

The Tasmanian Naturalist

Annual Charge 40 cents.

Supplement to the Bulletin of the Tasmanian Field Naturalists' Club
Hobart (Box 68A, G. P. O. Hobart) — No. 8, FEBRUARY, 1967

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

ANASPIDES TASMANIAE — NOTES ON ITS DISCOVERY AND DISTRIBUTION By A. M. Hewer, Hobart

TASMANIA is the home of a number of animal forms frequently described as "living fossils". Apart from the "Tiger" (Thylacine), perhaps the best known is the small Mountain Shrimp (*Anaspides tasmaniae*). Indeed, so well known is this creature of highland ponds, tarns and rivers that lay people have accepted its generic name as a vernacular, "Anaspides."

Although familiar to many early settlers, the Mountain Shrimp was unknown to science as a living species until 1893. In that year a visiting New Zealand naturalist, G. M. Thompson, accompanied Leonard Rodway, Tasmanian Government Botanist, on a walk over the top of Mt. Wellington, which rises to more than 4,000 feet above Hobart. They were interested primarily in the alpine flora. Whilst having lunch at a spot known as Diamond Springs, near the mountain's unique rocking stone, Rodway drew Thompson's attention to these unusual and primitive shrimps living in the springs. Thompson was excited by the discovery. These were living specimens of a group of primitive shrimp-like creatures known previously only as fossils. He described the species, naming it *Anaspides tasmaniae*, in a paper presented to the Linnean Society in August, 1894.

Apart from an unusual freshwater crustacean described by O. A. Sayce in "The Victorian Naturalist", Vol. 24 — 117-1907, the only known relatives of the Tasmanian Mountain Shrimps are several fossil forms found in the Permian and Carboniferous sandstones of Europe and North America.

During 1907, Professor Gilbert C. Bourne and the British Association sponsored a one-man expedition to Tasmania to collect freshwater animal life and in particular investigate the life cycle of *Anaspides*. Geoffrey Watkins Smith accepted the assignment. He arrived on November 1st, 1907, and in the four or five months he was here found several new species of crustaceans. The most notable, probably, was *Paranaspides lacustris*, which he described from specimens collected by him at Great Lake, central highlands.

A full description appears on pp. 470 - 473 of the Proceedings of the Royal Society of London, December 1908. In the same volume he describes the breeding, habits and occurrence of *Anaspides* (pp. 466 - 469).

Anaspides is common in many places over the western half of the State, usually at elevations above 1,000 feet. It may be seen in a number of places on Mt. Wellington and is known in New Town Creek, about half a mile beyond the end of Lenah Valley Road. It also occurs in the national parks.

Geoffrey Smith states: "The introduced English Trout which are multiplying so rapidly in the Tasmanian rivers and lakes will probably end by exterminating the shrimp."

Of the species *Paranaspides lacustris* this is probably true, as this species was described as inhabiting "the littoral zone of the lake, living among rocks and water-weeds rather after the manner of a prawn". Certainly, if not exterminated by the trout, its continued existence would not be helped by the fluctuating level of the lake as a result of today's hydro-electric development. *Anaspides*, on the other hand, is common in many areas and inhabits water not normally accessible to

trout or other introduced fish. The species does not appear to be in any danger of extinction.

Anaspides differs from all other shrimps in that the front half of the body is segmented and not fused into a solid carapace. It may be seen at rest on stones, in the small pools and creeks which it inhabits, and, unlike other shrimps, holds the body flat, the tail being unflexed. In this position it crawls around the stones and weeds in its pool. When disturbed it gives rapid side strokes with the tail which send the animal sideways or forward, but not backward. Diet consists mainly of algae, slime and other vegetation but it appears to be omnivorous and will eat animal matter.

Whilst in Tasmania, Geoffrey Smith collected material for a book on Tasmanian Natural History in which he described some of his experiences during his stay. The book, "A Naturalist in Tasmania", was published in 1909 (Clarendon Press) and is today somewhat of a collector's item. An even rarer volume in my possession is entitled simply "Geoffrey Watkins Smith". Only one hundred and twenty five copies were printed, and my copy, No. 41, was originally presented to his great friend in Tasmania, Leonard Rodway.

This is a memorial volume to a man who devoted his short life to the cause of science. With the rank of captain, he was killed in action in France on Monday July 10th, 1915.

