



The Tasmanian Naturalist

No. 26

August 1971

Registered at the G. P. O. Hobart, Tasmania, for transmission by post as a periodical

Supplement to the Bulletin of Tasmanian Field Naturalists' Club

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Annual Subscription \$1.00

1971 EASTER CAMP - DENNE'S POINT

David Ziegeler

THIS year's Annual Easter Camp was held at Denne's Point on North Bruny Island. About twenty-five members attended, staying in a cottage or camping in the grounds. The weather was fine and warm on Friday and Saturday but cool with a few showers on Sunday and overcast on Monday. Little time was spent exploring North Bruny but trips were made to South Bruny visiting Lunawanna, Alonah, Mount Mangana, Simpson's Bay, Cloudy Bay Lagoon, Adventure Bay, Neck and Cape Queen Elizabeth.

The habitats of Bruny are variable, ranging from grazing land, dry sclerophyll forest, coastal heath on North Bruny and dry sclerophyll forest, coastal heath, wet sclerophyll forest, wet sclerophyll regrowth around Adventure Bay and relict rainforest on Mt. Mangana. The main trees on Bruny include Eucalyptus amygdalina, E. viminalis, E. ovata, E. globulus, E. tenuiramis, E. obliqua, and Nothofagus cunninghami, Atherosperma moschatum in the rainforest. Most of the smaller plants recorded are widespread or common elsewhere but some are worth recording: a red fruited Billardiera was found at Killora, which is regarded as a new species by botanists. Acrotiche serrulata, Helichrysum costatifructum - a locally distributed endemic, Olearia lepidophylla were recorded at Adventure Bay. Drymophila cyanocarpa, Pittosporum bicolor, Olearia persoonioides, Gaultheria hispida, Richea dracophylla were recorded on Mount Mangana. Melaleuca gibbosa was found in flower between Great Bay and Cape Queen Elizabeth and also at Cloudy Bay Lagoon. The plants were identified by Miss M. Westbrook and Dr. W. Curtis.

One of the objects of the camp was to hunt for native land snails and searches were made for them in the rainforest on Mt. Mangana and two species were found.

Four species of butterfly were recorded on the wing - Cabbage White Pieris rapae, Common Brown Heteronympha merope salazar, Meadow Argus Precis villida calybe, Common Grass Blue Zizina otis labradus. A Hawk Moth Herse convolvuli was found at Dennes Point. Only one species of amphibian was recorded - Brown Treefrog Hyla ewingi was heard at Dennes Point, an Echidna Tachyglossus aculeatus was seen at Adventure Bay.

Bird life was abundant both in species and numerically. Of special interest was the sighting of a Black-headed Honeyeater with aberrant colouring, instead of being olive with a black head it was yellowish brown with a medium brown head. Several Scrub Tits were seen in the rainforest on Mt. Mangana and Forty-spotted Pardalotes were seen behind Dennes Point and near Killora.

DES ILES KERGUELEN

G. C. Bratt

ISOLATED islands often support a strange and interesting lichen flora. High mountains and few people make an island even more interesting so that it was with haste that I accepted a recent invitation to visit the Kerguelen archipelago.

The archipelago is centred on about 50° South and is roughly midway between Australia and Africa. There are about 400 islands ranging from mere rocks to the main island of 2000 square miles. The mainland is mountainous with the highest peak at 6400 ft. (Mt. Ross) and is deeply dissected by huge bays and fiords. Most of the island is free from ice and snow during the greater part of the year, but from the higher western mountains flow a number of glaciers. Also there is a large ice plateau of about 300 square miles, the Cook Calotte, with its summit at 3000 feet, which nourishes other glaciers.

The party to visit the Islands was sponsored by the National Science Foundation of America and its primary purpose was to make a broad survey of the terrestrial flora of the islands. The party consisted of three lichenologists (including myself), a specialist on bryophytes (mosses and liverworts) and a vascular plant botanist specializing in Antarctic and sub-Antarctic floras.

