

Fauna of the Stirling Range (W.A.).

By F. R. BRADSHAW, Tambellup, W.A.

DURING the camp-out Mr. F. R. Bradshaw, of Tambellup, gave an address on the Stirling Ranges, a tract of rough mountainous country about 30 miles north of Albany, and accounts of animal life he had noted there during many visits and explorations. Almost the whole of this hill country is included in Western Australia's greatest National Park, and comprises 270,000 acres. Mr. Bradshaw exhibited maps of the range and several photos, and members were thus able readily to follow his descriptions.

The nature of the country, he said, is rough and difficult to examine. The peaks rise gradually eastward. Peak Donnelly on the western end is 1,400 feet; on the east side Mt. Toolbrunup reaches 3,341 feet, Bluff Knoll 3,640 feet and Ellen Peak 3,420 feet. The timber is red gum and white gum and jarrah, all more or less stunted and growing in the valley. There is little grass except on the tops of the hills. Sandstone is the general formation. There are a few streams, but most of them disappear underground, and in summer water is scarce except at Dale Spring—which is always fresh, whereas other waters go salt. Blackboy scrub and shingles are the nature of the lower slopes; alpine flora is characteristic of the tops, and cliffs start generally about 400 feet from the tops. The range affects the climate of the south, the 20-inch rainfall line curving round the south side, and the peaks stopping a good deal of rain from going east. On the peaks the average rainfall is about 40 inches, and on the east side about 15 inches.

Mr. Bradshaw referred to the visits made to the range by Milligan and Conigrave, and F. L. Whitlock, and said that his information would be supplementary to the accounts given by those gentlemen. He had met with a number of species not mentioned by Milligan, Conigrave and Whitlock, and there were others about which he was able to give more information. Records of species new to the ranges were in all cases confirmed by the taking of specimens. Following is a list of the birds mentioned by Mr. Bradshaw, accompanied by notes:

Varied Magpie (*Gymnorhina dorsalis*).—Not common, and seen only in the valleys. "A marked characteristic of the bird-life of the Stirling Range is that birds which are chiefly insectivorous are a great deal less common than Honeyeaters. The Stirling Range is a paradise for Honeyeaters."

Blue-breasted Wren (*Malurus pulcherrimus*).—Not numerous in the Range, but abundant in mallee country about 10 miles north. On Nov. 9 last year obtained a nest and three eggs—now in the W.A.

Museum. Gilbert first obtained this species in the Wongan Hills in 1840. In 1886 George Masters obtained specimens on the Pallinup or Salt River, a little to the north of the Stirling Ranges. In 1902 Milligan and Conigrave procured specimens on the north side of the Ranges. During 1910-11 Whitlock secured several sets of eggs for the H. L. White collection.

Black-cheeked Falcon (*Falco peregrinus*).—Not previously recorded from the Stirling Ranges. First met with several pairs in 1919 on a wild, rocky mountain called Talyuberlup, 2,500 feet. "Standing on the top of this mountain on a fine day, their hunting activities can be watched in detail. From the cliffs they fly down to their hunting-grounds in the gullies and fly slowly a few feet above the scrub. When the prey is secured they rise in a great spiral flight until they reach the height of their young, then fly straight in." Sometimes they exact toll from flocks of Ducks and other waterfowl flying over the tops of the range.

Red-winged Wren (*Malurus elegans*).—Present only in central and eastern parts; they live in the deep, moist gullies and are sometimes met with about two-thirds of the way up the mountains.

Leaden Crow-Shrike (*Strepera versicolor*).—In 1920 a specimen was obtained in the central parts of the range; it was very brownish in colour and similar to *S. intermedia*, of Eyre Peninsula. Specimens from the locality 10 miles north of range also show some degree of brown colouring. The bird is a great roamer; it is met with on the top of Bluff Knoll.

Southern Emu-Wren (*Stipiturus malachurus*).—Specimens obtained in mallee country 10 miles north. Males have a distinct streak of blue above the eyes. Present also in the range, where the eye-streak was not so marked, while on the Kalgan River further south the bird showed the eye-streak still less prominent.

Rock Field-Wren (*Calamanthus montanellus*).—Discovered by Milligan in 1912. Inhabits open country between the range and the mallee to the north, where are stretches of heath-like country. Also met between the range and the Kalgan, in similar country.

Tits (*Acanthiza*).—Not numerous in the range. The Broad-tailed Tit (*A. apicalis*), was present. Collected eggs of the Plain-coloured Tit (*A. inornata*), at the end of October.

