



birds

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The following notes by Messrs. Hindwood, McGill and myself discuss the five dotterels found nesting in Australia. All five species breed in N.S.W.

- EDITOR -

THE AUSTRALIAN DOTTEREL

The Australian Dotterel is a distinctive bird of the inland regions of the Continent. It is found, for the most part, within the limits of the 20" rainfall belt and is, perhaps, commoner in those areas which receive an annual rainfall of about 10" or less. In other words it is largely a desert form well adapted to an arid and semi-arid environment.

In South Australia (Eyre Peninsula and Nullabor Plain) and in Western Australia (North-west Cape) it occurs, or has occurred, in near-coastal localities, so the alternate name of Inland Dotterel that is sometimes used is not entirely satisfactory.

An interesting occurrence, well outside the usual range of the species, is that of an immature bird collected at Alloway Park, near Bathurst, N.S.W., on February 2, 1905 (specimen No. O.21168, Australian Museum, Sydney). Bathurst lies west of the Great Dividing Range about 100 miles from the coast at Sydney.

Breeding takes place when conditions are suitable and often after rain and has been recorded for every month except January and February, the hottest and driest period of the year. Nests are slight depressions in the ground and may be ringed with a ridge of sandy soil or, perhaps, small stems of plants, pebbles or pieces of sheeps' dung. Two or three eggs form a normal clutch, though up to five have been recorded. The ground colour, which varies from cream to reddish-buff is overlaid with blackish brown and grey spots, blotches and streaks. Average measurements are 37 mm. by 26 mm. J. Neil McGill has stated (South Australian Ornithologist, 5,1920, p.51) that the eggs when laid are of a greenish colour but change to yellowish-brown after a few days.

When leaving its nest the Australian Dotterel will often cover its eggs with small twigs, pellets of hard mud, grass stems or earth. One observer (R.T. Littlejohns, Emu, 45, p.98) has noted that the birds were not inclined to brood during warm or hot weather but on cold or wet days soon returned to the nest after being disturbed. Littlejohns observed that the eggs at a particular nest were almost completely concealed by earth mixed with short grass stems. The covering of the eggs is done quickly with the feet. One nesting bird watched by C.E. Bryant (Emu, 39,1940, p.155) turned its back on the intruder and commenced an exceedingly speedy "dance", rising slightly off its feet as it used them alternatively in scratching the sand over the eggs.

The Kittlitz Sand-Plover of Tropical Africa and also the Egyptian Plover cover their eggs with sand, as does the Kentish Plover (our Red-capped Dotterel) in those parts but not elsewhere throughout its extensive range, as far as is known. The habit probably serves the double purpose of protection from the heat of the sun and concealment from predators. Apart from the above-mentioned plovers other species, such as the Little Grebe and the Ruffed Grouse, cover their eggs, the former with aquatic vegetation and the latter with leaves.

Australian Dotterels eat seeds, insects and their larvae and some vegetable matter. Monty Schraeder of Cunnamulla, Q., has an injured bird which lives on millet "with greens sometimes". Doubtless the birds rest during the heat of the day preferring to feed in the mornings and evenings. A relatively large eye indicates that the species is active at night, a fact noted by Monty Schraeder and also by McGillp who watched, in the headlights of his car, many birds at work on a thick patch of grasshoppers.

Hundreds of Australian Dotterels have been seen coming in to a stock tank to drink at dusk (McGilp, Emu, 22, 1923, p.240).

The Australian Dotterel has the typical plover-like habit of bobbing its head and it practices injury feigning when its eggs or young are in danger. It runs with speed and flies swiftly.

Recently-hatched downy young are speckled blackish-brown and buff above and have pale buff underparts and their mottled appearance makes them look like little clods of earth.

The haunts of the Australian Dotterel are open sandy plains, salt-bush and gibber country, pasture lands and ploughed fields. The opening up of mallee country for agricultural purposes has provided additional habitats for the species. Its presence in a particular district seems to be largely influenced by local conditions rather than by regular seasonal movements.

The taxonomic position of the plover-like (in-habits) Australian Dotterel has been discussed in recent times by Walter J. Bock (Emu, 63, 1964, p.383) and also by Joseph R. Jehl, Jr. who, in his paper (San Diego Society of Natural History, Memoir No. 3, 1968) retained the species in the subfamily Cursoriinae (Coursers) whereas Bock recommended that it be placed with the plovers. K.A. HINDWOOD, Sydney, NSW.