We travelled to and from the Islands on an American oceanographic research ship, the "Eltranin", landing at the French base at Port-aux-Francais in the eastern part of the main island. Here we discovered that because of many and complex reasons we would not be able to visit the western parts of the island (away went my plans for Mt. Ross), but the French gave immense assistance to our work in the eastern part by allowing us to use their landing barge and various scattered huts.

The French base has been maintained on the Island since 1950 and carries out a wide range of studies including geology, glaciology, meteorology and marine biology. Early interest in the islands had centred on whaling and sealing but the last base was closed in 1928. We lived for some days in the remnants of the Norwegian whaling station at Port Jeanne d'Arc. The old timber scattered about here is a good substrate for lichens.

Although Kerguelen is classed as subantarctic the climate is reasonably mild. The records indicate a temperature range of 14 - 68°F with a summer (our visit was during February and March) average of 43°F and an average precipitation of 30 inches/year. The most uncomfortable part of the climate is the almost constant wind (only 1% of calm days) of average speed of 45 mph and a maximum recorded speed of greater than 100 mph. The complete absence of trees and bushes accentuates the effect of the wind. In the fiords the wind is deflected by the cliffs setting up willy-willies which make boat travel unpleasant and dangerous. This mildness of the climate allowed us to work on almost all days when not travelling on or waiting for

the landing barge.

Previous collections of lichens from the islands ranging from those made in 1776 by Cook's party to those of Mawson's party in 1930 had been examined by an American, C. W. Dodge, who had claimed that 95% of the lichens were endemics. But as none of the previous collectors had been lichen specialists nor had they penetrated far from the coasts it was thought that our collecting would reveal many non-endemic species and fill some of the curious gaps in the records.

Our findings, (based on field observation as all the collections have been sent on to U. S. A. for detailed examination) rather surprised me. Thus, although we collected samples of the majority of previously recorded species and quite a few new, and probably endemic, species we failed to find more non-endemic species or fill any of the gaps. So it appears that the isolation (and/or climate and geology) has severely influenced and restricted the lichen flora of these islands.

As an example of the gaps in the flora, species of Umbilicaria (the rock tripe which helped to keep early Canadian arctic explorers alive) are found on the higher mountains of Australia, down as low as 1000 feet in Tasmania and at sea level on the Antarctic continent as well as in South Africa and South America, but have not been recorded for Kerguelen. Very thorough searching for Umbilicaria spp. by our party failed completely also.

The distribution of lichens on the islands was rather interesting. On the foreshores there was a thick growth with horizontal zonation into black, yellow and white zones as is observed elsewhere. Sometimes this horizontal zonation was completely changed to a vertical banding presumably due to wind effects. From sea level to about 700 feet lichens were generally rather scarce except on large rock outcrops because of the dense cover of higher plants (Acaena and Azorella spp). Above 700 feet increasing amounts of lichens were found but with preference for damp areas or rock outcrops. Huge areas were often stony deserts devoid of plant growth but rock outcrops within these deserts supported prolific lichen communities dominated by Neuropogon species. At higher altitudes the lichens again became scarcer until at about 3000 feet only small crustose species remained. It would have been interesting to have found which lichens survived on the high peaks of Mt. Ross.

There are at present no trees on the islands, but we did see fossil leaves of an Araucarian species similar to the Norfolk Island Pine. The total recorded vascular plant flora amounts to only 37 species which includes 7 grasses, and 5 ferns. At low altitudes the dominant plant is Acaena moschata, a plant closely related to the Tasmanian buzzy. It may grow to 18 inches high and any woollen garment worn becomes encrusted with the barbed seeds. Above about 500 feet Acaena is largely replaced by Azorella selago, a cushion plant which often forms terraces on the hill-sides. The most famous plant of the island is the "Kerguelen Cabbage" Pringlea antiscorbutica used by Cook and others to prevent scurvy. On the main island it appears to be restricted to crevices on cliffs, but on some of the smaller islands large stands exist. It is generally considered that rabbits which were introduced on the main island in 1874, have been responsible for the scarcity of the "Cabbage". A number of hardy European plants not previously recorded for the island were found growing on the rubbish dump at Port-aux-Francais.

