- 2. P. murorum, Kærb.
 - Thallus orbicular, stellate-radiose, yellow or vermilion coloured, adnate, sometimes white-pruinose, incised lobate, peripheral laciniæ narrow, convex, incurved and sub-crenate, at the apices, upper surface minutely granulate-scabrous;
 - M. centre of thallus areolate-verrucose. Apothecia sessile, central, crowded, dusky orange, disk flattish, minutely granulate; margin paler, entire, slightly flexuose; spores 8, colourless, ellipsoid, polari-bilocular. Leight. Lich. Fl. Gt. B. p. 175.
- 3. P. plurilocellare, J. Muell.
 - M. Reported from Queensland in the Vic. Nat. Oct, 1887.

ADDITIONS TO THE LIST OF FOSSIL BIRDS;

BY C. W. DE VIS, M,A.

CHOSORNIS PRÆTERITUS, AN EXTINCT MEGAPODE.

Among the existing vertebrates of Australia which bear the stamp of antiquity impressed on their organisation, the mound-building birds vie with the Monotremes in asserting their hold upon the past. We should therefore be surprised were we not, sooner or later, to discover in the deposits which contain remains of the Monotremes a trace of those remarkable birds Megapodius, Talegallus, Leipoa, or of some other near akin to them. Part of a single limb-bone is but a trace; at the same time if its characters are such as to persuade one to place considerable reliance on any decision to which it may lead, it is justifiable to bring forward its evidence for what it may be worth.

In the present case, the trace consists of the proximal moiety of the metacarp of the left manus wanting the lesser limb of that compound bone—this limb having been broken off at its confluence with the medial limb. In the notes following, this lesser element, being on the same side of the bone when the latter is in its natural

position as the radius is in the antebrachium, will be termed the radial limb, the larger element for the like reason being styled the ulnar limb.

Noting, first, the absence of the bony bridge which, rising from the dorso-radial edge of the ulnar limb, spans the interval between it and the radial limb, and forms a characteristic feature of the part in the perching birds, we observe in the form, extent, and direction of the surfaces of articulation with the carpals, a guide to the discrimination of this fragment of the bird-skeleton. It may be said of the distal moiety of the articulation that it presents in very many birds two elevated parallel and continuous ridges with an intervening sulcus-the ulnar ridge the shorter; in perhaps the majority of birds, however, this ridge is more or less emarginate proximad of its termination. The termination may itself be entirely absorbed by the emargination, the ridge then appearing truncate. In the Megapodidæ alone of the Australian birds examined, this ridge is continuous, but though distinct, it is feeble, almost linear, and trends obliquely towards the radial ridge. The root of the radial limb, which in most birds is broad and depressed, in the Megapodidæ is narrow and convex-between it and the ulnar is a groove running from the furcation of the two limbs proximad to the ulnar edge of the articular sulcus. Such are the features whichbeing present in the fossil, and occurring likewise in the Megapodidæ, and simultaneously in none other within the writer's scope of observation-lead him to refer this bone to the mound-building family.

It remains to ascertain the genus. In this regard mere superiority of size cannot be taken into account—antiquity even to the extent of a geological period can only be allowed a casting vote. But apart from these, the bone bears evidence adverse to its identification with either of the existing genera Talegallus and Megapodius—it combines characters of both with features peculiar to itself; with the bone in Leipoa the writer has no present opportunity of comparing it, his proposal of a new generic term for it is therefore amenable to a contingency which renders it little more than provisional.

The affinities of the extinct bird with Megapodius are seen in the development of a sharp process from the dorso-radial side of the radial limb near the root, in the sudden distention of its radial ridge indicative of a cuneiform of large size and in the regularly cordate form, and distinct sculpture of the articulation with the index digit.

Its equal, or more than equal, affinity with Talegallus is observed in the greater relative breadth of its articulating surface, and in the uniformity of the oblique portion of the ulnar ridge in conjunction with regular convexity of the surface on either side of it.

Its peculiar features are unusually deep impressions on either side of the radial ridge made by the pressure upon it of the cornua of the cuneiform and the greater relative size of the index-metacarpal process.

Dimensions—	Fossil.	Megapodius.
	m.m.	m.m.
Greatest breadth of proximal end	. 27	12
" thickness	. 16	7

BIZIURA EXHUMATA, A FOSSIL SPECIES OF MUSK DUCK.

Among those of Australian ducks the metatarse of Biziura lobata is conspicuous for its massive proportions, squat and distorted shape and general appearance of uncouth strength. It may be added, in passing, that in its conformation it stands alone, and affords no sign from which a solution of the ornithological puzzle presented by the bird itself can be discovered—in other words, it gives us no aid in tracing the affinities of this curious duck.

Obviously the recognition of such a bone in the fossil state is easy, and an elaborate description of it unnecessary since the general agreement between it and its living correspondent will be apprehended more readily from figures than from verbal details.

The fossil is the left metatarse. The trochlea for the fourth toe is missing from the distal, the calcaneal process from the proximal end—the outer plate of bone at both ends is abraded here and there as though it had been nibbled by a mouse.

Specific characters are distinct—the shaft is much more depressed than in the recent species—towards the distal expansion it is also twisted more strongly inwards, the inward direction of the median trochlea being more distinctly marked. This trochlea is moreover considerably narrower—the inner anconal edge of the shaft is not rounded off, but like the outer, forms a continuous linear ridge. The intertrochlear foramen is preceded by a very short portion of the groove-like depression of the shaft on its anconal aspect which in B. lobata is co-extensive with it. In the recent species there is on the side of the shaft immediately below the outer articular cavity an excavation of some size—of this pit no trace appears in the fossil.

The fossil is approximately two-thirds of the size of the metatarse of a male B. lobata. We do not, however, derive from this any precise idea of the relative size of the bird, since the sexes differ so widely in dimensions—if from a male it would represent a smaller, if from a female a larger species.

Locality-Chinchilla, Darling Downs.

Our attention is, by this fossil, once more called to the fact that the 'anomalies' among Australian vertebrates are but the more persistent portions of its archaic faunas.

ON FILARIÆ OF BIRDS;

BY THOS. L. BANCROFT, M.B.

This investigation was undertaken with the hope that any knowledge gained therefrom might be of service in elucidating some of the problems of the life-history of Filariæ.

The Crow of Europe harbours a blood-parasite called Filaria attenuata. It was, therefore, of interest to ascertain if the crows of Austra'ia harboured this or any similar parasite. It was easily and soon ascertained, for the blood of the first crow examined abounded



De Vis, Charles Walter. 1889. "Additions to the List of Fossil Birds. (Chosornis praeteritus, an extinct Megapode. Biziura exhumata, a fossil species of Musk Duck)." *The Proceedings of the Royal Society of Queensland* 6(1), 55–58. https://doi.org/10.5962/p.351131.

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