THE BLACK-FRONTED DOTTEREL.

The Black-fronted Dotterel also called Sandpiper and Gutter Snipe, occurs throughout Australia and is usually found in pairs frequenting shingly banks of freshwater streams. This little plover is also to be found inhabiting the muddy foreshores of tidal weed-strewn backwaters and it was in a habitat such as this I came first to know the Black-fronted Dotterel.

Unlike the Red-capped species in which the male is much more brightly plumaged than the female, the sexes of the Black-fronted Dotterel are very similar.

In field habits and flight, the Black-fronted Dotterel differs from other sand dotterels of the genus Charadrius and seems to be more closely allied to the Spurwing plovers and Lapwings.

The nest too, is sometimes lined with grass and small sticks. Nests of this kind Bear a resemblance to nests of the Spur-wing and Banded Plovers.

The eggs of the Black-fronted Dotterel, like all eggs of the family of birds Charadriidae, are very beautiful objects of nature. They are stone-coloured with markings of brown and lavender neatly adorning the complete egg surface. When fresh, the eggs have a hard porcelain appearance and in this way, differ greatly from the eggs of the Red-capped Dotterel, the eggs of which produce a soft pigmental effect to the eye. The clutch is usually three in number, although I have found on occasions, clutches in which the complement was obviously two.

The breeding season is from September to December.

The food of this dotterel is mainly aquatic life; but fragments of beetles and skins of larvae of insects, some lepidopterous, ants and also seeds have been found in stomachs examined.

- L.C. Haines -

THE HOODED DOTTEREL

A species that always provides a measure of satisfaction to field observers on the quieter reaches of coastal beaches in southern New South Wales is the Hooded Dotterel. It is the only one of the five dotterels that breed in that State which solely occurs on beaches and tidal inlets. This is in contrast to the position in south-western Australia, where the Hooded Dotterel is not uncommon on salt lakes far inland. It is widespread throughout most of southern Australia and Tasmania, extending north in New South Wales rarely as far as Sydney. On the numerous sand beaches south of Jervis Bay one or more pairs appear to be resident. I have found them at times in small flocks upwards of six birds, probably family parties following a successful breeding. Pairs take up their territories in early Spring.

The nest is merely a shallow hollow in the sand, well above the tide line, and it is usually placed beside a beach-drifted log or other object. This either serves as protection from beach walkers or strolling animals, or possibly to provide a ready location mark. Two or three eggs are generally laid being sandy-buff in coloration and are spotted and blotched with purple and black

markings. They are somewhat pointed, like all plover eggs, the smaller end being turned inwards when in the nest. August to January covers the breeding period.

The Hooded Dotterel is easily identified, as it is the only small plover with the head and throat all brownish-black, there is a broad white nape-patch with a black border between it and the brownish upper plumage. The legs are pinkish and the bill red with a black tip. The underparts are white, and in flight the white rump shows a blackish centre. The young do not have the black head and throat and need careful identification.

Birds permit a close approach, but usually run with quick strides ahead of an observer for some distance along the beach. When the birds decide they have gone far enough they rise in flight over the sea and quickly return to where they were first disturbed. I have seen them on most south coast areas when patrolling from Ulladulla southwards, but only on a few occasions have I found the nest. The total State population would be, however, small and careful protection of this interesting bird is needed.

Arnold R. McGill, Arncliffe, NSW

THE RED-CAPPED DOTTEREL

My earliest recollections of the Red-capped Dotterel date back to the year 1937. In those far off days the back-waters of Iron Cove Bay still retained stands of mangroves, muddy water channels and at low tide, fairly extensive sand and mud flats.

While homeward bound late one winter's afternoon from a swampside ramble. I noticed in the fading light and some little distance out in the swamp, a small party of waders.

Despite the fact that I did not possess field-glasses, I managed to write down in my note-book an "on the spot", description of the birds and observed in doing so, that some were more brightly marked about the head and face than were others in the group. During my next visit to the bird gallery in the Australian Museum, the only reference "bird book" to which I had access in those days, I eventually managed to locate some mounted specimens in one of the glass cases, which answered very well indeed to my field notes and I found my little plovers to be Red-capped Dotterels.

