

described, either upholding or rejecting the validity of the former, and referring the latter to their proper synonymy (following the practice of the last Checklist). This would keep the Checklist up to date, and moreover, would confirm the position of the Committee as a judicial body on species-making—unique as far as Australian systematic zoology is concerned—which was established with the publication of the two Checklists. Other branches of zoological science would have found it of inestimable advantage had they a similar panel of specialists to appraise the value of the new species continually being proposed.

Stray Feathers

Notes on the Kestrel.—Mr. Sharland's photograph is one of the most pleasing bird pictures I have seen. When any notes on the normal nesting of any bird are offered by the writer of an article, it would be of very great advantage that members of the R.A.O.U. who have knowledge of unusual nesting sites or methods of the same bird should in the next number of *The Emu* place their observations before their fellow-members. This is sometimes done by those who are writing regularly for our journal; but those who never contribute an article may have just a small note to add giving a report of a single observation made by a reliable observer. This is, I understand, the real purpose of our column, "Stray Feathers." The ornithological section of my library is unfortunately very limited, and it is only when I visit Hobart at irregular intervals that I am able to consult the standard works in the Royal Society's library. What, therefore, I am about to mention may not be as unusual as it appears to me, and many bird-books and observers may have similar records. W. W. Froggatt, in *Some Useful Australian Birds*, p. 76, notes that the Nankeen Kestrel (*Falco cenchroides*) "often occupies the deserted nests of Crows and Magpies." As Littler, in his *Handbook of the Birds of Tasmania*, and Mr. Sharland in his article have pointed out, there have been very few records of the Kestrel from Tasmania, and all my experience of the bird was gained in the north-western Mallee country of Victoria. Even there I only once found a nest. The female was sitting on four eggs (one of which was lighter in a zone about the middle) in a nest of the White-winged Chough (*Corcorax melanorhamphus*), which had been used by that bird earlier in the season. This observation was made in the "big" Mallee, near Mr. James Blight's, south of Cowangie, on October 13, 1926. In that year the Chough was nesting as early as July 21. I tried to get a photograph of the female

sitting, but had to be satisfied with one of the eggs in the nest. Belcher, in *The Birds of the District of Geelong*, at p. 163, says that of our Hawks the Kestrel is one of the most beautiful and "the one which betrays least fear of man." With this judgment I heartily agree; but my experience as a Kestrel-photographer was not nearly as happy as Mr. Sharland's. Both male and female gave me evidence of their disapproval as I removed my camera from the tree after spending two whole afternoons at the end of a fifty-feet shutter-release waiting for the mother to return to her eggs.—WALTER WALTERS, R.A.O.U., Scottsdale, Tasmania.

Further Notes on the Lotus Bird.—In the last issue of *The Emu* I defined the habitat of the Jacana in Australia as extending from the north-eastern portion of New South Wales through eastern Queensland and across the northern and north-western portions of the continent. It was referred to as a coastal form not usually found more than 150 miles inland. It appears that there are comparatively few localities 150 miles from the sea coast that are regularly frequented by the Jacana. A few weeks ago, however, Mr. H. A. Mawhiney sent to me a skin of *Irediparra gallinacea* taken at the Gwydir reed beds at Moree, New South Wales, on September 30, 1931. The exact locality where the bird was secured was about 185 miles from the sea in a direct line so that the occurrence of this bird west of Moree is a very important factor in connection with the distribution of the species. This is, I think, an inland record.

In an accompanying letter Mr. Mawhiney stated that although he has known the reed beds for the last thirty years, yet this is the first occasion on which he has ever seen or heard of the Jacana on the Watercourse, which, incidentally, has not been so full of water since 1894. There were about 10 birds all told, only two of which appeared to be breeding, but a close search failed to reveal any nest. All of the birds were very timid and kept close to tall thick sags in the centre of the swamps. The birds were very easily alarmed, and either ran with wings outspread, after the style of a Coot making for cover or else they flew a few feet above the water and weeds to seek shelter in another clump of sags.