TASMANIA'S CURIOUS WATTLE-BIRD

By Michael Sharland

SOME of us can recall the time when the sight of a Tasmanian Wattle-Bird (*Anthochaera paradoxa*) in the city was really noteworthy and, all too often, meant the production of a gun — and usually one less Wattle-Bird to grace the park or garden. Wattle-Birds were always accepted as birds of the country which they roamed in search of nectar in flowering trees and made their presence known by their loud, unorthodox calls and their clustering in dozens on certain trees where they sipped nectar to the point of intoxication and in their frenzy of drinking scarcely turned a feather when one of their number — or more — fell to a man with a gun beneath.

Now, not only do they visit Hobart regularly, but they live in it. A few breed in small suburban parks, one being Lambert Park, Sandy Bay. They come on to bird trays in private gardens and are tame enough to drink sugared water from a jar while a person is standing a few feet away. At such times the observer can admire their attractive patterns, the light orange-yellow breast mixed with grey, the broad brown stripings on the body, the quaintly streaked head, and note the long yellow face-wattles and the extremely long tail. The male averages fifteen inches in length; this makes it the largest of all the Australian honeyeater group, Meliphagidae, and, of course, it is one of Tasmania's 14 endemic species.

Australia has three kinds of Wattle-Birds — this one, confined to Tasmania, the Brush Wattle-Bird (*A. chrysoptera*), which also occurs in Tasmania, and the Red Wattle-Bird (*A. carunculata*), which, though common in the eastern, southern and western parts of the continent, does not come to Tasmania. Although it has a family likeness to the others, the Tasmanian, or Yellow, Wattle-Bird is a distinctive bird and, with its long tail, relatively short wings and rather awkward flight, seems as if it might link the earliest forms of birds with those of today, both in structure and voice. In flight it bears an extraordinary resemblance to pictures we have seen of the *Archaeopteryx*, the fossilised bird that wasn't far removed from reptiles. Then, its voice is so unlike that of a normal bush bird as to suggest that it has come, without any refinements, from the days when birds had not developed the songs we hear from them today.

Its chief food is nectar. Yet it also eats a good deal of insect life, and it has the habit of feeding on the ground. It catches insects in the grass, hopping from point to point or flying a few feet in pursuit of beetles, grasshoppers, and the like. This seems curious behaviour by a bird that we usually associate with flowering trees. But in many respects the Tasmanian Wattle-Bird is unorthodox.

CLUB ACTIVITIES DURING 1966

THE 1966 annual report of the Tasmanian Field Naturalists' Club — the 62nd — will be presented at the annual meeting at the Tasmanian Museum, Hobart, at 8.00 p. m. on Thursday, February 16, next. An advance copy of the report reads :-

Membership — There have been 16 new members elected during the year, one resignation, and the loss of one valued member (Mrs. Fleming) through death.

Meetings — The average number attending meetings was 39. Following is a resume of meetings — February 17 (1966), annual meeting, report and balance sheet, election of officers. March 17, Dr. B. I. H. Scott spoke on "Nature's Clocks." April 21, special general meeting to elect a new president and hon. Secretary, followed by an illustrated talk, "A trip to Cape Portland," by Mr. L. Wall. May 19, report on Pine Creek and Easter camp at which members' slides were shown. June 16, Dr. E. R. Guiler gave an interesting illustrated talk on the habits of the Cape Barren Goose. July 21, Mr. B. C. Mollison screened slides showing various aspects of Tasmanian wild life. August 18, Dr. Reber, Hon. Research Fellow, Division of Radio Physics, C. S. I. R. O. gave an entertaining and informative lecture on twining vines. September 15, Mr. M. Sharland gave an account of his visit to Cape York Peninsula. October 20, Mr. A. Hewer showed some of his excellent slides in a talk "Exploring Nature with a Camera." November 17, question night, during which members' questions were answered by other members; Professor Jackson (Botany) also outlined possible projects for the forthcoming camp at National Park.

Outings — A number of field excursions were held during the year. Feb. 19, Blackmans Bay (Mr. L. Wall leader); March 19, Mt. Dromedary (Mr. D. Milledge); April 30, Pawleena (Mr. Wall); May 21, Bonnet Hill and Kingston (Sister Warren); June 18, Rocky Tom (Mr. Wall); July 23, Granton Caves (Mr. Mollison); Aug. 20, Shag Bay (Mr. Hewer); Sept. 17, Glen Huon Falls (Miss Anne Cooper); Oct. 22, Tinderbox and "St. Chad's" (Mr. Milledge); Nov. 19, Carlton Bluff (Mr. Aves). April 8 - 11, Easter camp.

