The NORTH QUEENSLAND NATURALIST

CAIRNS

Journal of

NORTH QUEENSLAND NATURALISTS CLUB
Box 991, P.O.CAIRNS, Q.4870. Australia.
Phone 53 1183

Founder President: The late Dr. HUGO FLECKER
International Library No: AT ISSN 0078 1630

OBJECTS: The furtherance of the study of the various branches of Natural History and the preservation of our heritage of indigenous fauna and flora.

MEETINGS: Second Tuesday of each month at Cairns Education Centre, Cnr. Morehead and Lazarus Sts., Bungalow, 8.00 p.m.

FIELD DAYS: Sunday before meeting. Notice of place and time given in "Cairns Post".

SUBSCRIPTIONS: (Due September 30th)

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Vol. 44 No. 170 October, 1977 Price: 50¢

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Each author is responsible for the opinions and facts expressed in his or her article.

A SPECTACULAR SLUG

by PHILLIP H. COLMAN*

One of the most fascinating native molluscs in Australia is the slug (or slugs) of the genus Triboniophorus, family Athoracophoridae. The Scientific names are long, but the slugs are mostly beautiful, and perhaps more important, completely harmless in gardens. Imagine a brilliant scarlet slug about 3" long; or a deep yellow slug bordered by scarlet; or a subdued rose-coloured slug. Whether these colour forms are different species or geographical races of the one species is not known, hence the (or slugs) above. Until more specimens from all parts of its range are studied, we won't know this answer.

Triboniophorus is a slug with a large ecological distribution. Specimens have been collected from the beautiful but harsh environment of the Hawkesbury River sandstone country round Sydney, to the equally beautiful, harsh and windswept top of Thornton Peak, north of Mossman, Queensland, to the lush and warm rainforests of mid-Queensland.

However, they are hard to find! Take an area, mix some rain and cloud and cold weather, don the cold weather gear and go out to watch patiently for slugs to climb trees. We don't know exactly what they feed on but suspect it is the micro-algae that covers the trunks and leaves of plants and rocks, and possibly the rich breakdown fauna and flora of the forest floor. However, recent observations indicate that Triboniophorus may not be as secretive, or as uncommon, as it has so far appeared to be. The writer observed feeding trails not unlike scribble marks on the smooth trunks of the 'blackbutts' of northern New South Wales. At first these marks, scrape marks in a left-right, left-right pattern leading up the trunk, were thought to be patterns of former insect explorations. A closer look, however, showed they were feeding tracks of a mollusc. The pattern of individual scrapes suggested molluscs, and a long search under shedding bark on trees and subsoil cavities at trunk bases yielded several specimens of the slug. Feeding marks on trees were very prolific. It is probable that this slug is quite a common species, but because of its cryptic habits is rarely seen.

If readers can observe their local trees and look for unexplained scrape patterns on trunks, mark the trees, and watch during wet weather, they will probably find these colourful slugs. I was able to see these feeding marks quite easily on tree trunks while driving at 50 kph.

Malacologists at any of the Australian museums would be only too pleased to receive live specimens of these slugs. Preserved, they

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lose their characteristic colour patterns, and it is necessary to photograph dorsal and ventral surfaces and match individual specimens to photographs. To ship, it is essential not to give too moist an environment. Slightly damp dirt, wood shavings, or the rotten interior of logs is good. Place this in a well sealed tin, with the slug, and post. Collecting details should be supplied separately, as many slugs and snails have a disconcerting habit of eating paper labels.

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CONFIRMATION OF THE OCCURRENCE OF THE GHOST BAT Macroderma gigas, (CHIROPTERA : MEGADERMATIDAE) IN CAPE YORK PENINSULA, QUEENSLAND.

by B.J. Marlow * & W.E. Boles **

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The Australian Ghost Bat, Macroderma gigas is widely distributed in the tropical regions of Australia and details of its range in Western Australia are given by Douglas (1967) and in the Northern Territory by Parker (1973). While records of this bat from the Rockhampton district of Queensland are plentiful, there is a paucity of records from further north in Queensland and especially from Cape York Peninsula. Dwyer (1968) describes the discovery of isolated living specimens and mummified remains from four localities in the southern part of Cape York Peninsula in the vicinity of Chillagoe, Lappa Junction, Mount Carbine and Helenvale but no specimens seem to have been collected at the most northerly point - Helenvale. The only evidence of the existence of M. gigas there would appear to be the mummified carcase of this bat which was displayed in the bar of the local hotel "The Lion's Den".