The birds of the island were quite fascinating and were easy to observe

because of their relative fearlessness and the lack of cover. Of the four recorded penguin species I saw only two, the King Aptenodytes patagonica and the Gentoos Pygoscelis papua. The King Penguins were usually seen standing motionless and very handsome with their golden patches near the throat. The small Gentoos mostly seemed to be in moult and thus appeared ruffled as they scurried for the water. Large numbers of terns, Sheath Bills (the only non-web footed bird on the island), teals, cormorants, gulls and skuas were seen. The Sheath-Bills were very friendly and waited around the huts to be fed, while the skuas frequently followed me for considerable distances. Only one albatross was seen and this was having difficulty getting airborne as it was seen during one of the rare periods of calm.

The animal population of the island originally consisted of sea elephants, sea lions and furred seals, but the latter two have been almost exterminated. The sea elephants give variety to trips along the foreshore. They have rather hideous faces, awful breath and rather sorrowful tear filled eyes. At various times rabbits, reindeer, sheep, cattle, cats, rats and mice have been introduced and still live on the islands. Dogs and mules have been introduced but have not survived. The rabbits have been blamed for the bareness of parts of the island and now appear to provide the bulk of the skuas diet. The cats live on rabbits and smaller birds. The cattle, sheep and reindeer are herded into restricted areas and have not seriously interfered with plant growth. Man himself has done little to alter these islands but his introduction of other animals may have considerably altered the natural plant and animal balances.

The overall geological picture of the islands is one of repeated volcanic outpourings of basaltic type materials. The amount of material distributed at each "eruption" was relatively small but the number of "eruptions" was high. The result is a series of terraces of 10 - 100 feet steps with thin bands of scoria between each step. Some of the mountain peaks and islets may be the remains of volcanic plugs as huge blow holes are visible on the contorted rock mass. Some sedimentary beds of coarse sandstone and conglomerate were seen as well as lignite bands. Large peat beds exist, one of which was sampled without finding bottom at 30 feet. Unconsolidated peat bogs were an unpleasant feature in some parts of the island.

Although my principal purpose was to collect and study the lichens I found time to collect, (mostly for other people) - star fish, sea urchins, shells, water samples, algae samples, grasses, vascular plants, mineral and clay samples. All in all the Kerguelen visit was interesting and successful but I'm rather pleased to be away from the wind.

XVI INTERNATIONAL ORNITHOLOGICAL CONGRESS

THE International Ornithological Committee agreed at the end of the XV International Congress in the Hague, Netherlands, that the next Congress would be held in Australia in 1974. Professor J. Dorst was appointed President. The Australian invitation had been proffered jointly by the Royal Australasian Ornithologists' Union and the Australian Academy of Science.

The Royal Australasian Ornithologists' Union appointed Dr. H.J. Frith as Secretary-General and an Australian Advisory Committee has been formed. After

close examination of the possibilities the Australian Advisory Committee has decided that the XVI International Ornithological Congress should be held in the Australian National University in Canberra in the period 12 August to 17 August 1974. A programme of scientific sessions, major and minor excursions and ornithological exhibits will be organized.

Applications for membership will be accepted until March 1, 1974.

Applications for the presentation of papers and for arranging Specialist's Meetings should reach the Secretary-General not later than February 1, 1974. It is probable that, apart from those presented by invitation in a Symposium, there will be some selection of the papers that are actually read. Accordingly it is essential that each offer of a paper should be accompanied by a summary of about 200 words.

Information regarding the XVI International Ornithological Congress can be had from - The Secretary-General, XVI International Ornithological Congress,
P.O. Box 84, Lyneham. A.C.T. AUSTRALIA 2602

WHO WERE THESE NATURALISTS ?

R. C. Kershaw

COLLECTING snails is probably rather less popular than collecting sea shells. Nevertheless many people made such collections in the past. William Legrand in his "Collections for a Monograph of Tasmanian Land Mollusca" (1871) refers to a number of people who helped with or made collections. Who were these people of 100 years ago? What has happened to their collections? Some of the names, such as Ronald Gunn and Morton Allport, are well known to naturalists. Charles Gould was a geologist who made an invaluable foundation contribution in Tasmania. R. M. Johnston, public servant, statistician, amateur geologist and naturalist is another who needs little introduction. Other names are perhaps less familiar.

