

THE GRANITE BELT NATURALIST

Monthly Newsletter of the Stanthorpe Field Naturalist Club.

No. 14

March 1971

P.O. Box 154, Stanthorpe

Officers and Committee 1970 - 1971

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Activities

Meetings	4th Wednesday of each month C.W.A. Rooms 8 p.m.
Field Outing	Sunday preceeding 4th Wednesday

Annual Subscription

Single \$1.00

Family \$1.50

Programme

Field Outings

<u>Place</u>	<u>Date</u>	<u>Leader</u>
Dr. Dark's Property	21st March	F. Wilkinson
Tenterfield Area	18th April	P. Ingram
Mystery Weekend Campout	23rd May	E. Walker
South Bald Rock	20th June	John Harslett
Nundubbermere	25th July	Jean Harslett
Red Rock Gorge	22nd August	to be arranged

Meetings

<u>Subject</u>	<u>Date</u>	<u>Speaker</u>
Granite Belt Insects	24th March	Jean Harslett
Birds	28th April	To be arranged by T. Chapman
Film Evening	26th May	B. Masters (Wck. Travel C)
Fungi or Australian Animals	23rd June	to be arranged
Selection of Slides	28th July	Annual General Meeting.

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Report on Field Outing to Dr. Robert's Waterhole

General Report

Approximately 30 people of all ages attended the outing which, while it did not rain appreciably, provided plenty of water and mud to lubricate the track. The car convoy left the park at 9.20 am. One hour and twenty minutes later we were still building the road to our destination.

The mud-spattered cars were left at the National Park boundary and, equipped with raincoats, the party set off upstream along Bald Rock creek past Dr. Robert's Waterhole to an area of granite outcrop where the creek disappears underground for quite a length. Exploring the underground passages proved quite impossible owing to the capacity volume of water flowing after recent cyclonic rains. Nevertheless the party explored the immediate vicinity and watched the rushing brown foaming torrent as it continued its ceaseless effort to carve its image into granite gutters eight to ten feet deep.

A volcanic dyke running at right angles to the stream was quite pronounced and had a few people guessing as to its geological origin. A dyke is a fine grained rock which intruded into cracks in the original granite and this intruded rock may be either harder or softer than the surrounding terrain. If the material of the dyke is harder, then weathering will leave the dyke as a ridge above the surrounding terrain, if the reverse applies a depression will be the end result.

Several ladies volunteered to mind the younger members of the party while the rest of us walked a quarter mile to wonder at the towering spires and balancing granite boulders of the "Aztec Temple". We then returned to the cars for lunch where we met some late-comers and discussed what should be done with the remainder of the afternoon.

Five of the more adventurous found pleasure in pushing through thick prickly scrub, down slippery cliff lines into gorges of frothing cascading water. The Wyberba Falls were rediscovered and the spectacle of a thirty foot waterhole in full flood followed by a seething cascade some 200 ft long finishing in a "jump-up" will long be remembered.

Those who did not go scrub pushing actively engaged themselves in the rather unenviable pastime of extricating a car (one of our own members) from an axle deep bog in the middle of the road. We were indeed fortunate to have fine weather when one considers the presence of cyclonic rains both before and after the date set for the trip.

Botanical Notes.

The rather abnormally wet conditions have replenished swampy areas and on this particular outing we saw some of the interesting swamp plants. Because of the very wet conditions under which these plants thrive they have to overcome the lack of nitrogen available to them. This is done in a most ingenious manner. Firstly we noted the large white flowers of the

Botanical Notes cont'd

Forked Sundew, Drosera binata; the species belonging to this group are sometimes referred to as Flypaper Traps which describes quite well the method of catching insects. They have sticky leaves and active tentacles along these which enfold the prey. A Number of kinds of insects are caught. Over a period of days the soluble matter of the insect is reduced to fluid and absorbed by the plant. As if this is not sufficiently remarkable there is yet another wonderful association. One insect, an assassin bug, coloured green with red spots to camouflage with its host, lives on and moves about the leaves quite immune to the stickiness; indeed they themselves feed on the insects the plant has already caught. This insect appears to be rather ungracious and does not offer any service in return to the plant for providing its livelihood with so little effort.