January, 1, 1969.

Not very long after the above mentioned episode, the mangrove swamps of Iron Cove Bay were totally destroyed in the name of civic progress and the complete area reclaimed.

Although White-fronted Chats, Little Grassbirds and Brown Honeyeaters were forced to abandon the area and seek other suitable habitats further along the Parramatta River, conditions were made ideal for Red-capped Dotterels. Areas that were formerly mangrove, samphire and mud were converted into quite extensive flats of white sand and shingle, dredged up from the bottom of the adjoining bay. The dotterel population began to increase and it was not long before they began to nest in the reclaimed areas.

Red-capped Dotterels nest from August to January and on this dazzling white nesting habitat I located many nests. All eggs examined were of what I now regard as the pale form; that is, creamy-white eggs marked with light and darker brown spots and pale lavender splotches. Eggs of this pigmentation I then regarded as typical Red-capped Dotterels' eggs. It was not until some years later that I became aware of the fact that the Red-capped Dotterel was capable of producing two other forms of eggs, according to the immediate background and habitat in which the nest depressions are placed.

It was also in this reclaimed swamp, that I located a true clutch of three eggs. The normal is two and the only other record I have of a clutch of three for the Red-cap is a true set photographed many years ago by Michael Sharland. During more recent years, Douglas Gibson of Thirroul has found a clutch of four; but this clutch was obviously the laying of two hens, there being two of the pale form and two of a dark form all in the one nest depression. Just how the two clutches came to be in the same nest is a matter of conjecture.

The Red-capped Dotterel's diet consists of small beetles and beetle larvae. It mainly feeds at the water's edge.

The young "Downies" are able to swim quite well and I once observed a wounded female which eluded capture by running into the water and swimming out into the bay.

Taxonomists now regard the Red-capped Dotterel, Charadrius (Leucopoliis) alexandrinus ruficapillus as a sub-species of the



BLACK-FRONTED DOTTEREL

- PHOTO - N. CHAFFER



RED-KNEED DOTTEREL

- PHOTO - N. CHAFFER

Kentish Plover, L.a. alexandrinus, a Palaearctic species no longer found breeding in Britain. Four other sub-species of the typical race (The Kentish Plover) are known to ornithological science. They are :- Leucopoliuss alexandrinus dealbatus, South China to Japan. L.a. seebohmi, Ceylon. L.a. nivosus, North and South America and L.a. spatzi of Rio de, Oro.

L.C. Haines

THE RED-KNEED DOTTEREL IN COASTAL NEW SOUTH WALES.

In New South Wales the Red-kneed Dotterel is largely a bird of the inland swamps and lagoons. The presence of the species in coastal districts (that is, east of the Great Dividing Range) is irregular and apparently the result of drought conditions causing the birds to disperse to more suitable localities. An early coastal specimen was that collected by the Naturalist John MacGillivray (1821-1867) near Grafton, Clarence River, in 1865, there is also a specimen, dated 1866, and another undated skin from the Clarence River: both are in the Australian Museum collections.

A.R. McGill discussed (Emu, vol.43, 1944, pp.225-8) the status of the species in coastal south-eastern Australia, and later Hindwood and McGill (Birds of Sydney, 1958, p.37) summarised the records for the Sydney district. Between June 1943, when first noted in the area, and April 1958, from one to 12 Red-kneed Dotterels were observed in the Hawkesbury swamps some 30 miles west of Sydney. Another coastal record of the time was that for a bird seen at Tuggerah Lakes, north of Sydney, in December 1958 by the Late Captain and Mrs Hutcheson.

Several years then passed before the next recorded "invasion" between June and December 1965, from one to 6 birds were seen either at Homebush Bay (close to Sydney) or at Bushell's Lagoon, Wilberforce, in the Hawkesbury district. It was at Bushell's Lagoon, on September 9, 1965 that the nest and four eggs of a pair of Red-kneed Dotterels were found by E.S. Hoskin: as far as is known this is the only recorded nesting of the species in coastal New South Wales.

In 1966 single birds were observed both at Homebush Bay and Bushell's Lagoon over the period April to September.