In reply to a letter asking for information on their powers of flight, Mr. Mawhiney said that his observations were so limited that he could not supply any details, but in his opinion the birds were certainly much better and far stronger fliers than was generally supposed, even by ornithologists. "Taking into consideration the distance they would have to travel from their usual habitat to the Gwydir reed beds," he says, "I should think that their powers of flight were considerable."

The specimen taken was that of a female in full adult plumage, and the skin is now in the reference collection of the National Museum, Melbourne. The following measurements were taken:—Bill (from gape to tip of upper mandible) 30 mm., wing (from carpal joint to tip) 132 mm., tail 40 mm., tarsus 60 mm.—N. J. FAVALORO, R.A.O.U., Melbourne.

Recording the Song of the Lyrebird.—Many members of the R.A.O.U. who heard the broadcast from B Class stations in July last of the sound-film of the Lyrebird may be unaware of the magnitude of the task which Australian Sound Films undertook when they agreed with me that the subject of the record must be a genuinely wild bird singing under absolutely natural conditions. There was the difficulty of transporting valuable and delicate gear to the Sherbrooke Forest, the connection of the recorder to the nearest electric supply and the laying of over a quarter of a mile of twin wire from the recorder to a spot deep in the forest where it was hoped that the bird would sing.

But the choice of a wild bird involved a tremendous risk of failure and of considerable financial loss. Those who are familiar with the Sherbrooke Lyrebirds will know the wily old fellow who actually provided the sound. A small white spot on his left shoulder is an unfailing identification mark, and there is not a bird in the locality more accomplished as a songster. But he is every inch a Lyrebird, and in four seasons association with him I have never once been able to induce him to visit a mound at which any camera or hiding device has been erected. I have been sure, on occasions, that scarcely a fern frond had been disturbed, and yet he has walked past the mound concerned with mincing steps and a wicked gleam in his eye.

The special territory of this bird had been charted and watched for months in anticipation of the recording, and a particular mound had been chosen as the most suitable. And, of course, a microphone may be hidden more effectively than a camera can be. It was hoped that, to make success reasonably certain, one microphone should be placed fifteen feet from the mound while another, somewhat mobile, should be provided for stalking the occupier of the adjoining territory. However, it was found impracticable to provide two microphones, so that the whole success of the venture depended upon the bird's visiting one mound. Furthermore, the day was windy and not conducive to singing, so I felt considerable anxiety as I wandered around the locality hour after hour during which no sound came from the old bird.

Then, at about 3.30 p.m., his familiar voice rang out and closer investigation made it clear that he was actually on the mound at which the microphone was concealed. When I reached the sound apparatus, somewhat out of breath, I

found that recording had already commenced. An excited little group was crowded round a loud speaker linked with the recorder. For a quarter of an hour the bird sang his own wild song alone in his own wild forest, while the eaves-dropping microphone drank in every sound. Besides being broadcast in Australia the sound-film was heard in England and in America. It seems rather a pity that the interest of the broadcast in England should have been lessened by an article in one of the English weeklies which, I believe, wrongly described the bird as singing before a mirror on a house verandah. A gramophone record made from the sound film and including a description of the habits of the Lyrebird will be available shortly.—R. T. LITTLEJOHNS, R.A.O.U., Melbourne.

Mutton-Bird Oil and Fat from Australia.—Mr. H. M. Whittell, R.A.O.U., of Bridgetown, W.A., has sent along the following extract from *News Bulletin* No. 6, dated June 15, 1931, issued by the Department of Markets, Commonwealth of Australia, which he considers might be of interest to members:—

In 1926 samples of mutton-bird oil and fat were forwarded by the Chief Chemist to the Tasmanian Government for examination at the Imperial Institute, London, and in October, 1930, a further sample of the oil was received from the office of the High Commissioner for Australia. The results of examination of these samples are given below.

