

## THE FAUNA CONSERVATION ACT AND SWIFLET PROTECTION IN QUEENSLAND.

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### ABSTRACT

*Northern white-rumped swiftlets are birds native to Australia, South East Asia and Western Pacific which roost and breed in caves. Classified as protected fauna under the Queensland Governments Fauna Act, all birds are protected both on and off National parks. Disturbance of birds by the casual visitor, mostly cavers, and by researchers has the potential to permanently disrupt colonies. Research into the birds biology is essential for management of colonies. Chillagoe National Parks and Wildlife field staff are monitoring all visits to Swiftlet colonies to determine the degree of disturbance.*

*The authors are devising guidelines for future visitors to follow when visiting a Swiftlet colony.*

### SWIFTLETS

The Northern white-rumped swiftlet, previously called the Grey swiftlet, occurs in a coastal belt extending from the tip of Cape York Peninsula to the Tropic of Capricorn. (Readers Digest 1983). The birds are fast flying, insect eaters which breed only in dark caves. They have an echo-location system - a system of "clicks" - which have only been recorded from birds in caves. The Australian birds occur solely in Queensland. The birds breed in caves and lay eggs in shallow scallop shaped nests made of sticks and saliva. The presence of a "narrow pale grey band on the rump appears dirty white in flight," gives the bird its name (Readers Digest 1983). Breeding is centered on the summer months and may extend over an eight month period.

### OCCURRENCE

National Parks where the bird breeds includes Dunk Island, Mt Spec, Chillagoe - Mungana, Finch Hatton Gorge, Barron Gorge, Mt Bartle Frere, Cape Tribulation, Palmerston National Park, Grey Peaks National Park and Mossman Gorge.

Other areas where the Swiftlet breeds include Tully River Gorge, Malbon Thompson Range, Bedarra Island, and Mitchell - Palmer caves. Broken River caves, Russell River Gorge, Downey Creek area, other Chillagoe caves. Swiftlet colonies at Chillagoe are the largest known in Queensland.

### FAUNA CONSERVATION ACT

The Fauna Conservation Act of 1985 provides varying levels of protection for most species native to Queensland. It classes Northern white rumped swiftlets as "protected fauna". Regulation and monitoring of activities affecting these animals or their habitat is achieved by a permit system. Permits are issued by the QNPWS Directorate of Field Operations in Brisbane after careful evaluation.

General speleo and related activities, especially during the lengthy breeding season, have the potential to inadvertently disrupt swiftlet populations.

In an effort to avoid such foreign disruption, a list of the known swiftlet colonies in the Chillagoe - Mungana area has been compiled so that speleological trips can be planned to bypass them. (Table I).

### DISTURBANCE OF BREEDING COLONIES

Disturbance to individual swiftlets or to their colony includes both natural and human factors. Potential factors affecting the birds survival both in and outside the cave includes those listed in Tables 2 and 3 on the following pages.

### CONCLUSION

The swiftlet in Queensland is protected by the Fauna Conservation Act both on and off National Parks. Prosecution of any visitor, be it a caver, researcher or member of the public can occur if "undue disturbance" is caused to the birds. Legitimate scientific study or observation of these birds can be carried out under a relevant permit issued by the Queensland National Parks and Wildlife Service. Techniques for visiting bird colonies are being scientifically devised.

These will ultimately be determined by the findings of observations made during every cave visit and by follow up inspections to disturbed colonies.

At the moment there are too many unknowns concerning the degree of disturbance colonies will tolerate. There is some indication the birds can partly adapt to limited disturbance.

Avoidance of nesting chambers, especially during the breeding, season is essential.

