reproductive isolation of *ornatus* suggests that it is of older origin, which seems to question the conclusion that it is a hybrid of *striatus* and *substriatus*. Much remains to be investigated.

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AVIFAUNA OF MONASH UNIVERSITY CAMPUS

Monash University is at Clayton, 20 km southeast of Melbourne. Before the University bought it in 1958 the area (100 hectares) comprised a farm and a hospital. Near the existing buildings were stands of Cypress *Cupressus* spp., Monterey Pine *Pinus insignis*, and several other exotics including Oak *Quercus robur*, Elm *Ulmus procera*, Horse Chestnut *Aesculus hippocastanum*, and varieties of flowering *Prunus* spp. Native Australian trees were represented by a few mixed *Eucalyptus* and *Acacia* spp. The nature of the grounds has changed greatly since building started in 1960. Many vacant areas have been covered by fill from foundation excavations and playing fields have been created. On the perimeter, around the car parks, and in various other places native trees and shrubs (*Eucalyptus, Acacia, Casuarina, Leptospermum, Melaleuca*, and *Pittosporum*) have been planted. These are growing rapidly towards maturity. On the north-east corner of the campus about three hectares, covered mainly by stringybarks *Eucalyptus cinerea*, were set aside and enclosed for a reserve (Snake Gully), and an artificial lake was created in it.

The occurrence and status of all bird species found on the campus from November 1962 to August 1965 were noted and the results are given in Table I.

Because a regular census was not carried out, the results are incomplete. Some species which were recorded occasionally by sight may have been of regular occurrence (e.g. Nankeen Night Heron). The use of mist nests probably revealed other species which might have been missed (e.g. Rose Robin). However the

Key for Table I—Avifauna of Monash University campus

Status

VC = Regular in large numbers
C = Regular in small numbers
I = Irregular in variable numbers
R = Rare, only once
Br = Bred during study period
S = Only in summer
W = Only in winter

Area

A = All areas
B = Near buildings
E = Mature Eucalyptus
F = In flight over campus
O = Open areas
P = Plantations
PE = Exotic plantations
SG = Snake Gully
W = Wet waste areas

