# Casmanian Field Naturalists' Elub

# Easter Camp-Out

1916

Co Eaglebawk Neck Casmania



# GENERAL REPORT By CLIVE E. LORD

Hon. Secretary

### **BOTANICAL NOTES**

By L. RODWAY

Government Botanist

# ENTOMOLOGICAL NOTES

By G. H. HARDY Tasmanian Museum, Hobart

### GEOLOGICAL NOTES

By W. H. CLEMES B.A., B.Sc.

### ORNITHOLOGICAL NOTES By CLIVE E. LORD

Reprinted from "Tasmanian Mail"

The Mercury Printing Office, Hobart



Eaglehawk Neck, looking South

(x denotes Camp Site.)



Some of the Members,

### LIST OF CAMP MEMBERS

Mr. W. Abbott

Miss O. Barnard

Mr. F. B. Cane

Mrs. F. B. Cane

Mr. C. H. D. Chepmell

Mr. W. H. Clemes

Mr. C. E. Cole

Mr. E. Cruickshank

Mr. L. Dechaineux

Professor T. T. Flynn

Mr. G. H. Hardy

Mr. E. D. Harrisson

Mr. R. C. Harvey

Mr. F. Heyward

Miss L. Holmes

Miss Ivey

Miss M. Johnston

Mr. E. Kirby

Miss F. Lewis

Mr. C. E. Lord

Mrs. C. E. Lord

Miss F. Miller

Miss E. Pocock

Mr. L. Rodway

Mr. H. Sargison

### MR. W. L. MAY'S PARTY.

Mr. W. L. May

Mrs. W. L. May

Miss L. May

Miss C. May

Miss P. May

Master E. May

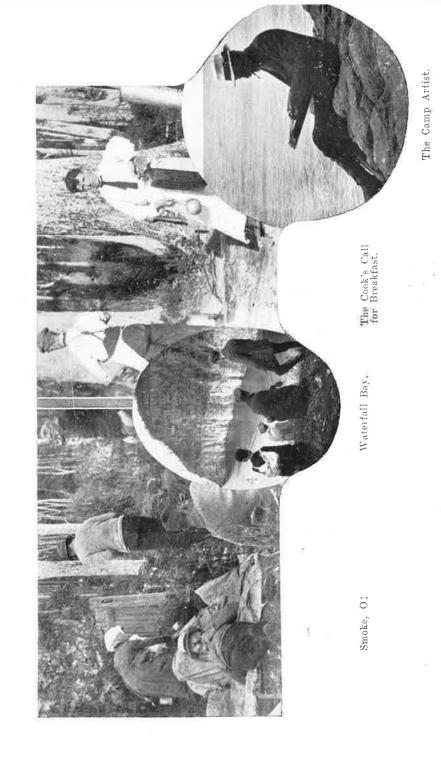
Miss Walker

#### ASSISTANTS.

Mr. W. H. Woodward (Assistant-in-Charge)

Mr. V. Molross.

Master E. Woodward.



### Tasmanian Field Naturalists' Club

### EASTER CAMP-OUT, 1916

By Clive E. Lord, Hon. Secretary

The Tasmanian Field Naturalists' Club held its 12th annual Easter camp during the recent holidays. Owing to the war the camp was only a small one compared with previous years, but new ground was explored by visiting Eaglehawk Neck. The previous operations of the club are shown by the following list of places visited, together with the number of members who attended:—

1905.—Bream Creek; camping party, 9.1906.—Cole's Bay (Freycinet Peninsula); camping party, 40.

1907.—South Bruny; camping party, 27.1908.—Soldiers' Point (Maria Island); camping party, 27.

1909.—Wineglass Bay (Freycinct Peninsula); camping party, 84.

1910.—Cole's Bay (Freycinet Peninsula); camping party, 97.

1911.—Southport; camping party, 60.

1912.—Darlington (Maria Island); camping party, 69.

1913.—Safety Cove, Port Arthur; camping party, 80.

