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**THE**  
**NORTH QUEENSLAND**  
**NATURALIST**

CAIRNS

Journal of

**NORTH QUEENSLAND NATURALISTS CLUB**

Founder, Presd. The late Dr. HUGO FLECKER

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

ADDRESS — Box 991, P.O. CAIRNS.  
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MEETINGS - Second Tuesday of each month at Oddfellows Hall, Lake St., 8p.m.  
FIELD DAYS - Sunday before meeting. Notice of place and time given in "Cairns Post."

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

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Club Officers -- September 30, 1969 to September 30, 1970.

President: A. J. CASSELS, Esq.

Hon. Secretary: Mrs. M. L. CASSELS. Hon. Treasurer: Mr. W. Huddy.

Editor: Miss J. MORRIS.

PATRON - We are pleased to announce that Mr. S. E. (Ernie) Stephens has accepted the position of patron of our Club.

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## **BOOK REVIEW**

"COMMON AUSTRALIAN BIRDS OF TOWNS AND GARDENS" by Graeme Chapman, published by Lansdowne Press Pty. Ltd., price \$2. 95.

As stated on the dust jacket, "This book will enable the reader to identify many of the common birds seen around the towns, cities and gardens of Australia. It also provides the amateur bird-watcher and student with an excellent introductory guide to the study of Australian birds and their habits." Included is a section on the structure of birds, and advice on how to attract birds to the suburban gardens. The author is a trained ornithologist and photographer, and the book is amply illustrated with diagrams and many black and white photographs supplementing the sixty-four colour plates. A distribution table shows the capital cities in which the birds described may be seen. Also a list is given of societies and organisations for the bird-lover, including the N. Q. N. C.

K. J. M.

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## **POT POURRI**

FLYING FOXES. I once watched for an hour as hundreds of flying foxes came to drink at a tank on a Peninsula cattle station. Flying foxes always drink on the wing; they dart down and skim along the surface of the water, just causing a small ripple. Never once was there a collision as all the foxes flew in from the same direction and none turned back, but they were so thick that by the time they had finished the air was "stinking" with their strong smell.

Stanley H. Boyd.

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## **BIRD NOTES.**

Recently whilst watching birds on the foreshores my husband and I were surprised and pleased to see five cattle egrets in breeding plumage standing in their characteristic hunched up position in the mud. Cattle egrets in breeding plumage have also been reported up at Daintree this month (November).

Marion Cassels.

## THE AUSTRALIAN HERCULES MOTH

Coscinocera hercules (Family Saturnidae)

The Australian Hercules Moth, found in North Queensland and in New Guinea, is one of the world's most spectacular moths. The male has a wingspan of approximately eight inches and long slender tails, as shown in photograph. The female is much larger with a wingspan of ten to eleven inches and with short tails broader than the male. Both are brown in colour with clear prominent triangular-shaped eyespots on all four wings.

The young larva is white and spiny, and after fourth instar becomes greenish with yellow spines. The caterpillars feed on several rainforest trees, including Polyscias (Panax) elegans or Celery Wood: Homalanthus, known as Bleeding Heart; Glochidion; Timonius rumphii; and Dysoxylum.

The cocoon is spun with a tough silken thread with leaves drawn together and when hanging in a tree looks like dried leaves. In photograph, the moth is hanging on the cocoon.

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The following is an account of my experience in raising the Coscinocera hercules moth from egg to adult insect in a flat in Cairns.

After coming to Cairns especially to obtain this well known moth, I heard that difficulties had been experienced in raising it, and was curious to find out the reason why!

On August 24, 1969, I finally obtained a female, with the help of a young member of the North Queensland Naturalists' Club. My friend-climbed a very slender tree about 25 feet up where a pair was mating. As he tried to break the branch off the tree, the male let go and glided down and away into the valley where we lost sight of him; but my friend grabbed the female and stunned her, so as to drop her down to me. I quickly picked her up and held on to her to prevent her damaging herself as she was a beautiful specimen. I held on to her for four hours and on the way home she laid one egg.

During that evening the moth rested in a box with netting over it. At 11 p. m. she started to quiver her wings, so I held her while another friend held strips of cardboard under her abdomen on which to lay her eggs. She laid 26 eggs that night. I left the lights on all night and keep waking up to check that she was resting well in her box. Early morning she laid 19 eggs and rested all day till late evening and then laid 48 more. Another night with lights on and in early morning she laid 52 more, making a total of 145 eggs. Then I decided to put her to sleep as she had done her task well.

Within the next ten days I had planted the eggs out in different areas on Polyscias, Homalanthus, and Glochidion in lowland rain forests. I kept four and cut one open and found a small larva in it. So they were fertile!

On September 5th, I discovered the first egg had hatched. What excitement! I placed fresh Glochidion leaves in a bottle of water and moistened the leaves. The tiny white spiny caterpillar crawled onto the new leaves and wandered around till it found some moisture. It drank the moisture three times, then chewed a piece of leaf and wandered again. I covered the whole branch in a big plastic bag with lots of moisture for the night. Next day two more eggs hatched. These two caterpillars were just resting and drinking

moisture off and one, while the first one was eating more now but still drinking also. Next day fresh leaves and moisture were put in the bag.