We also saw in the swamp the small vivid purple Bladderworts perhaps more attractively named by some as Fairy Aprons, Utricularia species. These plants grow under really boggy conditions and again require additional nitrogen. Nature provides the remedy by providing the plant with underwater traps to capture small water insects such as mosquito larvae etc. Sometimes they are referred to as the suction traps. Sensitive hairs open at the mouth of the cup, allowing extra water to rush in and so carry the insect in with it - never to be heard of again.

Another plant we noticed enjoying these very wet conditions was a bright orange fungus growing in a cluster and somewhat coral-like in form. This is Ulocolla foliacea. Daviesia latifolia was present showing very colourful tips.

Reference should be made too, I think to the Paperbarks whose normally silver-white limbs were displaying a golden brown for about eight feet above the present rather high water level suggesting that they had been buffeted by even higher flood water which had removed the outside white bark.

Specimens of the robust Hakea propinqua were seen. This grows into a tree 15-20ft high, very erect, with particularly rigid and needle-like foliage. The seed vessels are also quite large and handsome.

Another member found some of the handsome flowers of the Red Bean, Kennedia rubicunda. The flowers are grouped and are long swinging pea-like flowers with brownish markings. Each flower is fully an inch in length.

Correa reflexa with its green bells was seen. This is sometimes called Native Fuchsia, however this is rather confusing as the same name is given to some of the Bell Heaths. It is perhaps surprising to learn that the Correas are closely related to the Boronia.

Report of Monthly Meeting held on 24th February, 1971

The Secretary reported that newsletters have been received from the following clubs:-

Report on Monthly Meeting cont'd

1. Bundaberg - Maryborough
2. Richmond Valley
3. Queensland's Nats. Club.
4. Toowoomba Field Nats.

also a letter re. a school on Australian Reptiles to be held at Lismore.

The President in his report outlined meetings and outings for the next six months arranged at a committee meeting. (See lists on page 1.)

In general business the state of the club's finances was discussed and it was agreed that each member would be asked to pay 30c. to cover cost of postage on the magazine.

Mr. I. Gall and Mr. D. Fleary were to be written to about the possibility of reproducing their articles in our magazine.

Samples of rock from the Mt. Isa and Mary Kathleen areas were brought along by Mr. Maurice Passmore who was able to tell us much about them.

Mrs. J. Harslett introduced the guest speaker Mr. P. Grant who, with his wife had travelled from Kingsthorpe to present an illustrated talk on Galls to the club. This was much enjoyed by all present. (See first part of write-up under contributions. Ed.)

P.S. A few notes which may be of interest to readers on the rock samples brought to the meeting by M. Passmore from the Mount Isa and Mary Kathleen areas.

Cambrian fossils of the Beetle Creek formation.

Trilobites - approximately five hundred and fifty million years old - one of the earliest forms of life.

Samples of Belemnoites and Brachiopods approximately one hundred and thirty million years old.

Mary Kathleen Uranium ore through which fine grained uranium is dispersed - this contains approx. 3lbs uranium to the ton, plus other rare earth minerals which may become of major significance in the future mining of the field.

Among the "odd crystals" samples were some of Calcite, Tourmaline (showing the host schist) blue quartz and Hematite (iron oxide retaining the original cubic form of Pyrite).

We were also shown copper and lead ores with some of their associated minerals such as Pyrite, Pyrohotile and Tuffaceous Marker Bed.

Thank you very much Maurice.

Contributions

GALLS - by kind permission of Mr. P. Grant.

In nature one of the prime requisites for concealment is to remain still, which is perhaps one reason why galls so often pass unnoticed. This is something of a pity because this odd but highly specialised association of plant and insect life is a most interesting one with wide scope for some original research.