The severe drought that affected much of inland New South

Wales (and other parts of Australia) in 1967 and early 1968, must have forced many Red-kneed Dotterels to move into coastal localities. What may be termed an influx of the species took place in December 1967 and January 1968 as the following records will indicate:- Mill Pond (Botany) 1; Homebush Bay, 3; Maraulan (100 miles s-w of Sydney), 13; Bushell's Lagoon 24 (all for December). A survey of the muddy margins of Bushell's Lagoon on January 6, 1968 revealed the presence of at least 50 Red-kneed Dotterels. Some ten days later 15 birds were noted along a portion only of the same lagoon. Apart from one bird seen on the Mill Pond, Botany, in January none has since been reported from coastal areas. Two visits were made to Bushell's Lagoon in April 1968, at which place more than 50 Red-kneed Dotterels were recorded in January, but none was seen. Widespread rains ended the inland drought in mid-May 1968.

An organised survey of likely haunts in coastal New South Wales during the drought would have doubtless revealed the presence of considerably more Red-kneed Dotterels than were recorded by the "chance" and intermittent observations outlined above, and which, apart from personal notes, have been kindly made available by several observers to whom thanks are extended.

K.A. Hindwood, Lindfield, N.S.W.

WADER RECORDS FROM JAN. TO JUNE, 1968.

LOTUS BIRD LONG NECK LAGOON: (7) 2-1-68, (1) 20-1-68. PITTOWN SWAMP: (1) 29-1-68. BAKERS LAGOON: (3) 3-3-68, (5) 27-4-68, (2) 1-6-68, (3) 16-6-68.

PIED OYSTERCATCHER ASH IS. NEWCASTLE: (1) 13-1-68

SPUR-WINGED PLOVER BUSHELLS LAGOON: (20) 27-4-68, PITTOWN SWAMP: (60) 19-5-68. HOME BUSH BAY: (22) 4-6-68.

BANDED PLOVER RICHMOND AIRSTRIP: (9) 2-1-68, (4) 19-5-68, (4) 10-6-68. BANKSTOWN AIRSTRIP: (2) 4-2-68.

PACIFIC GOLDEN PLOVER ASH IS. NEWCASTLE: (8) 13-1-68. COOKS RIVER EAST: (1) 3-2-68. QUIBRAY BAY: (1) 10-2-68.

DOUBLE-BANDED DOTTEREL McGRATHS HILL SWAMP: (7) 1-6-68.

MONGOLIAN DOTTEREL ASH IS. NEWCASTLE: (8) 13-1-68. QUIBRAY BAY: (12) 10-2-68.

LARGE SAND DOTTEREL QUIBRAY BAY: (4) 10-2-68.

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RED-CAPPED DOTTEREL ASH IS. NEWCASTLE: (8) 13-1-68. HOME BUSH BAY: (11) 17-1-68. COOKS RIVER EST.: (2) 3-2-68. QUIBRAY BAY: (5) 10-2-68.

BLACK-FRONTED DOTTEREL BROADWATER LAGOON: (8) 2-1-68. ASH IS. NEWCASTLE: (2) 13-1-68. BUSHELLS LAGOON: (1) 18-2-68, (3) 3-3-68. BAKERS LAGOON: (10) 27-4-68. GATTAI SWAMP: (9) 25-4-68, (1) 16-6-68.

RED KNEED DOTTEREL BUSHELLS LAGOON: (14) 2-1-68. ASH IS. NEWCASTLE: (4) 13-1-68. MASCOT SWAMP: (1) 3-2-68.

WHITE-HEADED STILT PITTOWN SWAMP: (4) 2-1-68 (5) 19-5-68. ASH IS. NEWCASTLE: (8) 13-1-68. HOME BUSH BAY: (30) 17-1-68. BUSHELLS LAGOON: (4) 3-3-68. BAKERS LAGOON: (6) 27-4-68. MARAYLYA SWAMP: (3) 6-4-68. HOME BUSH BAY: (2) 26-5-68, (20) 11-6-68. McGRATHS HILL SWAMP: (2) 1-6-68.

GREY-CROWNED KNOT ASH IS. NEWCASTLE: (14) 13-1-68. QUIBRAY BAY: (2) 10-2-68.

GREATER KNOT STOCKTON, NEWCASTLE: (5) 13-1-68. QUIBRAY BAY: (1) 10-2-68.

