# Changes in Taroona bird species occurrences 1986-2019

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#### Introduction

Taroona is a township in the north of the Kingborough municipality and is part of greater Hobart.

In 1988, the Taroona Historical Group published a book about Taroona's history from 1808 to 1986 (Taroona Historical Group 1988). The book included a chapter on Natural History, including an account of the fauna by Hans and Jolanda Naarding (1988). This article contained a list of birds and their status in Taroona, rating the birds as common, uncommon or rare, and whether they were vagrant or known to be breeding. We were interested to observe whether there had been much change in the number of species and their status over the past three decades, given the changes in status of birds observed in Tasmania more generally over that period.

The suburb has maintained many pockets of native vegetation across a range of habitat types, and also has many

long-established gardens cultivating plants favoured by birds. The native vegetation has been described by Brown (1988) and includes coastal vegetation and dry sclerophyll which is dominated by Eucalyptus pulchella on Jurassic dolerite ridges and sunny aspects, and E. tenuiramis on Permian mudstones. E. globulus predominates along the coast and immediate hinterland, on back slopes and in gullies of wet sclerophyll, having secondary trees and/or shrubby broadleaf understoreys. The driest fire-affected ridges and slopes bear Allocasuarina verticillata low forest. There has been some reduction in the total amount of native vegetation within Taroona in the past 33 years. This is predominantly due to new housing sub-divisions, although these have mainly occurred in adjacent areas, for example around Bonnet Hill. If the bird community composition is related to the composition and diversity of vegetation then we would expect bird diversity to broadly remain the same, unless other factors are operating.

We have an ongoing interest in the birds to be seen in Taroona, and whilst we have undertaken this study out of personal interest, we feel it may be of interest to other bird enthusiasts in the suburb as well as more broadly.

#### Methods

We have used the list of birds in Taroona from H&J Naarding (1988) as the basis for comparison with today's avifauna in the same area. The updates and amendments are drawn from our own observations, and from personal communications, together with reports in the literature, the most recent eBird list (eBird 2019), the Atlas of Living Australia (ALA 2019) and reliable records/photographs from social media sites such as the Tasmanian Bird Sightings and Photography Facebook Group and the Tasmanian Field Naturalists Facebook Group.

#### **Results and Discussion**

### **Species composition**

A composite list of the birds observed in Taroona from all canvassed sources is presented in Table 1. The species order follows that used by DPIPWE (2019a), with introduced species being listed at the bottom of the table. The table contains 107 species, 97 of which are native Tasmanian birds and 10 of which are introduced. H&J Naarding (1988) list 72 bird species as occurring in Taroona, whilst the more recent e-Bird list which includes birds from 2000 to 2018 has 76 species, or 77 if Mallard is included (Table 1). There are 105 bird species

observed either from our own records or from those of other observers in the past two years.

# Species that have disappeared or declined

H&J Naarding (1988) reports the Spotted Quail-thrush (Plate 1) as being common and breeding, but there are no more recent records of this species. It was quite commonly seen in the forest verges above Atunga Street by the Naardings (Hans Naarding pers. comm.) in the 1980s. There are only seven records for the Spotted Quailthrush in the greater Hobart area in the ALA database, and they all predate the 1988 publication. It is now mainly found in eastern Tasmanian dry forests and woodlands, for example near Buckland and in the Douglas-Apsley and Freycinet National Parks. The authors list the Common Diving Petrel (Plate 2) as being sometimes observed 'skimming close to the waves, fairly far out in the river' when the water is very rough. The only record of this species in the Derwent River in the databases is from 1988. There are no more recent records of this species from Taroona.

No other species appear to have disappeared from Taroona, but the status of some other species has changed markedly. The Swift Parrot is dealt with below. The Horsfields Bronze-cuckoo was recorded as common and breeding, but now appears to be rare. This is surprising, given the abundance within Taroona of the host species it parasitises, mainly Superb Fairy-wrens and Thornbills. It may be that its reported earlier abundance is due



Plate 1. Spotted Quail-thrush near St Helens. Photograph Peter Vaughan.