1914.—Wineglass Bay; camping party,

1915.—Maria Island; camping party, 36.
1916.—Eaglehawk Neck; camping party, 35.

The club decided on a new departure this year, as an advance party left before the main body and prepared the camp for their reception. On Wednesday morning, April 19, ten members left at 9 a.m. in the s.s. Breone, taking with them all the camp impedimenta. They experienced a delightful passage to the Neck, which was reached shortly after lunch. Here several carts were awaiting our arrival, and willing workers soon had portion of the club's goods loaded up and despatched to the camp site, which was about a mile or more from the jetty. The various sites were pegged out, and a start made erecting tents, while the ladies of the party prepared a welcome repast. The main camp was set up in the scrub, about 100 yards from the beach, while the ladies' tents were pitched in a clearing on the brow of the low

cliffs overlooking the bay. A pleasant stream of fresh water meandered through the camp, and this served to make the site an ideal one.

The members of the working bee retired to rest early, but were just as early in rising the next morning in order to devote a little time to study the locality.

Eaglehawk Neck is the name given to the narrow strip of sand connecting Tasman's Pentinsula with the rest of Tasmania. In the early days of Tasmania's history it formed the gateway to Governor Arthur's "Natural Penitentiary." On the eastern or ocean side of the Neck is Monge or Pirates' Bay. It is generally known by its latter designation, but the former would appear more correct. It was named Monge Bay in 1892 by the French explorer Baudin, but it was not until about 1822 that, owing to some bushrangers seizing a schooner that was in the bay, it came to be spoken of as Pirates' Bay. It was across the Neck that the famous line of dogs was stationed in order to make the escape of convicts practically impossible. There are many historical descriptions of this line, as well as a drawing, which is at present in the Hobart Museum.

Monge Bay is a crescent of sand set in a rugged coast. To the morth and south there are cliffs containing many natural wonders in the shape of subterranean and submarine passages and caves. The most notable of these lie to the south. At the northern end of the bay the arc is completed by Clyde Island, while at the southern end Fossil Island intervenes between the silver strand of sand and the rocky cliffs. In close proximity to Fossil Island is the Blowhole, which can easily be viewed from both the land or the sea entrance. From here onward numerous formations are met with. Tasman's Arch is well known, but a close exploration shows that the Devil's Kitchen surpasses all the others. A superficial observation shows a yawning hole in the earth about 100 yards in diameter. A passageway leads through the Cliffs from this opening to the sea. The waves foam and oar over a portion of the floor of this gulch, while the higher portions are



At Breakfast.



covered with scrubs and ferns. A closer examination of this wonder of Nature reveals many hidden passages and caves. Some so rectangular in shape that it would appear as if they were the work of man. When standing at the bottom of this chasm, and noting the various channels and gulches, one recalls to mind the passage in "For the Term of His Natural Life," wherein Marcus Clarke describes this wonder. Further south is Waterfall Bay, down the rocky cliffs of which a mountain torrent descends with a rush to the sea. Towering above is a summit known as "The Pinnacle," from which a delightful panorama is unfolded to the view. With such scenic gems as the foregoing in close proximity members were inclined to set forth and explore, but there remained a large amount of work to be done, and this, of course, was given pride of place. By the afternoon the advance guard had their work complete, and everything in readiness for the reception of the main party.

The majority of the campers left Hobart at 6.30 p.m. on Thursday night by the s.s. Cartela, and had a smooth trip down the river and through the various bays. The Neck was reached about 11 o'clock, and portion of the advance party welcomed them at the jetty, while others stayed in camp to prepare supper. A walk round the crescent-shaped shore soon brought the party to Pendennis, the property of Mr. Clemes, who had kindly granted the club permission to camp on his property. Once supper was disposed of the members were shown their new homes, and the camp retired to rest.