Annual Camp — As reported in "The Tasmanian Naturalist", No. 5, the camp was held during Easter at Lune River, some 60 miles south of Hobart. About 20 members attended. Each party catered for itself, and the campers were grateful for hutment accommodation provided by the mine manager at Lune River, Mr. Donnelly.

Committee Meetings — Seven meetings were held during the year. The Club gave full support to the South-West Committee in its efforts to preserve the natural beauties of the State's south-western region, also to the Fauna Conservation Committee, Federation of Field Naturalists Clubs of Tasmania, and Mt. Field National Park Board. Grateful thanks are expressed to all who so ably helped during the year, especially to Mr. Kelsey Aves who so capably filled the post of hon. secretary and to whom the functioning of the Club owes so much.

The Future — Your committee is concerned about the future of the Club. In particular it would like to see more members at meetings and field outings. Any suggestions for making these more attractive will be gratefully received. Remember, the success or otherwise of your Club is in your hands.

DAVID G. THOMAS, President

Bird-study group : For some time now the Tasmanian branch secretary of the Royal Australasian Ornithologists' Union, Mr. L. E. Wall, has been promoting a bird-study group among local Union members. Meetings are held in Hobart at two-month intervals. Some highly interesting talks and discussions have been held. The group would welcome new members interested in bird-study. If you don't know of the existence of the group then phone Mr. Wall (Hobart, 8-4165) for information.

TASMANIA'S CONIFEROUS FLORA

A number of conifer trees of different genera are restricted to Tasmania. In fact, only one species, the Oyster Bay Pine (*Callitris*) occurs outside the island. All help to impart a distinctive character to our wilder bushland regions and highland areas.

The three principal commercial species are, Celery-top Pine, King Billy Pine, and Huon Pine, though the lastnamed is becoming more difficult to procure through over-cutting and slow regeneration.

Celery-top (*Phyllocladus aspleniifolius*) has rather tough broad leaves, which when squashed between the fingers have the smell of celery. Its wood varies from white to pale straw colour. It is used for flooring, external and internal fittings, joinery, furniture, railway carriage construction, ship-decking, panelling and for making vats to hold sulphuric acid. Its quantities are limited, however.

King Billy Pine (*Athrotaxis selaginoides*) is favoured for many uses. It is very good for cabinet work, doors, window-sashes, oars and sculls, pattern-making, and for the manufacture of violins. It has been used for making rowing skiffs.

Huon Pine (*Dacrydium franklinii*) is one of the world's finest softwoods. It has no superior for boat-building, and also makes very attractive furniture. From the bark and foliage comes the medicinal Huon Pine oil. The tree is now extremely scarce, unfortunately. Logs and old trunks which may have lain on the ground for hundreds of years are being retrieved by millers from western parts of Tasmania, which were its stronghold.

Most familiar of the endemic conifers probably is Pencil Pine (*Athrotaxis cupressoides*). It occurs frequently in montane and subalpine habitats at 3,000 to 4,000 ft., often as an attractive framework for lakes and tarns, sometimes forming pure stands. Its foliage is not prickly to the touch as that of King Billy Pine. It generally has a spired tip, which gives it strong resemblance to a true pine (*Pinaceae*).

Devil's name : An overseas reader writes — "How did your Tasmanian Devil get its name? Perhaps it was the evil look on its face, as illustrated in your last issue." "Devil" is certainly no pet name, no popular diminutive as "joey" is for young kangaroo, for instance. Nor does it help to endear the animal to anyone, but rather tends to generate antipathy. The name was given by early settlers. They came upon this peculiar creature in their traps and snares or saw it about their homes — a small black fury that frightened their sheep, bluffed their dogs, and, when caught, spat, hissed and fought. They found it entirely out of pattern with more conventional animals in the countries whence they had come, a creature that did not fit anything within their experience. It was "the very devil of a thing." That was how its label came to be applied. — THE EDITOR

Symbol : A slightly larger-than-life-sized effigy of the Tasmanian Thylacine is perched prominently as a kind of trade symbol over the offices of a Hobart brewery company. Anyone seen it? It must be the only one of its kind. Symbolically, it has little significance now, because while the "tiger" is possibly extinct, the company's product has gone from strength to strength since 1824.

Bird Sahara : Listing birds along the bush road between Avoca over the Eastern Tiers to Cranbrook by an observer at Christmas was relatively simple. The total was one — a lone Yellow-throated Honeyeater!

Editors address : Please note address for the receipt of articles, nature notes etc., for publication in "The Tasmanian Naturalist" — Michael Sharland, 1 Erina Place, Hobart, Tasmania. (Phone, Hobart 2-3789).