White-bellied Shrike-Tit (*Falcunculus leucogaster*).—Present occasionally in white gums. Nests in inaccessible tops. Males move about clipping off leaves.

Golden-breasted Whistler (*Pachycephala pectoralis*).—Present along the gullies. Nests in October and November.

Red-tipped Diamond-Bird (*Pardalotus ornatus*).—Abundant in white gum country. Nests in little holes on the undersides of branches.

Spotted Diamond-Bird (*Pardalotus punctatus*).—Found in moist gullies in central and eastern parts. Nest found in the bank of a creek, under vegetation, with a three-foot tunnel.

Golden-rumped Diamond-Bird (*Pardalotus xanthopygius*).—Not found in the ranges, but occurs in the mallee. No nests found.

Yellow-cheeked (*Platycercus icterotis*), **Yellow-collared** (*Barnardius semitorquatus*), and **Red-capped Parrakeets** (*Purpureicephalus spurius*).—First two not common; the last more numerous, and a nest had been found in a white gum.

Regent Parrot (*Polytelis anthopeplus*).—Occurred in the mallee. New species to the locality. In February, 1921, there was a sudden invasion of what appeared to be immature birds, in flocks of sixty or so. The colour suggested remarkable changes. On discussion, during which Mr. Ashby mentioned that the bird north of the

Murchison was not yellow as it was in the lower districts, it was surmised that the northern birds had come down to these ranges in that year. The bird had not been found breeding in the ranges.

Brown-headed Honeyeater (*Melithreptus brevirostris*).—Found in 1911, with nest at the end of a drooping eucalypt bough.

White-eared Honeyeater (*Meliphaga leucotis*).—New.

Emu (*Dromaius novaehollandiae*).—Not numerous, but generally a few about.

Scrub-Robin (*Drymodes brunneopygia*).—A dark form found in the mallee; new to the locality.

Mountain Duck (*Casarca tadornoides*).—Plentiful; really too numerous.

WADING BIRDS.—Ten miles north of the ranges is a region of great salt lakes, said Mr. Bradshaw, where he had found the following birds:

Little Stint (*Erolia ruficollis*).—Numerous, and new to the list.

Red-capped Dotterel (*Charadrius ruficapillus*).—Present in great numbers.

Hooded Dotterel (*Charadrius cucullatus*).—A few present.

Curlew Sandpiper (*Erolia testacea*).—New.

Sharp-tailed Sandpiper (*Erolia acuminata*).—Present.

Banded Stilt (*Cladorhynchus leucocephalus*).—A big mob had been seen by Whitlock in 1911. In 1924, when approaching a remote lake further north, Mr. Bradshaw saw several thousands massed together. There was a tremendous roar of wings when they rose, and it was like a cloud passing before the sun. (Mr. Ashby said that though this bird was not known to leave Australia, its nest and eggs had never been found.)

MAMMALIAN LIFE.—Questioned by Mr. A. S. Le Souef, Mr. Bradshaw spoke of the following mammals in the ranges: Dormouse-opossum (*Dromicia concinna*). Common pouched mouse (*Sminthopsis murina*), of which he had found a family in the deserted nest of a mound-ant. Fat-tailed pouched mouse (*Sminthopsis crassi caudata*).—Found nesting under clods, seldom in logs. Honey-mouse (*Tarsipes spenserae*).—Rare; found about Mt. Toolbrunup; south of the ranges, and west of Tambellup. Yellow-footed pouched mouse (*Phascogale flavipes*).—Two specimens secured from hollow "blackboys" in the central parts of the range. Kangaroo (*Macropus giganteus*).—Numerous. Brush-wallaby (*Macropus irma*) and banded ant-eater (*Myrmecobius fasciatus*).—Numerous at Tambellup. Opossum.—Present, but thinned out by trappers. Long-eared Bat (*Nyctophilus*).—One specimen recorded. Rabbits.—Increasing rapidly, especially on the sand-plains to the north.

Nesting of Plovers.—A pair of Spurwing Plovers have nested several seasons in the same site, on a small island in a lagoon. The nest and eggs furnished a wonderful example of matching surroundings. The island, composed chiefly of samphire and a little native couch-grass, is barely half an acre in extent, and in wet seasons it is almost covered with water. The pair of birds have been noticed for many years now, and even when they rear a brood there are no other pairs come into their gully.—HARRY H. NEWELL, Hindmarsh Island, South Australia (November 1, 1927).