It is now possible to confirm the occurrence of M. gigas at Helenvale, Cape York.

During an investigation of the fauna of rain forests in North Queensland being conducted jointly by The Australian Museum and The Queensland Museum, mist nets were erected in Dry Gallery Rain Forest fringing the Annan River about 2 km South of Helenvale Telegraph Office. The location of this site was 15°45'S 145°13'E and its altitude was 150 metres.

On the night of 28/29 November 1975 W. Boles captured five adult Macroderma gigas (3 ♂♂ + 2 ♀♀) in a mist net set parallel to the Annan River and about 15 metres from its bank. Three of these bats were liberated and two (1 ♂ + 1 ♀) were retained as spirit specimens in the collection of The Australian Museum.

The following data are referable to these specimens

Reg No.	Sex	Head & Body	Hindfoot	Ear	Forearm	Remarks
		mm	mm	mm	mm	
M10189	♂	101	28	48	102	Testes large
M10190	♀	107	25	48	102	Lactating

It was suggested by Dwyer (1968) that M. gigas, in the vicinity of Helenvale, would find adequate refuges in a large mass of granite boulders called "Black Mountain" situated about 5 km to the west.

The capture of these ghost bats confirms the existence of a colony in the vicinity of Helenvale in Cape York peninsula and corroborates Dwyer's suggestion that this bat exists in that locality.

The allocation of funds from the Australian Biological Resources Survey Interim Council to enable the Rain Forest Survey to be carried out is gratefully acknowledged.

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OLD MAN GOANNA

by ROZANNE GLAZEBROOK

Coming from Tasmania, I had seen the usual assortment of tiger snakes, copperhead and whip snakes, skinks and blue tongue lizards, but none of these thrilled me as did my first sighting of a sand goanna when on a trip to Cape York in September, 1975. He was enormous and very beautiful.

We camped at the Archer River, 40 miles north of Coen, and John had gone for a walk along the river bank. Suddenly he returned, very excited, and said he had seen a sand goanna. He rushed to get his camera. I grabbed the binoculars and set off after him.

The goanna was digging in the sand, and we approached very cautiously from the opposite side of the river bank. As we drew near, he stopped digging and climbed onto a large boulder behind him and sat there looking around. We sat quietly under a tree and waited. After a few minutes the goanna climbed down from the rock and went back to his hole to dig again.

He dug with his strong front claws, about five digs with one foot and then with the other. Occasionally he seemed to sense us, would stop digging, stand on his hind legs and gaze around. We remained very still and must have posed no threat, because he soon went back to work. We couldn't see clearly what he was doing, but every 5-10 minutes he would lift his head from the hole and gulp two or three times, as if he were swallowing something. We thought he may have been eating some sort of insect or eggs. I had read that goannas dig holes in which to lay their eggs, also in open country as burrows.

The gulping procedure was repeated four times in all. After 20 minutes our friend left the hole and walked slowly away over the sand dunes. We followed his tracks and soon came upon him sitting quietly on a log basking in the sun. We took some photos and left him undisturbed. The hole we found to be into the side of the sand bank, about $2\frac{1}{2}$ feet deep. He had made no attempt to cover it.

The sand goanna, Varanus gouldii, belongs to the family Varanidae. A common species of Australian goanna, he is found throughout the continent (not Tasmania), from the wet coastal areas to the desert. Size averages 3-4 feet, but may grow to 5 feet. Colour varies with habitat, from almost black in South West Australia, to a brightly coloured desert form.