MUTTON-BIRD OIL—

No. 1—Received in 1926.—This sample was labelled "Oil from the short-tailed Petrel." It consisted of a clear, limpid oil, of reddish-orange colour and having an odour resembling that of cod-liver oil.

The two samples of oil were examined with the following results, which are shown in comparison with the figures recorded for mutton-bird oil by other investigators.

	No. 1	No. 2	Range of figures previously recorded.
Specific gravity at 15/15° C.	0.8880	0.8882	0.8819-0.8858
Refractive index at 40° C. . .	1.466	1.465	1.4636
Acid value	4.0	4.5	4.5-5.7
Saponification value	125.0	120.5	119.6-125.9
Iodine value (Wijs, 3 hrs.) %	131.61	138.8	71.0-132.0
Unsaponifiable matter, % . .	36.5	41.7	31.1-38.4
Solidifying point of fatty acids below 18°C. below 15°C.			

1 Hubl, 17 hrs.

These results show that the oils were of normal character, although the amount of unsaponifiable matter in Sample No. 2 was rather higher than had been previously recorded.

Mutton-bird oil resembles sperm oil in its chemical characters, and might be used as a substitute for it for lubricating and other purposes. It seems hardly likely, however, that the oil could be produced sufficiently cheaply to enable it to compete in the market with sperm oil, which is quoted in the United Kingdom at the following prices:—No. 1, crude, £20 per ton; filtered, £25 per ton (February 6th, 1931).

It is possible that the oil might have a use in medicine for similar purposes to cod-liver oil, as it has been stated to contain vitamins A and D, and to be digestible, although it is of a wax-like nature.

MUTTON-BIRD FAT.

The sample received from Tasmania in 1926 consisted of dark brown, very soft fat containing a small amount of mechanical impurity. It had a strong odour which somewhat resembled that of cod-liver oil.

The fat was examined with the following results, which are shown in comparison with those previously recorded for this product:—

	Sample from Tasmania. at 100/15°C.	Range of figures previously recorded. at 15/15°C.
Specific gravity	0.8652	0.9351-0.9380
Acid value	5.8	6.8-8.6
Saponification value	189.7	200.0
Iodine value, Hubl., 17 hrs. %	106.5	99.5
Unsaponifiable matter, % . .	1.6	0.98-2.0
Refractive index at 40°C. . .	1.466	1.4637
Solidifying point of fatty acids	28.4°C.	29.40°C.

It will be seen that the results given by this sample agree fairly closely with the figures previously recorded.

Mutton-bird fat is different in nature from the oil and appears to possess the ordinary characters of animal fats. Its chief outlet would probably be in the manufacture of soap.

Bird "Jumping" Another's Nest.—On October 23, 1931, a friend and I watched a pair of White-browed Scrub-wrens (*Sericornis frontalis*) lining a nest in an ornamental palm tree—an unusual site—at a height of 5 feet from the ground. On October 25 the Scrub-Wrens were again noted at work, one of the birds in particular being most industrious as it added great quantities of down and feathers to the nest in a very short space of time. On November 2 I visited the nest and found that both birds were present, and the nest contained an egg, which appeared to be half embedded in the lining. Four days later I went to the nest again and was surprised to find a Blue Wren (*Malurus cyaneus*) on the nest. Neither of the Scrub-Wrens could be found. The nest contained three eggs of the Wren and one of the Narrow-billed Bronze Cuckoo, the Cuckoo's egg being almost buried amongst the feathers.

The nest was a typical Scrub-Wren structure being well concealed and neatly built into a triangular crevice of the palm tree.—N. J. FAVALORO, R.A.O.U., Melbourne.

In *The Emu*, Vol. XXX, at page 304, an account appeared of the successful attempts by Mr. J. Bright, R.A.O.U., Rochester, to photograph the Black-breasted Plover (*Zonifer tricolor*). The two accompanying pictures forwarded by Mr. Bright illustrate the result of his efforts in that direction.



Banded Plover approaching eggs.



Banded Plover on nest.

Photos. by J. Bright, R.A.O.U.