CURLEW SANDPIPER ASH IS. NEWCASTLE: (7) 13-1-68. COOKS RIVER EST.: (60) 3-2-68. QUIBRAY BAY, KURNELL: (46) 10-2-68.

SHARP-TAILED SANDPIPER BUSHELLS LAGOON: (9) 2-1-68. ASH IS. NEWCASTLE: (60) 13-1-68. HOME BUSH BAY: (54) 17-1-68. QUIBRAY BAY, KURNELL: (16) 10-2-68.

RED-NECKED STINT ASH IS. NEWCASTLE: (50) 13-1-68. COOKS RIVER EST.: (42) 3-2-68. QUIBRAY BAY: (60) 10-2-68. HOME BUSH BAY: (32) 17-1-68, (15) 31-5-68.

BROAD-BILLED SANDPIPER ASH IS. NEWCASTLE: (45) 13-1-68.

JAPANESE SNIPE BUSHELLS LAGOON: (10) 2-1-68. QUARRY CRK. RES., NORTHMEAD: (1) 6-1-68, (1) 7-1-68, (2) 18-2-68. ASH IS. NEWCASTLE: (2) 13-1-68. HOME BUSH BAY: (30) 17-1-68. GATTAI SWAMP: (2) 20-1-68.

TURNSTONE ASH IS. NEWCASTLE: (2) 13-1-68.

EASTERN CURLEW ASH IS. NEWCASTLE: (14) 13-1-68. QUIBRAY BAY: (4) 10-2-68. DOLLS POINT: (1) 14-3-68.

WHIMBREL STOCKTON, NEWCASTLE: (2) 13-1-68. QUIBRAY BAY: (1) 10-2-68.

BLACK-TAILED GODWIT ASH IS. NEWCASTLE: (6) 13-1-68.

BAR-TAILED GODWIT ASH IS. NEWCASTLE: (60) 13-1-68. COOKS RIVER EST.: (32) 10-2-68. QUIBRAY BAY, KURNELL: (90) 3-2-68. DOLLS POINT: (1) 14-3-68.

GREY-TAILED TATTLER ASH IS. NEWCASTLE: (16) 13-1-68. QUIBRAY BAY: (32) 10-2-68.

COMMON SANDPIPER STOCKTON, NEWCASTLE: (1) 13-1-68. HOME BUSH BAY:

(1) 17-1-68.

GREEN SHANK ASH IS NEWCASTLE: (1) 13-1-68. MURRAYLYA SWAMP: (1) 20-1-68, (3) 18-2-68, (1) 6-4-68, (1) 25-4-68.TEREK SANDPIPER ASH IS NEWCASTLE: (150) 13-1-68. QUIBRAY BAY: (2) 10-2-68.

ATHOL COLEMANE, NORTHMEAD. N.S.W.

FIELD NOTES

One occasionally reads in English magazines, "The Field" and "Country Life", letters to the Editor, concerning that interesting wader of the woodlands, the Woodcock carrying its Downy young between its thighs.

Mr. Tony Rose, Kuring-gai Chase National Park naturalist, sends me the following interesting bird-notes :-

"After being demobilised from the Indian army, I worked in Norfolk, the home of the Stone-Curlew, also called Norfolk Plover and locally, Thick-knee. Their eerie cry as they flew over at night, I heard again a few years later at Gloucester, N.S.W.

Many times I saw them on their breeding grounds on the Norfolk heathland and have been decoyed away from their nest by the old broker wing-trick. I saw one brooding with part of an egg-shell in its beak. Evidently they take the egg-shells away and crush them by stamping on them. They then eat the little bits so that no evidence is left of their nest.

Norfolk also introduced me to the Woodcock as a breeding bird. Previously, I had only seen it in winter, when it arrives from breeding grounds in Northern Europe.

I was honoured with a pair nesting in a spinney. The first sign I had was while standing in a ride of the main wood at dusk on 20th March, 1949. A Woodcock flew over my head calling, in the peculiar courting flight called "roding". I saw a young one on May 16th and later flushed the old bird which flew in a labouring manner just managing to clear the hedge after which it dropped into a bean field. Rooks chased her until they saw me. Her legs were hanging down carrying a young one between her thighs.

I had seen and seeing is believing, the much debated question of the Woodcock carrying her young. The Rooks were my only witnesses and I am sure they only gave chase to make the Woodcock drop the youngster, upon which they would have at once pounced."

