LETTERS

The Editor,
Sir,

EXTINCT RAILS

In his latest paper, " A Review of the Extinct Rails of the New Zealand Region (Aves: Rallidae) " — *National Museum of New Zealand Records* Vol. 1, No. 3, November 27 1975, my friend Storrs Olson places the rail I described originally as *Rallus hodgeni* and subsequently as *Capellirallus hodgeni* as a *Tribonyx*. It is now *Gallinula (Tribonyx) hodgeni*. This follows Storrs Olson's discovery of the bill of this bird, an element which was lacking in the material with wihch I was working, in the National Museum. He showed it to me, and I am in thorough agreement with him on this point. However, I disagree strongly with Olson when he regards *Gallirallus hartreei* as a synonym of *hodgeni*. I have re-examined the material, and still maintain that *hartreei* is related to the Weka, and is *not* a *Tribonyx*.

The fact that some of the bones of *Tribonyx hodgeni* and *Gallirallus hartreei* have similarities in size and shape does not mean that they are identical. There are subtle differences, apparent to the eye, but not always susceptible to measurement, that distinguish the two.

After all close resemblance between certain limb bones is not uncommon in birds of different species: e.g. the tibio-tarsi of the upper range of *Emeus crassus* and lower range of *Euryapteryx gravis* strongly resemble each other, as do those of the upper range of *gravis* and the lower range of *Pachyornis elephantopus*.

The femora of *Tadorna variegata* and *Euryanas finschi* also bear a very strong resemblance to one another, but not even Storrs would regard them as the one species.

This seems an appropriate place to place on record another discovery of *Gallirallus hartreei*. On 11 November 1975 Christopher Wiffen and I found a right humerus, and a right ulna which I also tentatively assign to *hartreei*, among bones which had weathered from a Moahunter Maori midden in the dunes of Ocean Beach, Hawkes Bay.

The measurements in centimetres are:

Humerus: L. 4.210: P. 0.890: M. 0.3 D. 0.6

Ulna: L. 3.15: P. 0.4: M. 0.2 D. 0.4

The ulna is more curved than in *hodgeni*.

This extends the time range of *Gallirallus hartreei* considerably, as the new bones are unlikely to be more than 5 or 6 hundred years old, if that.

I must leave the rest of Storrs Olson's stimulating paper for later comment.

RON SCARLETT

Osteologist,
Canterbury Museum
19 December 1975

Dr Olson has replied as follows:

In response to Mr Scarlett's letter I would point out that the lengths he gives for the two new elements attributed to "*Gallirallus hartreei*" fall well within the range of variation of *Gallinula (Tribonyx) hodgeni* (see Olson, *Nat. Mus. N.Z. Recs.* 1 (3): 66, table 1). Beyond this we are told that only certain unspecified "subtle differences" distinguish these two species. Yet Mr Scarlett places them in different genera! To accept *Gallirallus hartreei* as a valid species would appear to require faith; in this instance I do not count myself among the faithful.

STORRS L. OLSON

Smithsonian Institution
Washington, D.C., U.S.A.
12 March 1976

The Editor,
Sir,

MOREPORK TELEMETRY

The extreme simplicity of the telemetry equipment and the crudity of the procedures involved during the exercise concerned with tracking Moreporks (*Notornis* 22: 222 *et seq.*) came as a considerable surprise to me in view of the degree of sophistication readily achievable at that date.

It would appear obvious that the inclusion of a number of additional features in the electronics could have resulted in the acquisition of considerably more information by the investigator, and reduced a number of his mentioned difficulties.

Firstly, the addition of a few extra, very small and light, components to the transmitter board attached to the bird would have made it possible to turn the transmitter on by command, or to have it transmit in some pulse mode; either technique or some combination, resulting in greatly reduced battery drain and hence much longer life.

Secondly, the idea of attempting to secure position lines with hand held directional aerials seems ludicrous. Surely a pair of direction finders, preferably of the automatic type, could have been set up at right angles and simultaneous bearings measured from the two sites either at prescribed intervals, or on command (e.g. when the bird's transmitter came on). Some such regime could have provided a series of plots during the night which would give a track which could then be investigated at leisure during the daylight hours, and not in real time.

Perhaps it should be pointed out that the techniques here advocated have been common practice since the beginning of 1915, and suitable surplus military equipment, notably the AD 7092 ADF ex-RNZAF aircraft, was fairly readily available through the Stores Board about that time. Alternatively a pair of the older AN/ARN-7 automatic radio compass receivers used by NAC on their DC-3 aircraft could have been equally easily modified.

Thirdly, since everything is computerised today this whole set-up surely lent itself to total automation; in which case the required data could have been presented hour by hour on sheets from an X-Y plotter!