On Friday excursions were made to places of interest in the locality, while one party went searching for rare mosses in the sylvan glades of the gully behind the camp. Unfortunately, a heavy shower of rain fell late in the afternoon, which caused some of the explorers to arrive back in camp in rather peculiar fashions. During the afternoon Mr. W. L. May and party arrived by motor-car, which served to bring the camp up to its full strength.

On Saturday a party of the more energetic members set out to climb "The Pinnacle," and achieved their object after a good climb. Another party followed the course of the mill tramline far into the bush in the search of botanical specimens. Other parties made trips to divers places, some in search of specimens, others just for the enjoyment of the outing.

On Sunday a large party commandeered the district's supply of conveyances, and made an excursion to Port Arthur. The road follows along the shore of the inland bay for about six miles until Taranna is reached. It then turns inland, following the route of the old convict "railway" to Long Bay, and thence to Port Arthur. From Taranna to Port Arthur is about seven miles. Three mides south of Port Arthur is Safety Cove, where the club camped in 1913, and nearby is situated the "Remarkable Cave." This natural wonder surpasses some of more advertised sights of the district, and it seems peculiar that not more is heard of it. The party had lunch in the cave, and after visiting Mr. and Mrs. Tanner at the old Government Farm, they returned via Port Arthur to the camp. Portion of the party did not journey as far as Port Arthur, but spent their time in exploring the gullies near Oakwood. The botanists got their reward. On returning to camp it was learned that the "energetic party" had, with the aid of many fathoms of rope, succeeding in exploring Tasman's Arch and several of the lesser known caves. They had also spent a considerable time in the Devil's Kitchen, but had not the time or means to explore it thoroughly.

On Monday several excursions were organised. One party went northward, noticing the Natural Pavement and other places of interest. Others pursued their hobbies in various directions. The campartist was noted utilising the last day in securing, on canvas, his impression of the shore. Nearby a professor of biology could be seen endeavouring to induce minute obects to forsake the mighty deep and take up their abode in small glass jars. And so each member pursued his calling, the outcome of which we hope will be another link in the chain of knowledge concerning Tasmania's natural history.

The camp-fire socials held during the evenings in camp were quite a feature of the outing. We were fortunate in having an able conductor in Mr. F. Heyward, who spared no pains in organising "the choir." The epics composed by the camp poet will doubtless be long remembered by those who took part in this camp, and they may be heard by future campers as "the choir" are already drawing up a scheme for their use again at the next camp. Another factor which materially helped the musical programme was Mr. F. Cane's zonophone. His kindness in bringing it to camp was much appreciated.

Tuesday morning arrived only too soon, and with it a change in the weather. Except for some rain on Friday afternoon we had had good weather, but our last morning was spoilt by rain. This made breaking up camp a little umpleasant, but many willing workers soon had the majority of the tenus down and the camp impedimenta packed on the carts for transmission to the jetty. One large.



The Ladies' Tents.



The Cook's Department

tent, generally spoken of as "The City Hall," was left to the last, and in this members had breakfast. Later the rain ceased, and allowed a few hours' leisure before assembling at the jetty.

We boarded the steamer at 3.30 p.m., and settled down to enjoy a four hours' journey to Hobart. Owing, however, to the steamer calling at several ports in quest of freight, and the darkness of the night making mavigation rather difficult, the fact must be placed on record that we "didn't get home till morning."

The natural history work will be treated by the leaders of the various sections, but before closing this report I would like to draw attention to the need for further developing the natural attractions of the district, as hundreds of tourists visit this locality every year. For instance, at a small outlay steps could be formed so that anyone could descend to the bottom of the Devil's Kitchen. A few additional notice boards would also be an asset, especially if they denoted the distance between the various sights. Also, it would be an advantage if the Tourist Department erected a if the Tourist Department erected a small hoarding near the jetty, and had a map of the locality showing the position of the main features of interest, together with the distances, from a fixed point. Such items as these would, I feel eure, be much appreciated by the tourists. While we were staying in the district we were being continually asked for information concerning the Blowhole and other such places. and other such places.