- Editor -

FIELD-OUTING TO HAWKESBURY SWAMPS Etc. November 24, 1968

High winds, which fortunately moderated later in the day,

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did not deter either birds or bird watchers, numbering some 22 people, under the expert guidance of Mr. Ernest Hoskin.

Highlights at Bushell's Lagoon, near Wilberforce, were a White-headed Stilt's nest with four eggs, two young Black Ducks, which were banded by Mr Hoskin, two Sharp-tailed Sandpipers seen at close range, and a Stubble Quail.

Water-birds, including over 100 Pelicans, were in abundance. Altogether 44 species were seen in the locality.

Lunch was eaten near the old church at Windsor where a White-plumed Honeyeater and a Black-faced Cuckoo-Shrike were added to the list.

Next stop was in open forest shale country near Scheyville where Mr. Hoskin's mimicry of the calls of birds brought many species, including a White-throated Warbler and a Rufous Whistler right before our eyes. Two large lace lizards on the one tree were admired. On we went to Cattai Creek, near Murphy's Bridge where we listened to the Bell-miners calling and also saw many other species including a lovely King Parrot.

Finally the party went to Blue-Gum Creek near Annangrove in sandstone country where a nesting White-throated Warbler was observed.

Altogether the outing yeilded 86 species and was a reminder to Sydney bird-watchers how fortunate they are in having such a variety of habitats so close handy and so close together.

HARRY GOLDSTEIN. Oatly, N.S.W.

FIELD OUTING TO LION ISLAND, December 7, 1968.

The day dawned fine and clear-perfect weather for island going - and at 9a.m. a party of 35, including 30 members of the G.L.B.W. left Palm Beach for Lion Island. After landing safely on the small beach on the southern side of the Island members were introduced to Bill Lane (the leader of the party) Alan Morris (representing the National Parks and Wildlife Service), Harry Battam, Ray Lonnon, and Brian Speechley who were assisting with the banding programme. Before splitting up into smaller parties we were given a short, but informative, talk on the birds of Lion Island by Bill Lane who also discussed some of the results of the banding programme.

The main species of interest found on the Island were the Little Penguin, Wedge-tailed Shearwater and the Sooty Shearwater. The penguins were breeding in good numbers among the rocks and boulders below the cliffs and young birds of all ages were seen.

Some shearwaters were also breeding below the cliffs but the main colonies appeared to be in the area surrounding the highest point of the island. Here, both species were nesting together and many of their burrows had been numbered in an attempt to gather information on the life histories of individual birds. Most of the birds examined during the day had already been banded, one as long ago as 1957 and some interesting information was thus obtained; in addition, several new birds were banded. Very few land-birds were seen and only Ravens and Yellow-faced Honeyeaters were present in any numbers.

Before leaving most members took the opportunity of visiting the northern side of the Island where the sandstone cliffs have been weathered and eroded into a series of most unusual patterns and shapes. In closing this report I would like to record the thanks of members to Bill Lane and his helpers for a most interesting and enjoyable day. ALAN ROGERS.

FIELD DAYS

Saturday, January 18, 1969. (RAIN-FOREST)

Leaders: George and Marie Dibley.

Meet at 9.30 a.m. east side of Waterfall station. We intend to walk $2\frac{1}{2}$ miles down the Old Mill track from Waterfall to the Scientists' hut site, through some good rain-forest. Carry morning tea.

Some cars and those who do not want to walk down the track (which is a bit rough) will proceed down McKell Ave. and walk into the Scientists' hut clearing where the rest of the party will meet up with them. Drivers of cars still parked at Waterfall will be driven back to pick these up and will then return to the clearing for lunch. The afternoon will be spent in rain forest along Bola Creek, cars being parked in Lady Carrington Drive.

Members coming by public transport should catch the 8.23 Cronulla train at Central and change at Sutherland to the Waterfall train arriving at 9.23 s.m.

Sunday, February 9, 1969 (Rain-forest)

Leader: Peter Roberts.

Localities, Mt. Tomah; Mt. Wilson; Mt. Irvine.

Meet 10.30 a.m. at picnic ground at the top of Mt. Tomah near the Bell Road. Lunch at Mt. Wilson picnic ground. The afternoon will be spent at Mt. Irvine.