Our Archer River goanna was approximately 3 feet long and blended beautifully with his sandy surroundings. He had strong muscular limbs, long sharp curved claws, and a powerful tail. His head was pointed and on his face was a dark streak, edged above and below with white, from the eye to the neck.

Unlike a skink, a goanna cannot regrow its tail. Goannas feed on insects, lizards, birds, mammals and snakes. A legendary plant, supposedly eaten by goannas to neutralize the snake venom, was immortalized in Banjo Paterson's poem, "Johnson's Antidote".

Other legends which surround the sand goanna are also very interesting. Goanna fat or oil is said to have incredible powers of penetration, it can even pass through glass. Bites inflicted by goannas mysteriously break out annually or every seven years. According to one legend, they never completely heal. This has been disproved, but bites may not heal properly because of secondary

infection caused by decayed food and bacteria in the wound from the animal's mouth.

The sand goanna rarely climbs trees, unlike his relation, the tree climbing goanna Varanus varius, unless as a means of escape when threatened. He can move extremely fast when he has to, is mild tempered, but can stage a terrifying bluff display by standing on hind legs, swelling his throat pouch and hissing at his opponent, shooting his forked tongue in and out.

Our goanna didn't seem to mind us. In his isolated habitat he probably had not been previously threatened by humans. With his tough leathery skin with scales lying up against one another, instead of overlapping like those of some other lizards and snakes, the goanna appears to be an ageless creature.

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THE ORIGIN OF GENERIC NAMES OF QUEENSLAND RAINFOREST TREES PART V

by JAMES A. BAINES.

Note: STCN = Standard Trade Common Name
PCN = Preferred Common Name (likely to become the standard name).

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Brassaia. This genus was not named after Banks' cllector William Brass (see Part IV), but after Prof. Samuel Brassai of Klausenburg, now Cluj, in Romania. (Brassia, a large genus of tropical American orchids, honours Wm. Brass, the African collector; because this name was already occupied, Dr. George Gillett used Lenbrassia to commemorate Leonard Brass of N.Q.).

Calophyllum. Gk kalos, beautiful; phyllon, leaf. N.Q. species are C. inophyllum, Satin Touriga, Alexandrian Laurel or STCN Beach Calophyllum; C. australianum, STCN Blush Touriga or Pink Touriga; and C. costatum, STCN Red Touriga or Satin Mahogany. Fam. Guttiferae.

Canarium. Francis gives the derivation as 'from Canari, a Malayan name', but there is no C in the Malay language. Several species, from which fragrant resins are obtained, are native to India and the generic name could have come from Kanara, a district in Mysore State. Q. species include C. australasicum (see Bursera, Part IV), STCN Brown Cudgerie; and C. muelleri, STCN Scrub Turpentine or Q. Elemi Tree, elemi being the name of the resin. C. commune is called Kanari Nut or Pili Nut in the Phillipines.

Canthium. From Kanti (spelt Canti by Bailey), the name of one species in Malabar; a species native to India and Sri Lanka is known as Ceylon Boxwood. Two species are listed by Francis. Fam. Rubiaceae.

Capparis. Greco-Latin name for the Caper-bush, C. Spinosa (from Perso-Arabic kabar), capers being the pickled flower buds of this plant. C. arborea, Native Pomegranate, is a N.Q. species

reaching small tree height, as does C. mitchellii, Native Orange, of the dry inland. Fam. Capparidaceae.

Cardwellia. Named by Mueller in 1865 after Edward Cardwell (1813 - 1886), Secretary for the Colonies, 1864 - 6, during which time he ended transportation of convicts; he became Viscount Cardwell of Ellerbeck in 1874. C. sublimis, Northern Silky Oak (called also Gold Spangled Wood in Bailey), is a monotypic species, endemic in n.e. Q. Fam. Proteaceae.

Cargillia. Named by Robert Brown after James Cargill (flor. 1603), a medical man of Aberdeen. He studied at Basle under Caspar Bauhin (after whom the genus Bauhinia was named) and wrote on algae. C. australis is now in Diospyros, related to Myrtle Ebony of Q. and to true Ebony. Fam. Ebenaceae.