### **BOTANICAL NOTES**

### By L. Rodway, Government Botanist

The plant life observable at Eaglehawk Neck, and the Peninsula in general, affords some interesting factors for the There is every indication of copious humidity; not only is the whole district, saving minor formations, such as sand-dunes and swamps, a continuous forest, but such forest essences as Sassafras and Fagus here grow down to sea level, whereas in the neighbourhood of Hobart they are not met with below an altitude of 1,000 feet. Lengthy exposure to a dry atmosphere is fatal to these two trees.

The Eucalypts are varied and intermixed. Swamp Gum produces extensive forests of fine trees in the gullies passing into Gumtop on the higher land, while Stringy Bark, Peppermint, and Blue Gum are everywhere to be met with. The very variable and interesting Risdon Gum makes its appearance on poor mudstone soil, in which it appears to revel. This tree responds in leaf form to the ground conditions in which it grows. In very dry, barren places the leaves are opposite and joined across the stem, but when ground moisture is generous it assumes the appearance of a broad-leaved Peppernint, except that the leaf venation is more diverging and netted, and the surface is everywhere somewhat glaucous. A broad-leaved Peppermint appears along the Taranna road. This is very distinct from Black or White Peppermint, or Risdon Gum (often known as Blue Peppermint). It was treated as a distinct

species by Hooker, and named by him Eucalyptus nitida. There is a very similar tree in the Lake District, but this, having the juvenile foliage of the Mountain Peppermint, is probably derived from that species. The various forms of Peppermints in Tasmania are very confusing, and require patient observation and cultivation to elucidate them.

Ferns always appeal to the young botanist, and the Peninsula is fairly strong in species. All three of our Tree-ferns appear here. Besides the common Old Man Fern, plenty of specimens of the Prickly Tree-fern are to be found. The stem is thick, and is commonly from six to twelve feet long; the stalk of the leaf is public. prickly. The fruit is very distinct. In the common Dicksonia the spore-cases are produced in clusters close to the mar-Each cluster is covered by a thick scale or indusium, which opens outwards. As it matures the margin of the leaf recurves, so that the sorus of spore-cases appears as if contained in a double case. In the Prickly Tree-fern the sori are numerous, and placed on the back of the leaf. There is no indusium, and the cases are attached to a short, thick process. This fern is Alsophila australis. The Palm Tree Fern, Cyathea cunninghami, is also found in gullies in the vicinity of the Neck. It is not often in fruit, but may be distinguished by the slender stem, which is often very tall. This fern is peculiar for bearing rudi-



"The Mercury" War News arrivest



The Biologist at Work.



The Searcher.

mentary pinnules at the base of the leafstalks right in the crown of the stem. This is an interesting feature, and is not common in present-day ferns, but is met with in fossils, and was once thought to be a parasitic growth. They are referred to as Aphlebia. The leaf-stalks of this are also prickly. The spore-cases are situated on the back of the pinnules, as in Alsophila, but when young are completely enclosed in a spherical membranous industum. This ruptures at maturity, but remains as a cup containing the solus.

Of the smaller ferns the genus Lomaria was represented by many species. Lomaria may always be recognised by the difference in shape betveen the barren and fertile leaves. Whether the leaf be divided or simple, the sterile leaves are broad and flat, while those bearing spores are everywhere contracted by a strong recurving of the margin. Lomaria procera was very common. It forms a handsome pot plant, and only its profusion prevents it being more cultivated. The rarest of our Lomarias, Lomaria patersoni, was met with in one gully. The leaf of this fein is about eight inches long, and quite simple, the fertile leaves looking very like pieces of cord. This is the only part of Southern Tasmania where this fern has been recorded.

There are three distinct shrubs, which grow on sand dunes, which are given the popular name of Boobyalla, Myoporum serratum, Acacia sophoræ, and Correa alba. They all occur intermixed at the neck. This reckless use of common names is one of the reusons why botanists find it so necessary when wriving notes to include the scientific disignations. It is quite time that an authentic list of popular names should be compiled, and taught in our schools.

