AFFINITIES OF SOME NEW ZEALAND BIRDS.

In "American Museum Novitates," No. 1417 (1949), Ernst Mayr continues his "Notes on the Birds of Northern Melanesia," and discusses the taxonomic problems of Pacific Island rails. Rails are notable colonisers of isolated oceanic islands where predators are absent. Many island rails have lost the power of flight, partially or completely. Their unstable morphology has led to the establishment of many genera based on single species. "Such classification," writes Dr. Mayr, "fails to recognise the function of the generic name in binomial nomenclature, namely to indicate relationship. A revision of the family with the arrangement of the species into related groups is badly needed." Such a revision, in Dr. Mayr's view, is likely to result in synonymising a number of genera, including (among New Zealand forms), **Nesolimnas** (with **Rallus**), **Tribonyx** (with **Gallinula**) and **Notornis** (with **Porphyrio**, along with **Porphyrula**). **Gallirallus** is considered related to **Rallus philippensis.**

The widespread banded rail **(Rallus philippensis)** is a most successful Pacific colonist, and the Chatham Island rail **("Nesolimnas" dieffenbachii)** is so clearly a member of the same group that "it would be unnatural to separate this group generically." In the words of Jean Delacour, **dieffenbachii** is but "a modified **philippensis**, hardly more different than **macquariensis**," a conclusion independently reached by the present writer after examining the unique type in 1948, and indeed evident from Buller's plate.

Mayr quotes Delacour's conclusion that the weka is also related to **philippensis.** "The head pattern is the same if less bright and also the breast barred; grey throat and foreneck and belly. All have similar ruddy primaries, barred with black." This is a conclusion which New Zealand ornithologists can test by field comparison of voice, habits and behaviour.

Mayr recognises six races of banded rail in the Bismarck-Solomon Island area, but Pacific populations of the pukeko **(Porphyrio porphyrio)** are so variable that only one subspecies can be recognised from the Admiralty Island to Samoa and New Caledonia, a conclusion which (in the absence of adequate study material) must influence the recognition of the alleged subspecies **chathamensis** Forbes in the New Zealand region.

In recent letters to the writer, Dr. Mayr stated his conclusion that the brown creeper **(Finschia novaeseelandiae)** is quite closely related to the Australian genus **Sericornis** (scrub wrens) and that the whitehead and yellowhead **(Mohoua)** are presumably also related. "Actually, there are many resemblances between **Finschia** and **Sericornis** in the structure of the bill, of the feet, and in the colour of the tail feathers and other parts of the plumage." Dr. Mayr expressed the hope that this conclusion would be tested by comparative field studies.

The whitehead, yellowhead, and creeper have been classified as Certhiidae and Luscinidae (Hutton), Certhiidae and Paridae (Buller), Timeliidae and Paridae (Buller), Paridae (Hutton, Mathews and Iredale, Oliver), Campiphegidae (Mathews, 1931) and as a special family Mohouidae (Mathews, 1946). Most field observers agree that the three forms are related in habit and voice. If they are related to **Sericornis**, they are Australian warblers, at present classified in the subfamily Sylviinae, family Muscicapidae.

Other New Zealand birds which have been wrongly classified are the "thrushes" **(Turnagra)** which Dr. Mayr considers to be overgrown relations of the Australian genus **(Pachycephala** (thickheads and whistlers).

I am grateful to Dr. Mayr for permission to quote relevant parts of his letters.—C. A. Fleming, Wellington.