I brought back four caterpillars that were on Glochidion and noted they were not eating, so gave them moisture and they drank some.

On September 8th, I brought five more caterpillars back and found two others had been eaten by green ants and two had dried up through lack of water. Immediately these five were given moisture and fresh leaves, and they drank first and one could actually see them expanding. Next day I collected some more and found a number of others dried up. So now I had 15 little white spiny caterpillars.

Next day, at another area, I found two caterpillars eating on Polyscias and two eating on Homalanthus, some not eating as they had not enough moisture, also some dried up. I brought them all back, gave them fresh leaves and dampened down for the night. I now had 32 caterpillars altogether.

On September 11th, one had already shed its skin (instar) and the rest were coming along well. The next few days they were given fresh leaves and plenty of moisture, and seven were lost. On September 15th, the 25 were doing well and another one was losing its skin.

On September 17th, the caterpillars were put on small trees. Some were lost in the instar stage and I found a wasp larva on another. What a job!

On September 19th, five more were lost as they seemed to be very sensitive. The first caterpillar had now done two instars. Next day, only ten were left, and were given fresh leaves and moisture. On September 21st, five remained and seemed to be doing well, and were given fresh leaves.

On September 23rd, the one on Polyscias had another instar. I now had three caterpillars, and gave them fresh leaves with moisture. On September 25th, another caterpillar was found, so I now had two on Glochidion and two on Polyscias and in another instar. I noted they were turning a greenish colour in the fourth state.

Every day they were checked and every other day given fresh leaves, and all dampened well each day with a plastic bag over them.

On October 6th, one died on the Glochidion but the rest seemed fine.

On October 8th, another instar.

On October 12th, the other one on Glochidion died, so only two caterpillars on Polyscias were left, but both were huge and doing well. Each day they were checked and given moisture and new leaves every other day.

On October 24th, one went into instar.

On October 27th, the other one went into instar also. They were now over three inches in length and both eating voraciously. Fresh leaves were then given every five days and well moistened.

On November 12th, one was spinning a cocoon.

On November 16th, the other one was spinning also, but was having trouble and it died later in the evening. So I was left with one cocoon!

On February 21st, 1970, at 7 a. m. there emerged a beautiful male specimen with an eight inch wingspan, successfully raised in a flat.

(I gratefully acknowledge the help given by the following members of the North Queensland Naturalists' Club:

1. Peter Cassels - help in capturing the female moth.
2. Dr. Leonard J. Brass, Botanist - identification of food plants and transportation. )

R. Parrott.



Larva of Hercules Moth.



Male Hercules Moth,  
Coscinocera hercules  
(Family Saturnidae).

## VALE-----ALF READ

With the passing of Alfred Arthur Read on June 30 last, not only the Naturalists Club, but the whole of North Queensland, lost an indefatigable worker for Northern interests.

Born in Bendigo, Victoria, in 1894, "Alf" had a lifelong interest in natural history, and once told the writer that this dated from the time when, neatly attired in the fashion of the nineties - wide-brimmed sailor hat with flowing ribbons and thigh-length black stockings - he fell overboard from the family flattie whilst attempting to add to his already profuse collection of yabbies.

He added: "That was when I learned (after a hefty dose of parental discipline) the cardinal rule of Nature study: 'Patience in all things' when studying wildlife, whether it be furred, feathered, or finned".

A childhood begun in Victoria and continued in Western Australia was followed by a journey through all the mainland States. When he settled in Cairns in the early thirties, he brought to the North a wide knowledge of Natural History accumulated by practical observation during his travels.

Specialising in conchology and having a good general knowledge of marine biology, he became associated with the "Nats" shortly after its foundation, and worked in close co-operation with its founder, Dr. Hugo Flecker, in building the Club to the status which it enjoys today. He followed Dr. Flecker as President, and held this office for a record term of fourteen years.

During the war he served with the C. M. F. on full time duty, and on his discharge was engaged by the C. R. E. B. as a draughtsman, a position he held until his retirement in 1959.

With his wife, Alison (herself a competent malacologist and a recognised expert on the shells of North Queensland), he founded the original "House of Ten Thousand Shells" - the fruits of his wide collecting on the Barrier Reef and when this was on display at his home in Grove Street, "Coraline" became a meeting-place for conchologists from all over the world.

Alf was one of the pioneers of "stinger research" in Cairns, and in 1958 made "Operation Chironex" the Club's project of the year. At this time very little was known regarding the "stinger", and although the investigation has been brought to a successful conclusion by others, it must never be forgotten that it was Alf - and the club members inspired by him - who initiated the investigation. Whilst advancing this project, he was instrumental in providing the first direct short-wave radio communication between Ellis Beach and the Q. A. T. B. centre in Cairns.

Although giving unsparingly of his time to the Club, Alf also had other interests. He was an executive committee member of the Cairns Show Association for many years and was awarded a Life Membership of the Association shortly before his death.

Amongst the many other honours which came his way during his long lifetime, (he was an Honorary Magistrate and held high office in several Fraternal orders), the one he valued most was his Life Membership of the "Nats".