Space will only permit one other group to be referred to here, namely, the orchids. Autumn is not the best time of year to search for these. Only two were met with, both of which were Green-helmets. One was the small Percentylis aphylla and the other Pterostylis obtum. The latter differed from the form growing on Mount Wellington by having a rosette of leaves at the base of the flower stem. In the spring the Neck is one of our richest hunting grounds for orchids. Mr. Clemes has sent us many of our rarest plants from here, namely, two of our obscure Corysanthes, C. unguiculata and C. bicalcarata. The sweet-scented Caladenia and the Black Orchid. The latter is pink and white when fresh, but turns quite black on drying.

### **ENTOMOLOGICAL NOTES**

### By G. H. Hardy, Tasmanian Museum, Hobart

The Entomology of Eaglehawk Neck has received much attention at various times, especially during January to March, 1913, amongst Hymenoptera by Mr. Rowland Turner, of the British Museum, and it would be scarcely surprising if the party procured nothing new on this occasion in the way of species. The extra late Easter is another factor against finding new species during the outing. Nevertheless, several important captures were made, some of which are entirely new; others as yet undescribed. Particulars are given under their respective orders.

Reviewing the collections as a whole, the entomological captures were certainly successful, perhaps more so than at any other of the Easter excursions I have attended, and the success is greatly owing to the energies of my co-worker, Mr. Clive Cole, to whom is credited the capture of the most difficult specimen to

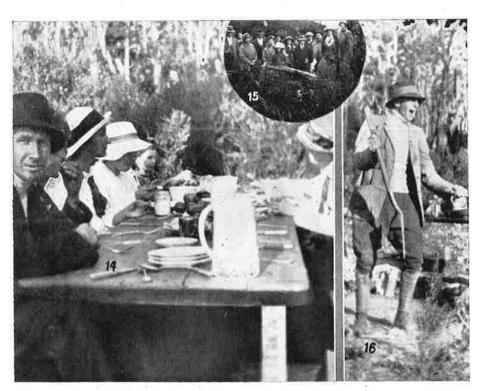
secure, namely, the Dragonfly, which belongs to a genus well noted for its rarity and great speed of flight. In all, over 240 specimens were secured.

ORTHOPTERA.—2 specimens, one cockroach and one locust only were taken.

NEUROPTERA.—5 specimens. Two excellent captures were made in this order, one Dragonfly and one Coniopterygidae, both of which were taken by Mr. Cole.

About 19 species of Dragonflies are known from Tasmania. It is uncertain if the species taken on this occasion is new.

The Coniopterygidae, a family of minute insects having body and wings covered with a powdery efflorescence, has only recently been recorded from Australia. It was entirely unknown in Tasmania until I discovered it on Mt. Wellington last January. This new specimen makes a second time the family has been taken in Tasmania.



The Luncheon Hour.

Some of the Party,

Opposition Call for Breakfast.

Two Osmylinae and one Psocid were also captured.

HYMENOPTERA.—Over one hundred specimens taken.

One typical specimen of Genus Ophion is the most noteworthy of the Ichneumons, and is the second only that I have taken in Tasmania (apparently only one species of this genus has been described from Australia). Many Bracons, five specimens of an Evanid, Ruby wasps, a few common Thynnids or flower-wasps, several bees, and various families of Fossorial wasps, formed the remainder of the captures.

Mr. Rowland Turner records taking specimens of Apheletoma tasmanica at Eaglehawk Neck on dead eucalyptus logs in which old beetle holes were numerous, and, although of smaller size, the wasp bears considerable resemblance to ants of the Genus Myrmecia (the common jackant, or jack-jumper, is the one evidently referred to). The account goes on to state that when alarmed the wasp often picks up a fragment of dead stick or leaf, which it carries in its mandibles, thus increasing the resemblance to the ant. I took a specimen of this genus larger than the Jack-ant, and which also shows characteristic differences from tasmanensis, the only species recorded from Tasmania. This will probably prove a new species.