* Caught in mist nets

TABLE I

Species Recorded at Monash University

Species		Status	Area	1962	1963	1964	1965
Podiceps poliocephalus	Hoary-headed Grebe	C	SG			x	
Podiceps ruficollis	Little Grebe	C	SG		x		x
Phalacrocorax melanoleucos	Little Pied Cormorant	I	SG	x	x	x	x
Ardea novaehollandiae	White-faced Heron	C	SG,W	x	x	x	x
Nycticorax caledonicus	Nankeen Night Heron	R	SG		x		
Threskiornis molucca	White Ibis	I	SG,F		x	x	x
Anas superciliosa	Black Duck	C	SG		x	x	x
Accipiter fasciatus	Australian Goshawk	C,Br	SG		x		x
Haliastur sphenurus	Whistling Kite	R	F			x	
Elanus notatus	Black-shouldered Kite	C,Br	A	x	x	x	x
Falco cenchroides	Nankeen Kestrel	C,Br	A	x	x	x	x
Hypotaenidia philippensis	Banded Landrail	R	SG			x	
Lobibyx novaehollandiae	Spur-winged Plover	C,Br	O	x	x	x	x
Larus novaehollandiae	Silver Gull	C	SG	x	x	x	x
Neophema chrysostoma	Blue-winged Parrot	R	(Y)			x	
Kakatoe roseicapilla	Galah	I	O		x	x	x
Platycercus eximius	Eastern Rosella	C	P		x	x	x
Platycercus elegans	Crimson Rosella	R	E				x
Chalcites basalis	Horsfield Bronze Cuckoo	C,S,Br	P		x		x
Cuculus pallidus	Pallid Cuckoo	C,S	O,P		x	x	x
Ninox novaeseelandiae	Boobook Owl	C	A		x		x
Hirundapus caudacutus	Spine-tailed Swift	I,S	F		x	x	x
Halcyon sancta	Sacred Kingfisher	R	SG				x
Dacelo gigas	Laughing Kookaburra	C	A	x	x	x	x
Hirundo neoxena	Welcome Swallow	VC,Br	O,B	x	x	x	x
Coracina novaehollandiae	Black-faced Cuckoo-Shrike	C,W	O	x	x	x	x
Cisticola exilis	Cisticola	C,Br	W		x	x	x
Acanthiza nana	Little Thornbill	C,Br	P		x		x
Acanthiza chrysorrhoa	Yellow-tailed Thornbill	C,Br	P		x		x
Malurus cyaneus	Superb Blue Wren	C,Br	P	x	x	x	x
Petroica rosea	Rose Robin	R,W	P*				x
Petroica phoenicea	Flame Robin	C,W	O		x	x	x
Rhipidura fuliginosa	Grey Fantail	C,Br	P*	x	x	x	x
Rhipidura leucophrys	Willie Wagtail	C,Br	P*	x	x	x	x
Eopsaltria australis	Southern Yellow Robin	R,Br	SG			x	
Falcunculus frontatus	Eastern Shrike-Tit	C,Br	SG,P		x	x	x
Pachycephala pectoralis	Golden Whistler	R	P*				x
Zosterops lateralis	Silvereye	VC,Br	P	x	x	x	x
Meliphaga penicillata	White-plumed Honeyeater	VC,Br	SG,P	x	x	x	x
Meliphaga chrysops	Yellow-faced Honeyeater	R,W	P		x		x
Myzantha melanocephala	Noisy Miner	C,Br	SG	x	x	x	x
Anthochaera carunculata	Red Wattlebird	C,Br	SG				x
Grallina cyanoleuca	Magpie Lark	C,Br	A	x	x	x	x
Cracticus torquatus	Grey Butcherbird	R	P*		x		x
Gymnorhina hypoleuca	White-backed Magpie	C,Br	A	x	x	x	x
Corvus coronoides	Australian Raven	C,Br	A	x	x	x	x
	Introduced Species						
Streptopelia chinensis	Indian Turtle Dove	C,Br	P	x	x	x	x
Columba livia	Domestic Pigeon	VC,Br	A	x	x	x	x
Alauda arvensis	Skylark	C,Br	O	x	x	x	x
Turdus merula	Blackbird	VC,Br	P	x	x	x	x
Turdus philomela	Song Thrush	C,Br	PE	x	x	x	x
Chloris chloris	Greenfinch	C,Br	O,PE	x	x	x	x
Carduelis carduelis	Goldfinch	VC,Br	A	x	x	x	x
Passer domesticus	House Sparrow	VC,Br	A	x	x	x	x
Passer montanus	Tree Sparrow	C,Br	A	x	x	x	x
Sturnus vulgaris	Starling	VC,Br	A	x	x	x	x
Acridotheres tristis	Common Myna	C,Br	A	x	x	x	x

list of species in Table I is of interest as a record of the birds at Monash between 1962 and 1965, and of how their populations changed in the period.

In addition to the native species which normally breed in suburban areas (e.g. Magpie, Magpie Lark, White-plumed Honeyeater, and Silvereye) several others are known to have bred. The

Yellow Robin did so in 1963 but has since disappeared. The Fantail Warbler was abundant in 1963 but left in 1964 after its breeding ground had been drained and returned to an isolated corner in 1965. The Little Thornbill and Yellow-tailed Thornbill were not recorded as breeding species until 1964 but by 1965 they bred commonly in the new plantations. The Eastern Shrike-Tit bred only in Snake Gully in 1963 but by 1965 was breeding in several places including the new plantations. Clearly some breeding species have been lost to the campus while others have recently become established.

The information based on sight records indicates a similar trend. The Blue-winged Parrot was seen in heavy grass in 1963 but has not been recorded since. *Acanthiza* spp., Rose Robin, and Golden Whistler among others were not recorded till late in the study.

The changes have probably resulted from alteration of the habitat. The new plantations of native shrubbery have provided a habitat into which some native passerines have already moved and into which other species may move as the vegetation matures. Destruction of habitat for building or recreation with increasing urbanization may have permanently driven out some species. Further habitat changes will take place as the University grows and it is hoped that the avian population will be recorded continuously in future so that the effect of these changes may be known. At present the campus is a refuge for several species not commonly found in suburban areas; it may continue to be so and also attract more native species. The experience at Monash shows the practicality and importance of landscaping with native shrubbery in the conservation of Australian birds.

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