# CAVES (Karst, survey and management)

**TABLE 1 -  
CHILLAGOE - MUNGANA CAVES WITH SWIFTLETS COLONIES**

Cave Number	Name of Cave	Tower	On N.P.	Off N.P.
CH 5	Tower of London Cave	Tower of London	x	
CH 9	Royal Arch Cave	Royal Arch	x	
CH 26	Clam Cavern	Walkunders		x
CH 30	Stop Press Cave	Piano	x	
CH 46	Snakey Cavern	Royal Arch	x	
CH 52	Swiftlet Cave	Royal Arch	x	
CH 81	New Southlander Cave	Queenslander	x	
CH 124	Flow Cavern	Royal Arch	x	
CH 132	Pharoah's Tomb Cave	Royal Arch	x	
CH 133	But Good Cave	Royal Arch	x	
CH 138	Chinese Cavern	Con Tower		x
CH 144	Christmas Pot	Suicide		x
CH 146	Guano Pot	Suicide		x
CH 167	Crack Pot	Suicide		x
CH 169	Squeeze Pot	Suicide		x
CH 176	Capricorn Cave	Queenslander	x	
CH 187	Gordale Scar Pot	Spring	x	
CH 221	September Cave	Walkunder South		x
CH 227	Pope John Paul 1 Cave	Spring	x	
CH 306	Mudlark	Spring	x	
CH 312	Project 31	Moffat		x
CH 322	Swiftlet Scallops	Markham		x
CH 338*	Epiglotis Pot	Markham		x
CH 359	Pretty Small Cave	Royal Arch	x	
CH 361	Atlas Cave	Markham		x
CH 362	Hercules	Markham		x
CH 374	Swiftlet Scallops 2nd Entrance	Markham		x
CH 375*	Faces in the Sky	Markham		x
CH 379	Tarby's Swiftlet Pot	Spring	x	
CH 380	Golgotha	Tower of London	x	
CH 381	Swiftrimelt	Royal Arch	x	
CH 382	Otobeaswiftlet	Royal Arch	x	
CH 397	Shirls Triple Twirl	Royal Arch	x	
CH 398	Swiftlet Swallet	Markham		x

\*Possible swiftlet cave

**TABLE 2.**  
**NATURAL FACTORS AFFECTING BIRDS**

**(a) Internal Cave Environment**

<b>Factor</b>	<b>Effect on bird/s</b>	<b>Reason for Effect</b>
Snakes/Rats	Fear	Potential Predator
Climate (in cave)	Determines suitability for nesting/breeding	Special conditions needed

**(b) External Cave Environment**

<b>Factor</b>	<b>Effect on bird/s</b>	<b>Reason for Effect</b>
Climate (including rainfall)	Determines numbers in cave	Numbers determined by food availability
Thunder	Panic	Disrupts the cave environment
Lightning	Nil	Lightning unlikely to penetrate dark caves

**TABLE 3**  
**UN-NATURAL FACTORS AFFECTING BIRDS**

**(a) Internal Cave Environment**

<b>Factor</b>	<b>Effect on bird/s</b>	<b>Reason for Effect</b>
Visitor Lights	Panic	Intrusion, disrupts darkness
Noise (talking)	Panic	Intrusion, disrupts darkness
Visitor presence	Panic	Intrusion, potential predator
Bird handling	Stress	Potential injury, predator
Nest handling	Stress	Damage to nest
Egg removal	Stress	Intrusion, effort need for replacement
Bird removal (permanent)	Stress	Loss of mate and parent
Bird removal (temporary)	Stress	Confusion to mate and young
Mist netting	Stress	Potential injury
Photography	Stress	Intrusion, birds startled
Mining (outside cave)	Scattering or removal of birds	Loss of feeding and other roosting and breeding areas
Blasting (outside)	Scattering or depletion of birds, panic	Disturbance to home (noise), interfering with breeding
Confinement in a narrow area by visitors	Panic	Feel trapped, potential predator

**(b) External Cave Environment**

<b>Factor</b>	<b>Effect on bird/s</b>	<b>Reason for Effect</b>
Mining/Blasting (of caves)	Scattering, depletion of birds	Loss of home

## **CAVES (Karst, survey and management)**

### **ACKNOWLEDGMENTS**

Keith McDonnald and Buzz Symonds, Fauna Rangers from Townsville and Cairns, greatly assisted with information on the Fauna Act. The Chillagoe Caving Club assisted by offering criticism and by giving access to their many years of trip sheets. Jeanette Mombelli from Queensland National Parks and Wildlife Service, Cairns office greatly assisted with the typing.

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