As the wasp has no popular name, and is of general interest, the name Jackwasp might be adopted for the genus Aphelotoma, after its model, the Jackant.

Two ruby-wasps were obtained. The name "ruby-wasp" applied to Tasmanian specimens, is certainly a misnomer, for all I have yet taken are green, and apparently no red, or ruby, specimens occur in the island.

COLEOPTERA.—22 specimens, belonging to 9 families, were taken. Beetles afford but poor material to the hunter of

new species. They have received so much attention that there are apparently nothing but minute species left to be found in the island, together with very occasional prizes of large species to the most diligent hard worker.

LEPIDOPTERA.—The same remark can be made about butterflies and moths as that passed about beetles. Only one specimen was taken, belonging to the Hepialidae, or Swifts, more usually known in Australia as wood-moths.

DIPTERA.—103 specimens of flies were taken, amongst which there were many excellent specimens. Six specimens of a Robber-fly known as Brachyrrhopala nitidus, which hitherto I have found very scarce, formed the largest catch, both in size and quality. A new Mock-bee (family Syrphidae) formed perhaps the most interesting species taken. It is an excellent imitation of one of our various red and black bees, such as the common Exoneura bicolor. I have often seen the day was taken when about to enter such a hole, so it appears at first sight as if the mock-bee had adapted the colouration for protective purposes. Tasmania is full of these apparent cases of mimicry, but owing to so little field investigation having been done to solve the problems of mimicry, and apparent mimicry, it is impossible to state definitely which are true cases of mimicry. The family Syrphidae contains numerous species of mock-bees and mock-wasps that do not mimic any particular wasp or bee, but in this case the mimic is remarkable even to the slightly yellowish tinge of the wings.

A species of parasitic fly of the rare family Hippoboscidae (parasitic on birds and animals) was taken on the wing, a rare occurrence for this family. The species is not determined.

HEMIPTERA.—Five specimens, belonging to two families, were taken.

### **GEOLOGICAL NOTES**

By W. H. Clemes, B.A., B.Sc.

The geology of Eaglehawk Neck is extremely simple, and can be very briefly described. The main features of interest are connected with the permo-carboniferous mudstones, which are well developed along the coast. They present the usual bold vertical faces, reaching in parts to fully 1,000ft, in height. The

bedding planes are nearly horizontal, or dip slightly to the south-east. The rock appears to have suffered very little deformation, though numerous faults are noticeable. The regular jointing has led to the formation of picturesque sculpturing, comparable to some ancient castle structure. The lower beds are the usual



Juvenile Cooks at Work.

gritty conglomerates, studded with boulders transported by ice action, and de-posited in the mud of the ancient sea-floor. These basal beds are often regularly jointed, the joints being filled with ferruginous material. This is seen to the best advantage at the famous "tesselated pavement," where the cross jointing is most regular. On these basal beds is resting a curious band of course grit stone, which in places appears up on the sides of the cliffs, and at others is faulted down to see leave and at others. down to sea level, and finally disappears beneath the sea between the Blowhole and the Arch. Numerous caves and caves and archways have been cut into the cliffs, archways have been cut into the cliffs, archive outliers are frequent. One magnificent chimney rock, fully 160ft, in height, and balanced on a remarkably small base, is seen on the way to Water-fall Bay. The beds are filled with numerous fossils, the predominating types being Spirifer convoluta, S. darwinii, Productus brachythaerus, Platyschisma ocula, Sanguinolites etheridgei, and the various Stenopora and Fenestella, with Protoretepora ampla. On the north side of the bay the mudstones are conformably overlaid by Mesozoic sandstones of

the usual type. The surrounding hills are capped with later Mesozoic diabase of considerable thickness, jutting out in the south into a peak with steep columnar face. Other flows are noticeable to the south, ending in the Lantern Rocks and the reefs of Fortescue Bay, and appearing far out to sea in the ill-famed Hippolyte Rocks. This diabase intrusion is responsible for the cross-jointing of the basal beds mentioned before. The beds were heated excessively by the passage through them of the irumense masses of diabase nov crowning the hills, and on cooling joints roughly rectangular in cross-section appeared, the shape approximating to the usual jointing of the mudstones and the diabase, quite unlike the hexagenal jointing of the basalts of the Giant's Causeway.

