There is one point that our work on a number of species of birds has made clear: weight is a very useful characteristic for classifying populations or parts of populations. Admittedly its coefficient of variation is usually greater than that for other body measurements (though not very much so in this instance), but whether that is a disadvantage or not depends upon the amount of overlap occurring between the two sets of weights being compared. There is one great advantage in weight measurements — of all external body measurements likely to be taken it is the one least subject to bias arising from variations in method used by the operator. In fact, it may be true to claim that when comparisons are being made between populations measured, as far as can be assured, in the same way by different operators, the extra amount of variation arising from even slightly-different techniques, say in measuring a tarsus, will offset the inherently-smaller coefficient of variation in such a measurement to an extent sufficient to make the use of weight comparisons of approximately equal value. We therefore recommend that weights of some kind be included as a matter of course in the series of measurements taken of any species.

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Association between the Black Honeyeater and the Emu Bush

By J. N. HOBBS, Finley, N.S.W.

The Emu bush (*Eremophila longifolia*) is a shrub or small tree growing to some 15 feet in height, which, according to Anderson (*Trees of New South Wales*, p. 11), is widespread in the Western Plains Division of New South Wales. In those southern parts of the Division with which I am familiar it grows most frequently on the sand-ridges across the saltbush plains. It is nowhere really common, occurring for the most part in small, scattered clumps. It is practically absent from the red gum/yellow box association of the Murray River system, the soils apparently not being conducive to its growth. It bears a flower which is roughly tubular in form, slightly decurved and about three-quarters of an inch long. Nectar is stored in some quantity at the base of the flower. Blossoming is profuse, but owing to the dull red colour of the flower is not particularly noticeable.

The Black Honeyeater (*Myzomela nigra*), in the south-west of New South Wales, bears out its reputation of being a strictly nomadic species subject to irregular irruptions. In

four years of extensive bird-watching in the area, I had seen the species but once, when I noted three feeding in mistletoe high in red gum in the Werai Forest, near Deniliquin, in January 1956. In the spring of 1957 a movement into the area occurred, possibly initiated by the drought conditions prevailing further north in the State.

While I was in the company of a party of Sydney members at Rankin's Springs in early October, the Black Honeyeater was found to be quite common in mallee country, and nests containing eggs and young were located. Birds were seen feeding on the blossoms of an ironbark and also in other eucalypts not in blossom. Emu bush does not apparently grow in that area. A week later we found Black Honeyeaters common at Bundyulumblah Station, Wanganella. Every bird seen was feeding in blossoming Emu bush. Subsequently I frequently saw parties of this bird in the Jerilderie, Urana and Moulamein areas. Without exception, every party seen was in association with clumps of Emu bush, despite the fact that often these clumps were composed of but two or three trees separated by many miles of country from trees of the same species. It was obvious that somehow the Black Honeyeater was able to locate this important food-tree no matter how scattered or isolated the trees were. Their amazing ability to do this and the importance of this plant/bird association was stressed in November when I came across over 100 Black Honeyeaters feeding in two small clumps of Emu bush, each no more than 10 yards square, near Mathoura.

The significance of this record is twofold. First, the Emu bush is virtually absent from the Mathoura area, which is situated in the heart of red gum country, and, indeed, I am sure that these two clumps are the only representatives of the plant within a 30-mile radius. Secondly, the clumps were surrounded by yellow box trees in heavy blossom which were completely ignored by the Black Honeyeaters, although other honeyeaters were swarming on them. This preference for the blossom of the Emu bush, despite the ready availability of other blossom, was noted on other occasions. At Lake Urana, for instance, six stunted Emu bushes in very poor blossom were eagerly being fed over by a party of Black Honeyeaters, yet the scores of surrounding red gums, which were white with flowers, were not even considered.

Despite the many records I made of this bird, I obtained no evidence of breeding other than in the mallee at Rankin's Springs. It would appear that, although the blossoming of the Emu bush is of importance to the Black Honeyeater during its irruptions, it does not in itself initiate breeding.

By late December little flower was left on the Emu bushes, and the Black Honeyeaters moved on, although well into late January odd birds were still to be seen ekeing out a living on the sparse flowers. At Windouran Station, Moulamein, a party of six Black Honeyeaters was watched as they scoured

some Emu bushes for the odd remaining flowers, but, unsuccessful in their search, they took to probing the flowers on an African boxthorn with apparent satisfaction.

The bill of the Black Honeyeater is, of course, admirably adapted to probing the flowers of the Emu bush. It is of approximately the same length and curved in the same fashion.

Some Notes on Grebes

By J. N. HOBBS, Finley, N.S.W.

A recent note in *British Birds* (vol. XLIX, p. 501) drew attention to a feeding association between the Coot (*Fulica atra*) and the Little Grebe (*Podiceps ruficollis*). Shortly after reading such note I was watching Coot, Dusky Moorhens (*Gallinula tenebrosa*) and Australian Little Grebes (*P. novæ-hollandiæ*) at Longneck Lagoon, near Sydney, New South Wales, and was interested to observe behaviour practically identical with that described in England.

Four of the Grebes had each 'attached' itself to either a Coot or a Moorhen which were feeding in shallow water thickly overgrown with floating weed, swimming slowly through the weed and picking food matter from the surface of the water. Each Grebe stationed itself directly behind its selected partner and followed its every move. The Grebes fed in the head-submerged position, with head directly beneath the body of the birds they followed. So close did they follow, that on occasions when their 'partner' stopped suddenly, a collision ensued. In these cases the Coot turned on its escort and endeavoured to drive it off with pecks. It was obvious from their neck-movements, that the Grebes were catching water-life disturbed from the weed by the progress of the Coots or Moorhens. On one occasion a small fish was brought to the surface prior to swallowing. Coots feeding in deeper, open water were not accompanied by Grebes although many were feeding nearby. This association was clearly to the benefit of the Grebes only.

The purpose of another association between the Coots and Grebes, seen at Yanga Lake, Balranald, is not so clear. Outside the breeding season, large congregations of grebes occur at this Lake. Hoary-headed Grebes (*P. poliocephalus*) predominate, with a fair percentage of Little Grebes. The birds form into very compact flocks, sometimes numbering as many as 300 birds. Invariably a few Coot and Musk Ducks (*Biziura lobata*) may be seen in the centre of these assemblies, travelling and feeding with them. It is difficult to see what advantage either the Coots or Ducks obtain from this association. Usually a Silver Gull (*Larus novæ-hollandiæ*) accompanies the assemblies feeding on the ample food