+ birds are frequently present on Ash Island, around the many wetland areas. Higher counts occur often, including there were 100+ birds present on January 3 2001 (Hunter Region Bird Reports) and 500+ birds in April/May 2002 (N Livanos pers. comm.).

## Tree Martin Hirundo nigricans

This species is an uncommon visitor to Ash Island.

## Fairy Martin Hirundo ariel

30-40 birds are usually present on Ash Island each year until around March and then from late August onwards (A Stuart pers. obs.). A nesting colony has established at the Radar Huts, with many pairs regularly breeding there each year.

## Clamorous Reed-Warbler Acrocephalus stentoreus

Up to 10 birds are regularly present on Ash Island during the non-winter period, in counts of 1-2 birds around the many reed-lined wetland margins.

## Tawny Grassbird Megalurus timoriensis

Up to 5 birds are regularly present on Ash Island, in counts of 1-2 birds around the many areas of 0.5-2.0m tall vegetation.

## Little Grassbird Megalurus gramineus

Up to 10 birds are regularly present on Ash Island, in counts of 1-2 birds around the many well vegetated wetland margins. A pair had dependent young on October 27 2002 (N Livanos pers. comm.).

## Rufous Songlark Cincloramphus mathewsi

This species is an uncommon visitor to Ash Island. The most recent record is of a pair of birds present near the southern end of Milham's Pond on October 7 2002 (A Stuart pers. obs.).

#### Brown Songlark Cincloramphus cruralis

The Brown Songlark is an uncommon visitor to Ash Island. However, in October-December 2002 there have been several records, consistent with a general influx of the species to the coast. At least four birds were present on Ash Island on December 15 2002 (HBOC records).

## Golden-headed Cisticola Cisticola exilis

Up to 20 birds are regularly present on Ash Island, in counts of 1-2 birds around the many well vegetated wetland margins.

## Silvereye Zosterops lateralis

This species is regularly present all year on Ash Island, usually in counts of up to 20 birds. When southern birds are on migration passage, counts of up to 50 birds sometimes occur. The birds utilise most of the well vegetated parts of the Island, although the south-eastern area near the railway line seems to be the most preferred location.

## Common Starling Sturnus vulgaris

Up to 50 birds are regularly present on Ash Island, mostly in the western and central parts of the Island.

#### Common Myna Acridotheres tristis

This species is an uncommon visitor to Ash Island.

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