Plate 2. Common Diving-Petrel from Eagle Hawk Neck pelagic trip. Photograph Peter Vaughan.

to misidentification, as the 1988 report does not record the Shining Bronze-cuckoo, a species which has been recorded many times since. The Flame Robin is recorded in the 1988 report as being a 'common vagrant', but while there are plentiful records in adjacent areas of Hobart and Kingborough, there are few more recent records of this species in Taroona.

#### Species that were not reported in 1988

There are a number of species not reported in the 1988 report, but which are now commonly observed in Taroona, including three native Australian species thought to be introduced. Rainbow Lorikeets are a potentially invasive pest DPIPWE (2019c). There is a large established colony in Kingston which has arisen from aviary escapes, and these birds are spreading north to Taroona. Galahs have self-introduced along the north coast of Tasmania, but southern populations may be aviary escapes. They are now common and widespread throughout Tasmania in urban and

peri-urban areas, including Taroona. Populations of Long-Billed Corellas are also thought to have been founded originally from aviary escapes, and there are active flocks in Lower Sandy Bay and in Kingston. They are frequently observed flying over Taroona. The Sulphur-crested Cockatoo is a native Tasmanian species. It was not recorded in the 1988 account, but is now very commonly seen and heard.

The Spotted Dove, a native of eastern Asia, was not recorded previously, but is now ubiquitous.

Some previously unrecorded waterfowl species have been observed in habitats such as dams occurring on private land, which would not have been accessible to the authors of the 1988 report. These include the Black Swan, Mallard, Australasian Grebe, Hoaryheaded Grebe, Pacific Black Duck, and Australian Wood Duck. The latter species has also been observed as an occasional vagrant on Hinsby and Taroona beaches.



Plate 3. Painted Buttonquail at Taroona. Photograph Peter Vaughan

There are some species that are resident and breeding in Taroona, but which occur in low numbers or are highly cryptic, and therefore easily missed. These include the Brown Quail, Painted Button-quail (Plate 3), Tasmanian Native Hen, Australian Owlet-nightjar, Bassian Thrush, Lewins Rail (Plate 4) and Pink Robin.

Other more recent observations of species absent from the earlier list are of occasional vagrants, migrants, or non-breeding residents of Taroona. These include Australian Pelican, Whitenecked Heron, Wedge-tailed Eagle, Great Cormorant, Pied Oystercatcher, Oystercatcher, Blue-winged Sooty Parrot, Pacific Swift, and White-throated Needletail. There is a single record of a Little Grassbird in Taroona from 2015, but this has not been confirmed since. There is also a single sighting of an Azure Kingfisher in the Creek near Hinsby Beach (Vica Bayley pers. comm.). Vagrants of this species have been reported from several locations near to Taroona in recent times, including Snug River to the south (Els Wakefield pers. comm.) and from Wielangta to the north (D. Gunson pers. comm.), therefore this exciting record is hopefully a harbinger of future sightings.

The absence of the Grey Currawong from the early list is somewhat surprising, since it is now common, and its calls are heard throughout the suburb. The Noisy Miner is found in large numbers in Sandy Bay and Kingston, but is still relatively rare in Taroona. The introduced Rock Dove has been recorded since 1988, but records are few and the species is not common.

# Species that have increased in abundance

The Laughing Kookaburra was listed as an uncommon vagrant in 1988 but is now common and probably breeding in Taroona or its environs. The Little Wattlebird, previously considered uncommon and breeding, is now one of the most ubiquitous birds in suburban areas.



Plate 4. Lewin's Rail at Taroona. Photograph Peter Vaughan

### Significant avifauna

#### **Endemic species**

11 of the 12 Tasmanian endemic species occur in Taroona along with one of the two breeding endemics, the Swift Parrot. The Scrubtit is the only endemic species not recorded in Taroona thus far.

# Threatened species and their status in Taroona

Seven species listed under threatened species legislation occur in Taroona. The information given below about their threatened status is from DPIPWE (2019a) and SPRAT (2019).

