Excursion to Mt Edwards, Easter, 1934.

Geological Notes.

By E. O. Marks, M.D., B.A., B.E.

From the geologist's point of view the residents of most of the other Australian capitals must be envious of the great variety of geological structures and problems within reach of Brisbane. Of the many interesting localities, the Passiflora district is one of the most attractive, whether it be for the study of the divers and diverse igneous rocks and of the vulcanicity which they represent, or for the investigation of questions relating to the development of the beautiful varied scenery, as well as the striking escarpment of the Main Range.

The camp site at the entrance to the Mt. Edwards Gorge was well situated for the geologist, but it was a matter of very keen regret to the present writer that his ambulatory powers did not permit of taking full advantage of the opportunity which the trip offered. These notes, in consequence, are a general impression and do not represent new observations.

While there are marine strata of Carboniferous age at Mt. Barney, the oldest rocks in the vicinity of Mt. Edwards are the sandstones and shales which Mr. J. H. Reid, of the Geological Survey, has shown to belong to the Walloon (Jurassic) series constituting the coal measures of Rose-
lected on the excursion by Miss Carrick were commented on by Mr. H. Tryon. A general account of the geology of the district was given by Dr. E. O. Marks. Mr. J. Nebe showed an excellent series of lantern slides made from photographs taken on the Mount Mee excursion. A grasshopper collected on the excursion by Dr. Malaher was commented on by Mr. H. Tryon.

The President introduced Mr. Howie, President of the Mitcham N., who was a visitor to Q. One of the wonderful bums of photographs to i-lecting and collecting and was given by Mr. F. A. P. under Section 55 of Copyright Act 1938 served on the excursion to on 2 Mar 2010 by Mr. N. Jack. Dr. Croll for the absence of Setundula flowers showed extreme irritation. Some specimens from Cracow were tabulated by Mr. Williams and commented on by Dr. E. O. Marks. A book, "Birds of Tasmania," by Mr. F. N. Little, was tabulated by Dr. A. Malaher, who presented it to the library.

EXCURSION TO MT. EDWARDS, EASTER, 1934

GEOLICAL NOTES.

By E. O. Marks, M.D., B.A., B.E.

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fore, have started its career above the present Mt. Edwards, which must have been entirely covered by some later formation. Subsequent denudation exposed the resistant trachyte, down through which the creek has succeeded in cutting its gorge, much as a saw cuts in its groove.

The only later rocks which we know of that could have covered the trachyte mass are the basaltic flows, and those in portions of the Main Range do cover trachytic material. It seems highly probable that these basalt flows of the Main Range and Darling Downs formerly covered also the Fassifern district, and that the streams were first formed on their surface. The comparative shortness of the east-flowing streams has enabled them to grade down their valleys to the softer rocks below the basalt, and thus lead to the great difference in levels on the two sides of the main Divide. Many writers have attributed this difference to a block faulting, but denudation is the simpler explanation.

Mt. Edwards thus forms the key to the physiographic problem, and supports Mr. J. H. Reid, who pointed out on structural grounds that the fault theory was inconsistent with the geological mapping.

**BOTANY, MOUNT EDWARDS AND DISTRICT.**

**(A) GENERAL.**

*By C. T. WHITE, Government Botanist.*

The camp was pitched in open forest country bordering on Reynolds Creek. The surrounding country was timbered mainly by Eucalypts of different species, notably *E. tessellaris*—Moreton Bay Ash, *E. creba*—Narrow-leaved Ironbark, *E. microcarpa*—Tallow-wood, and *E. aeminenoides var. carnea*—the Yellow Stringy-bark. On the rocky slopes of Little Mount Edwards, *E. exserta* in dwarfed trees was very common. As undergrowth *Leptospermum microcarpum* formed dense thickets. On the flats *Angophora subvelutina*—Apple Tree—was abundant.

Along the banks of Reynolds Creek typical trees were *Callicedron viminalis*—Red Bottle-brush, *Melaleuca bracteata*—River Tea-tree, *Casuarina Cunninghamiana*—River Oak, *Acacia decurrens var. pancegilandulosa* in full flower, *Acacia Maidenii* and *Notelaea longifolia var. velutina* (only a few trees seen).

In the rain forest clothing the slopes of Mount Edwards Gorge, the commonest tree was the *Hoop Pine—Araucaria Cunninghamii*. Further up towards the mountain the rain forest again gave way to open forest, and on the rocky cliffs on the higher part of the mountain an interesting find was *Eriostemon disformis* in great abundance.

On Saturday most of the party climbed Mount Greville. The rocky, trachytic slopes would probably carry a number of bright flowers in the spring. An interesting find was a *Westringia*, apparently a form of *W. rosmariniformis*, forming with *Basileia rupicola* regular thickets on the ridges. On the rocky cliff faces several specimens of *Phebalium*, probably representing a new species, was discovered. Most of the party made the ascent of the mountain up a cleft or rain forest gorge in which Piccanin Palms—Archontophoenix Cunninghamiana, and the Tall Tree Fern—Alsophila excelsa—were the main scenic features of the forest. Both were remarkable on account of their extreme height. Festooning the trees and clambering over the rocks the Pepper Vine or Festoon Climber—*Piper novacollandiae*—was extremely abundant.

The region would well repay a visit during the spring months, and I hope to do this and have some interesting finds to bring before one of the Club's meetings.

**(B).—NOTES ON THE GRASSES OF THE MT. EDWARDS DISTRICT.**

*By S. L. Eveleigh, Botanical Branch, Department of Agriculture and Stock, Brisbane.*

The grasses of the Mt. Edwards District provide quite an interesting study. From observations made during the four days of the trip over sixty species were recorded and this total could, no doubt, be considerably increased by further study.

From the grass point of view the most interesting find was *Aristida spuria*, a Spear Grass with very early leaves which was quite common on both sides of the Reynolds Creek Gorge, though it was more plentiful on the southern side than on the northern. So far as we know this grass has only previously been recorded from Castle Hill, near Townsville, and this record extends its range very considerably. However, careful search in other districts would probably reveal its presence.

The grasses of the district may be treated under five main headings, viz.:

1. those of the creek beds and banks
2. those of the flats and foothills
3. those of Mt. Edwards