Even in retirement and with failing health, he could not abandon his interest in marine life, and acquired a collection of crustaceans which has already attracted the attention of the Australian Museum.

An outgoing soul - always the giver and seldom the taker, his friends remember with affection one of whom it was once said "You feel a better man just for having known him"..... J. O.

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## **AN AMERICAN REMEMBRANCE**

Dr. Sheldon Miller, M. D., of Merrick in New York State, never met our late Past President, but they had corresponded over a period of many years.

On receiving the sad news of Mr. Read's passing he decided to commemorate his friend in a practical way. As a result, the Merrick High School is to receive a microscope inscribed "In memory of Alfred A. Read of Cairns, Australia. Naturalist". This will be the personal gift of Dr. Miller.

In addition the family - Dr. Miller's wife and three teen-age children - have set aside a sum of money to be divided equally between the American Heart Foundation and the Blue Nursing Service, Cairns.

-Again "In Memory of Alfred Read - Naturalist".

• A fine gesture, and an indication of the esteem in which our late Past President was held overseas.

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## **QUEENSLAND PIGMY POSSUMS**

While on nature study outings on the Atherton Tableland, I have several times disturbed specimens of a very small possum-like animal from their retreats. On three of these encounters, the light and distance allowed observance of colour and detail sufficient to convince me that, in these instances, a species of pigmy possum had been seen, and in one case examined in hand.

The first clearly seen animal was disturbed by my brushing past a clump of ferns on one end of a large rotten log. What seemed at first sight to be a rat ran from the ferns to the other end of the log, about 14 feet away, and sat up facing me. By carefully moving away from the log but closer to the animal, I managed to get some details of its form and colour.

**Description:** Body length about 4 inches, with tail of about equal length. Snout grey or light brown, very sharp. Ears large and round. Eyes seemed black and bright and were surrounded by a patch of black fur. Top and sides of head, back and sides of body, deep brown; underparts from lower lip to lower abdomen, white. The tail, held at a slight curve behind the body, seemed fuzzy as though covered with fine hair. Feet could not be seen, but the hands, which were held close to the chest, were yellowish and seemed disproportionately large.

After a short time the animal ran back along the log to the fern clump, and I was able to see that part of the tail under the tip seemed bare.

I tried to approach the fern clump for a closer view of this little creature, but it ran out of the ferns, sprang to the trunk of a small tree near the log and quickly vanished in the foliage. On investigation, the fern clump was found to contain a large ball of dead leaves and fern fronds, about 7 inches by 6 inches, with a 2 inch hole at one end. This was opened slightly but was unoccupied.

This specimen was in heavy rainforest on volcanic soil at an elevation of about 2500 feet.

The second specimen was found in a tall rotten stump. When a large piece of the dead wood was broken away, a ball of dead and partly green leaves rolled out and a small rat-like animal jumped from this and tried to hide under the debris at the side of the stump. I quickly had this specimen in a large jar and during the next hour a few fellow naturalists and I examined it closely. Due to its persisting in rolling itself into a ball with the head pressed close to the abdomen, it had to be taken in the hand for better inspection. It made no attempt to bite but gave out a sound like a low, hissing purr.

It was a female marsupial with a very small pouch opening, and by the feel of the pouch, was carrying young.

Description: Body length about 4 inches, with the tail about  $\frac{1}{2}$  an inch longer. Tip of snout pale red, snout very slender with short greyish-brown bristles pointing back at an acute angle. Upper surfact of snout to mid-face, grey; face, head, back and sides, dark brown blending to white on lower sides and abdomen; underparts from lower lip to base of tail, white. Eyes bright, black, in black fur patch. Ears large and almost round, grey, blending to brown on head. Hands large, for so small an animal; claws sharp. Feet large, big toe without claw, toes 2 and 3 joined closely together to top joint with the two claws very close, almost touching each other. Hands and feet yellowish. Tail slender and tapering, with fine fur throughout length on top and sides, bare underneath for about 1 inch of tip and relatively bare underneath for most of its length. Top and sides of tail with very fine bristles giving a slight brushy appearance. Tail very prehensile, proved by trying with finger. The animal supported its weight by the tail with only a part turn of the tail around a finger.

About  $1\frac{1}{2}$  hours after capture the animal was released in a tree near its nest site. This specimen was found in an area less than half a mile from where the first specimen was seen, in heavy rainforest on volcanic soil.

The third specimen was disturbed in an area of open casuarina and eucalypt forest near moderately dense rainforest. Some flitches and bark had been thrown into a rough heap during sleeper cutting, and when this was turned over in search of beetles, a small animal ran out from the pile to a nearby tree up which it climbed with speed to the first fork, about 17 to 18 feet-high. It remained in the fork long enough for me to examine it with binoculars. As the day was fine and sunny, the details of this little animal showed out clearly. A dark patch on the lower abdomen indicated a pouch. Other details of colour and form showed a close resemblance to the first two descriptions.

The animal later climbed much higher in the tree among the fine foliage.

Short notes taken on these three occasions were compared with Ellis Troughton's book, "Furred Animals of Australia", and I believe the animals were all one species, Eudromicia macrura.