Forty-Spotted Pardalote (Plate 5): This species is listed as Endangered under both the *Threatened Species Protection Act 1995* and the *Environment Protection and Biodiversity Conservation Act 1999*. It is thought to be an occasional vagrant in



**Plate 5.** Forty-spotted and Striated Pardalote fighting over a nest hollow at Peter Murrell Reserve. Photograph Mick Brown

Taroona, although there are reports of colonies having been there in the past. The following information on Fortyspotted Pardalote residency is taken from SPRAT (2019):

Two small colonies of Forty-spotted Pardalote on the lower slopes and gullies of Mount Nelson at Taroona, have been difficult to locate and monitor on a regular basis. When the location was comprehensively surveyed in 1995 it was found to have declined to one colony containing just six birds or three pairs (Bryant 1997). Ongoing interest by the landowners has suggested that over time the species may have become locally extinct on their property but may still occur in the general area (J. Paxton, pers. comm. in Bryant 2010).'

There have been occasional recent sightings of vagrant birds in the past few years.

Swift Parrot (Plate 6): The Swift Parrot (Lathamus discolor) is listed as Endangered under the Tasmanian Threatened Species Protection Act 1995 and Endangered on the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999. The birds regularly visit Taroona in Spring-Summer to feed upon the flowers of E globulus that bloom profusely most years. Feed trees are widespread in Taroona, and are especially common along the foreshore and immediate hinterland of the Hinsby-Taroona beaches. It was recorded as breeding in Taroona (H&J Naarding 1988), but there are no recent breeding records. Bird numbers are known to have suffered a severe reduction in nearby Mt Nelson (Hingston 2019), and this seems also to be the case in Taroona (Simon Grove pers. comm.)

**Grey Goshawk** (Plate 7): This species is listed as Endangered under the *Threatened Species Protection Act 1995*. There are several birds seen regularly in Taroona, and they may be breeding residents.

White-bellied Sea-eagle: Listed as Vulnerable under the *Threatened Species Protection Act 1995*, single individuals of this species can often be observed flying just offshore along the Alum Cliffs, and along the beaches past Taroona High School to Cartwrights Point and looping out across the Derwent to the Eastern shore.

Wedge-tailed Eagle: The subspecies, Aquila audax fleayi, is endemic in Tasmania. It is the largest Australian raptor and is listed as Endangered under both Commonwealth and State legislation. Occasional birds can be observed flying around Taroona.

**Masked Owl**: Tasmania has an endemic subspecies of this owl, *Tyto novaehollandiae castanops*. It is listed as Endangered under the Tasmanian legislation and Vulnerable by *t*he Commonwealth legislation. This

species is occasionally seen in Taroona, H&J Naarding (1988) thought that it was possibly breeding here but there are no known recent records of breeding.

White-throated Needletail: This species is listed as Vulnerable under the Commonwealth legislation. The species is an international migrant and has been listed because of an apparent decline in numbers between 1977–81 1998-2002. There are no listed threats at the species level, although individual birds may be at risk from collision with overhead power lines, windows and lighthouses (SPRAT 2019). The species may often be seen in Taroona, as elsewhere in Tasmania, ahead of approaching storm clouds foraging along the edges of low pressure systems (SPRAT 2019).

#### Conclusions

The core composition of birds in Taroona has remained fairly stable over the past 33 years, but there are some changes due to invasions/increases



Plate 6. Swift Parrot at Taroona. Photograph Mick Brown

in introduced species. There are no recent sightings of Spotted Quail-thrush or Common Diving Petrel both of which were recorded in 1986. The decline in Taroona of two of our most threatened species, the Forty-spotted Pardalote and the Swift Parrot, reflects the declines exhibited in the broader Tasmanian landscape.

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Plate 7. Grey Goshawk at Taroona. Photograph Mick Brown

#### Table 1: Birds observed in Taroona

\*\* threatened species, b breeding, c common, e endemic, r rare, u uncommon, v vagrant, y recorded. \*Hans and Jolanda Naading.