Collections made by early naturalists have great value to science. In many cases species were named in their honour. There may even be type specimens in such collections; not all have been located. What has happened to these collections? Some few have been given to the State. There must be others.

Several years ago a very useful and impressive collection was placed in the Queen Victoria Museum. This was the collection of Augustus Simson. It contains numerous specimens from many parts of the world in addition to a valuable Australian collection. Cared for by the East Launceston School for many years it seemed logical that it should be housed in the Museum. A very fortunate decision for Science in Tasmania.

Something is known about Mr. Simson. He was a company secretary for the Tasmanian Copper Company Ltd. His name appears on a notice of payment of 10 per cent interest on debentures payable in 1910. Mr. Legrand gave him a copy of the "Monograph" with the date 31 December, 1874. R. M. Johnston named a fossil snail in his honour.

The following names are taken from Mr. Legrand's "Monograph". With each name is given a locality in which that person collected. This may help in identifying these people. Anyone who may know of, or who can learn something of these people and their collections can render material assistance by passing such

information to the Museums.

Rev. H. D. Atkinson	South Burnie	Mr. G. Luckman, Hob.	Kangaroo Pt.
Mr. Collis	Prosser's Plains	Mr. Masters, Hobart,	Kangaroo Pt.
Mr. Doherty	Port Davey	Mr. McLeod	Recherche Bay
Mr. Geiss	Providence Valley	Mr. Midson	North West Bay, Snug
Mr. Gulliver	Burnie	Dr. Milligan	Sarah Island
Rev. Hall	Brown's River	Mrs. Ogilvie	Piper's River
Mr. Hurst	Port Arthur	Mr. Richards	Great Lake
Mr. Ibson	Macq. Harbour	Mr. Sprowle	Nth. West Bay, Snug
Mr. Lloyd	Macq. Harbour	Mr. Stephens	Oatlands, Fenton For.
Mr. J. Luckman	Hobart	Mr. R. Thatcher	Launceston

Valuable collections made by Miss Mary Lodder and William F. Petterd are housed in the Queen Victoria Museum. William Lewis May made a very important collection which, perhaps unfortunately, went to the South Australian Museum.

Do you know of any of these naturalists from the past or others not mentioned here? Can you locate their collections if they still exist? Do you know of other collections which may contribute to the cause of science in Tasmania? Perhaps you may be instrumental in making such a collection available to science. Perhaps you may be able to discover what has happened to some of these collections. Perhaps you can tell something of the romantic story of the naturalists of 100 years ago.

THE STATUS OF THE WHITE-BACKED MAGPIE IN TASMANIA

D. G. Thomas

INTRODUCTION

THE possibility that the White-backed Magpie *Gymnorhina hypoleuca* was decreasing so fast that it could become extinct within a short time was first raised by "Peregrine" (M. S. R. Sharland) in the "Mercury" of 21st September 1968. Later Sharland raised the matter at a meeting of the Hobart Bird Observers' Group which passed a resolution instructing the Secretary to write to the Tasmanian Conservation Trust and Tasmanian Fauna and Flora Conservation Committee asking for action to be taken. Both organisations accepted my offer to conduct an enquiry and the Animals and Birds' Protection Board generously provided a grant to cover expenses.

Historical

Littler (1910) gives little information as to distribution apart from stating that it is absent from parts of Tasmania and provides the enigmatic statement that "it is only within the last few years that it has extended its range to any extent on the West Coast. . .". Presumably Littler meant the north-western coast because there is little or no suitable habitat on the West Coast. Sharland (1958) states :

"The magpie is chiefly a bird of the sheep country and light timber, being very selective in this respect." and "Its distribution is marked by the extent and range of semi-open grazing country, it being common in most parts of the Midlands where the land is largely cleared, and occurring in lesser numbers in the Derwent Valley to as far as between Hamilton and Ouse; it is also found about

Sorell, Richmond, Tea Tree, Colebrook, Forcett and Rokeby. There are some on the east coast, very few on Tasman Peninsula and in the Huon. In the north there are a good many about Launceston and Perth, but it does not range along the north-west coast much beyond Carrick. It is fairly common on King Island."