Almost any tree or shrub can attract gall makers though the high proportion of Acacias and Eucalypts in the Australian flora make these the most commonly attacked. Casuarinas are also well patronised though mostly by a somewhat specialised group the Coccids which produce a strikingly regular shape gall. The irregular or "lumpy" type Eucalypt gall is usually the work of tiny wasps of the Chalcidoid group, while Thysanoptera which includes members of the thrip family are responsible for the rust coloured galls on Acacias, although these galls often become infected by a number of different insects. The original gall is often used to provide a ready-made food supply for a second species and both of these can be in turn invaded by yet another group which is parasitic on both of the previous inhabitants.

Infestation is by means of eggs deposited either through a tubular ovipositor or in a slit cut by a saw-like appendage similar to that used by the saw-fly, though of course a great deal smaller. This action triggers the abnormal growth in the plant tissues to become a community gall which enlarges as the embryos hatch and begin to feed.

The Coccid family mentioned previously have a somewhat different life-cycle in which individuals occupy each a separate gall of characteristic shape. The genus *Apiomorpha* contains a number of species, the females of which retain their shape while the gall enlarges to accommodate its growing occupant; the males remain small and remarkably alike even in the different species. Usually associated with Eucalypts this group contains *Apiomorpha duplex* which is thought to be the largest known gall insect. The gall can attain a length of six inches or so and contain a female as large as one's finger.

Cylindrococcus lives on the Casuarinas and produces a highly complex gall of such uniform pattern that it rivals the plants normal fruit and at times is even more prolific.

To be continued in the next edition.

The Recent Location of a Tailor Bird's Nest in the Stanthorpe District.

The Tailor Bird - *Cisticola excilis* is one of our smallest Australian birds, being only about four inches in full length. Because of its small size and modest colouring it is rarely seen. It is difficult to obtain a good view of a specimen in the field as it is a relatively silent bird with weak powers of flight and is confined to areas of thick cover which

Tailor Bird's Nest cont'd

it forsakes only for short distances. However during the breeding season these birds possess an unusual call - a small buzzing note - which is quite distinctive. They also develop a golden tint to the crown and grow a noticeably longer tail.

This diminutive and rather dull coloured bird makes up for its lack of personal glamour by the artistic construction of its nest. In this particular case a nest was constructed in the head of a stick of celery, but despite a concentrated search it was not located until harvested and even then the tiny nest was not seen, but an egg was found on the ground, apparently tipped out of the nest when the stick was trimmed. A fortnight later it again appeared to have a nest in the celery so a special effort was made to locate it and to watch for the nest. In the last half dozen sticks of an area of about 40,000 plants the nest was seen - just by chance - so this time fortune favoured it.

The Tailor Birds are related to the Asian and African birds of the same name and are so called because into their delicate silky nest they "sew" live leaves with cobweb. This not only provides excellent camouflage but reinforcement to the fragile silky structure. This nest contained two tiny blue green eggs lightly blotched with brown colouring. The eggs are noticeably smaller than a cent piece.

These birds enjoy swampy areas with dense cover and, indeed, probably found a crop of celery the conditions they prefer. They have also been recorded from rice fields in Northern Australia.

Details of Field Outing to Dr. Dark's Property.

Sunday 21st. March. Leader Frank Wilkinson

Assemble at Park 9.30 am.

Go through Border Gate on Amosfield Road.
At Amosfield go south along Tenterfield Road for $4\frac{1}{2}$ miles.
Cross Murson Creek and go through property gate on left about $\frac{1}{4}$ mile after crossing the creek.
Follow track to house. Notices will be put up at appropriate places.

Fossicking, bird-watching in the rain-forest and the possibility of seeing some wild flowers as well as walks to admire the beautiful views should make an enjoyable outing for all ages, and interests.

Wear stout shoes or boots and have with you all the needful items for fossicking.