Species	Status	H&J N.	eBird	Recent
		(1988)*	(2019)	record
Native Species				
Australasian grebe			У	у
Hoary-headed Grebe				у
Little Penguin		c-rb	У	У
Short-tailed Shearwater		cv	у	у
Common Diving-petrel		v		
Australasian Gannet		cv	У	у
Australian Pelican				у
Black-faced Cormorant		uv	У	у
Great Cormorant				у
Little Pied Cormorant		uv	У	у
Little Black Cormorant		uv	У	у
White-faced Heron		uv	У	у
White-necked Heron				у
Black Swan				у
Pacific Black Duck			У	у
Australian Wood Duck			у	у
Collared Sparrowhawk		ub	У	у
Brown Goshawk		ub	у	у
Grey Goshawk	**	rv	у	у
White-bellied Sea-eagle	**	uv	у	у
Wedge-tailed Eagle	**		у	у
Brown Falcon		uv	у	у
Australian Hobby				у
Swamp Harrier				у
Peregrine Falcon		b	у	у
Brown Quail				у
Painted Button-quail			у	у
Tasmanian Native Hen	е		У	У

# Table 1 continued

Species	Status	H&J N.	eBird	Recent
		1988)	(2019)	record
Lewins Rail			У	У
Pied Oystercatcher				У
Sooty Oystercatcher			У	У
Masked Lapwing		cb	у	У
Kelp Gull		С	у	У
Silver Gull		С	у	У
Pacific Gull		С		у
Great Crested Tern		uv	y	у
Common Bronzewing		u	y	у
Brush Bronzewing		ub	у	У
Sulphur-crested Cockatoo			у	У
Galah			у	У
Yellow-tailed Black		cv	у	у
Cockatoo Long-Billed Corella				у
Musk Lorikeet		uv	у	y
Swift Parrot	**	cb	У	y
Blue-winged Parrot		CD	У	У
Green Rosella	e	cb	-	
Eastern Rosella	C		У	У
		u	У	У
Shining Bronze-cuckoo				У
Horsfields Bronze-cuckoo		cb		У
Pallid Cuckoo		cb	У	У
Fantailed Cuckoo		cb	у	У
Morepork		ub?	у	У
Masked Owl	**	ub?		У
Tawny Frogmouth		ub	У	у
Australian Owlet-nightjar			у	у

# Table 1 continued

Species	Status	H&J N. (1988)*	eBird (2019)	Recent record
Pacific Swift			У	У
White-throated Needletail	**		у	У
Tree Martin		cb		у
Welcome Swallow		cb	у	у
Black-faced Cuckoo-shrike		ub		у
Bassian Thrush				У
Dusky Robin	e	cb		У
Pink Robin				у
Flame Robin		cv		у
Scarlet Robin		cb	у	у
Olive Whistler		ub	у	у
Golden Whistler		cb	у	У
Grey Shrike-thrush		u	у	У
Satin Flycatcher		ub		У
Grey Fantail		cb	у	У
Spotted Quail-thrush		cb		
Azure Kingfisher				у
Superb Fairy-wren		cb	у	у
Tasmanian Thornbill	e	cb	у	у
Brown Thornbill		cb	у	у
Tasmanian Scrubwren	e	ub		у
Eastern Spinebill		cv	у	у
Little Wattlebird		ub	у	у
Yellow Wattlebird	e	cb	у	y
Yellow-throated	e	cb	у	у
Honeyeater				
Noisy Miner		1.5		У
Black-headed Honeyeater	е	cb?	У	У

# Table 1 continued

Species	Status	H&J N. (1988)*	eBird (2019)	Recent record
Strong-billed Honeyeater	e	p5	у	у
New Holland Honeyeater		cb	у	у
Crescent Honeyeater		cb	у	у
Spotted Pardalote		cb	у	у
Forty-spotted Pardalote	e**	uv		у
Striated Pardalote		cb	у	у
Silvereye		cb	у	у
Little Grassbird				у
Beautiful Firetail		ub	у	у
Dusky Woodswallow		ub		у
Grey Butcherbird		ub	у	у
Australian Magpie		ub	у	у
Black Currawong		uv	у	у
Grey Currawong	е		у	у
Forest Raven		cb	у	у
Introduced Species				
Mallard			у	у
Spotted Dove			у	У
Laughing Kookaburra		uv	У	у
Eurasian Blackbird		cb	у	У
European Greenfinch		ub	у	у
European Goldfinch		cb	у	у
House Sparrow		cb	у	у
Common Starling		cb	у	у
Rainbow Lorikeet			у	у
Rock Dove				у
Total species		72	77	105