This distribution corresponds closely with the distribution of sheep (Scott in Davies 1965).

If my interpretation of Littler's reference to the "West Coast", is correct it would seem that the magpie disappeared from the north-western coast after 1910 but before 1958).

METHOD

The matter was considered urgent and results were wanted as quickly as possible. The method used by the British Trust for Ornithology to determine the breeding status of some smaller birds of prey and crows in Britain (Prestt 1965) was adopted. Its validity is discussed later. With the help of the press, the Tasmanian Farmers' Federation, and the Tasmanian Farmers, Stockowners and Orchardists' Association, a questionnaire was sent out early in 1969 to selected naturalists, persons with local knowledge, and those who responded to the appeal in the press. One hundred and two completed questionnaires were returned.

RESULTS

Contributors

The first question was - "Please give your name and address"

The second question was - "Please state briefly as to what area your information

refers (place name should, as far as possible, be those used on the 1:250,000 (4 miles to the inch) State Maps.) and

"Over what period have you been familiar with the area?"

The returns showed that 79% of the contributors had been associated with the area of their report for over 10 years and only 7% had less than 5 years' experience. There were several contributors with over 80 years' experience of one area. The mainland was divided into six areas. Completed returns from each of these were as follows :- North West 9; North 18; North East 8; East 12; Midlands 22; South East 29. In addition there were three returns from King Island and one from Flinders Island.

The area covered by different questionnaires varied from several squares of the 10,000 yard grid to a small area within a square. Additional information was based on that given in Green & Mollison (1961), Green (1969) and supplied by R. H. Green and L. E. Wall and from personal observation. Much of the State was not covered, but these unreported areas are mostly unsuitable for magpies because the habitat is unsuitable. Thus the results of the enquiry are probably not affected by lack of coverage, though nevertheless it is a pity that there were no returns from the western coast. They might have given us a better understanding of Littler's remarks, mentioned above.

Change in Status

Question 3 read as follows -

"Has the magpie, in a locality well known to you, during recent years, shown (a) no change in status, (b) an increase in numbers or (c) a decrease in numbers?"

The replies are summarized as follows :-

No change in status : 27; Increase in numbers : 33; Decrease in numbers : 42.

Because questionnaires covered areas of different size, and several were received for some grid squares, no conclusions can be drawn from the above figures. An analysis in which squares are weighted according to the number of returns is given later.

The Extent of the Changes

Question 4 read as follows -

"If there has been an increase, has this been (a) slight or (b) marked (birds resident where previously absent)?"

Question 5 read :

"If there has been a decrease, has this been (a) slight or (b) marked (birds disappeared where previously resident)?"

These questions are mutually exclusive, the one answered depending on the answer to Question 3. The answers are summarized in Table I.

TABLE I : Summary of replies to Questions 3, 4, and 5
(Has the magpie increased or decreased?)

Marked increase	12
Slight increase	23
No change	22
Slight decrease	13
Marked decrease	<u>27</u>
	97
Not stated	5

Prestt's (1965) method was used to compare the change of status and its magnitude in each 10,000 yard square from the answers to Questions 3, 4 and 5. If the change was an increase it was given a plus; if there was no change, it was given a value of zero; if there was a decrease it was given a minus. A 'slight' change was rated one and a 'marked' change was rated two. The results from all the questionnaires referring to a single square were combined to give an average value. Not all squares for which there was information on 'status' could be used to determine 'change in status' because Questions 3, 4 and 5 were not answered in five returns. On the mainland, decreases were recorded for 91 squares, increases for 37 and a further 52 showed no change. Additionally, there were 3 increases on Flinders Island and 15 increases on King Island.

(TO BE CONCLUDED NEXT ISSUE)