Sand dunes of recent date fringe the shores of the bay, rising to a considerable height on the Neck itself. Some excellent aboriginal flint implements were found on the kitchen middens round the coast. The more recent geological phenomena are also represented by wide wavecut terraces and raised beaches.

### ORNITHOLOGICAL NOTES

### By Clive E. Lord, Member Royal Australian Ornithologists' Union

The bird life observed during our few days' stay at Eaglehawk Neek did not present anything of outstanding interest. There were sufficient birds in the bush near by the camp to add life and melody to the other charms of Nature by which we were surrounded. The sharp notes of the green parrot (Platycercus flaviventris) in the gums, combined with the minor notes of the honsycaters in the scrub and heath, were continually to be heard near the camp. Our Tasmanian nomenclature is rather behind the times in many places, owing to the changes wrought by time and man. Consequently, it was rather a surprise to some that one of the first birds noted was a wedge-tailed eagle (U. audax), which was gliding majestically over the slopes of Cash's Lookout. It is a great pity that this splendid specimen of bird life should be commonly known as eaglehawk. It is a true eagle in every respect, and a worthy rival of the famous golden eagle of Europe. The Tasmanian form, in common with the majority of species, is even larger than the mainland one. Our other eagle, the white-bellied sea eagle

(H. leucogaster), was seen searching for food along the shores of Monge (or Pirates') Bay. The only other Accipical observed was the brown hawk (H. berigora).

Only one frogmonth, or morepork" (P. cuvieri), was seen. The spotted owl (N. maculata) was often observed near the camp during the evening hours. It was also at night that the sharp "bark of the penguins could be heard, and these agile swimmers (E. minor) were often noted during 'he day. Out to sea could be discerned several albatrosses (Diomedeidae), but at too great a distance for their exact species to be ascertained. Several terns were seen, while the Pacific gull (G. pacificus) and the silver gull (L. novae-hollandiae) were very common. The graceful form of the heron (N. novae-hollandiae) was seen on the rocks, in sharp contrast to the outline of the black (P. carbo) and the white-breasted cormorant (P. gouldi), that could be seen near by. The gannet (S. australis) was constantly proving his skill as a diver in the water near the camp. It is pro-

bable that had we done any marine work other species would have been noted, as in previous years when carrying out dredging operations, we have noted a larger number of sea birds than we were enabled to do this year.

The homely robins (P. leggi and P. phœnicea) were always to be seen hopping round the camp. A little further afield the dusky robin (A. vittata) was noted, and, although the gullies at the back of the camp seemed ideal ground for the pink-breasted (E. rodinogaster), the writer failed to observe any specimens of this beautiful bird.

The grey-tailed whistler (P. glacura) was seen, and in close proximity the fantail (R. diemenensis) flitted from bough to bough. Of the Acanthiza, both the

yellow tail (A. chrysorrhoa) and brown tail (A. diemenensis) were common, while the brown scrub wren (S. humilis) was seen also. The blue wren (M. longicaudus) was a common sight in the clearings, while from the trees and scrubs the liquid notes of the honeyeaters were to be heard. Of the latter the black cap (M. melanocephalus), yellow throat (P. flavigula), crescent (L. australasiana), and New Holland (M. novas-hollandiae) species appeared to be the commonest forms. The raven or "crow" (C. australis) was often seen, and in lesser numbers the magpie (G. organicum). Among our last remembrances of the camp is the pleasure we derived from hearing the musical notes of the whistling shrike thrush (C. selbii). This fine songster was heard to perfection on the morning of our departure.