Carnarvonia. Named by Mueller after Henry Howard Molyneux Herbert, 4th Earl of Carnarvon (1831 - 1890), Under-Secretary and then Secretary for the Colonies between 1858 and 1874. His title comes from Carnarvon, Wales (in Welsh, Caer-yn-Arfon). C. araliifolia, Red Oak or STCN Caledonian Oak, is monotypic, endemic in n.e. Q. Fam. Proteaceae.

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TWO UNUSUAL BIRD SIGHTINGS

by ROY WHEELER, Melbourne, Vic.

During a visit to North Queensland by Mrs. Wheeler and me in Oct. - Nov. 1976, I made two rather unusual bird observations. The first was on the Esplanade at Cairns on October 26. That day, after a trip to Port Douglas, Mossman Gorge National Park and Hartleys Creek with members of the N.Q. Naturalists Club, I was sitting on a seat on the Esplanade opposite our motel and taking grass seeds out of my socks when I noticed a strangely coloured bird feeding in the mud on the tidal flat. At first sight it looked like a small egret which had mud thrown over it. I returned to the motel for my binoculars and found that the dark patches on the bird were dark grey feathers. It was after 6 p.m. and starting to get dark and I wrote down as much detail as possible, because in many cases of such sightings the bird is not seen again. The mainly white bird was about the size of a Plumed Egret but the colour of the bill was different as was the shape. The dark coloured feathers were on the back, under the wings, on the neck and head, giving the bird a most piebald appearance. The back feathers hung as plumes over the wings and sides and had a rusty colour about them. That evening I contacted Bill Felton, John Crowhurst and others, and the following evening we all saw the bird on the Esplanade in exactly the same place. In our discussion later, we found that books did refer to the Reef Heron at times appearing in a spotted plumage. Peter Slater in "A Field Guide to Australian Birds", page 218, under Reef Heron states: "Medium sized heron, all white, or all grey, or

spotted grey and white." In "Birds of South-West Asia", this spotted appearance is also mentioned. None of the observers in Cairns had seen a Reef Heron in this plumage before and I imagine it is somewhat rare. My grateful thanks to the members of the N.Q.N.C. for their help in solving the problem.

Second unusual sighting in next issue.

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FULL ALERT FOR THE GIANT AFRICAN LAND SNAIL!

On 23rd April, 1977, Mr. Clyde Coleman, President of this Club, sent me a large specimen of a land snail for identification. It turned out to be a specimen of Achatina fulica Bowditch, the Giant African Land Snail, and it came from a residence at Gordonvale, some 20km south of Cairns. This introduced species has the possible potential to cause as much damage, in terms of crop loss and environmental damage, as the rabbit, although it would be restricted in its spread to the higher rainfall areas and temperature zones of Australia. It has so far colonised much of the Indo-Pacific region.

The original specimen that I received was collected by the Hardwick children, students at Aloomba school, who had visited Gordonvale. Thanks to their curiosity and to the concerned interest of their teacher, Mr. Bill McClintock, the specimen was given to Mr. Coleman and thus forwarded to me in Sydney. I immediately rang the alarm bells to quarantine officers in Sydney, Brisbane and Canberra, and within an hour Cairns officials were on their way to the site. Since that day everything possible has been done to eradicate this outbreak, and so far results have been very promising.

We may ask how or when this species was able to get to Gordonvale. The answer is probably lost. However, the lesson learnt is that the inquiring mind of a school child may have saved this country millions of dollars in crops lost, plus an equal saving in value to our native forests. It shows us yet again that the non-professional man-in-the-street can add immeasurably to our knowledge if he or she is prepared to observe, compare, and communicate with those in a position to act, be they Quarantine, CSIRO or Agricultural Department officers, museum personnel, or your friendly local naturalist.

By Phillip H. Colman, Dept. of Malacology, Australian Museum, Sydney.

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NOTE: Annual subscriptions now due... Thank you!