#### LITERATURE CITED

- Hayman, P., J. Marchant & T. Prater. 1986. Shorebirds: an identification guide to the waders of the world. London, Croom Helm.
- Heather, B. D. 1977. Foot-trembling by the Black-fronted Dotterel. Notornis 24: 1 8.
- Jehl, J. R. 1975. *Pluvianellus socialis:* biology, ecology and relationships of an enigmatic Patagonian shorebird. Trans. San Diego Soc. Nat. Hist. 18 (3): 25 74.
- —, M.A. Rumboll & J.P. Winter. 1973 Winter bird populations Golfo San José, Argentina. Bull. Br. Orn. Club 93 (2): 56 64.
- \* Department of Conservation, P O Box 842, Whangarei, New Zealand (Nueva Zelandia)

# Observations on the Diademed Sandpiper-Plover *Phegornis mitchellii* in Peru

### Raymond Pierce\*

RESUMEN.- Observaciones sobre Phegornis mitchellii en Marca pomacocha, Perú.

The Diademed Sandpiper-Plover *Phegornis mitchelliii* is a rare and little-known plover occurring at mainly very high altitudes in the Andes from Central Peru southwards (Johnson 1965). On 25-26 June 1988 I made brief observations on two birds near Marcapomacocha, Peru (11°30 S, 76°20 W). The birds were in a small alpine *Distichia* bog (100 m wide and 150 m long) at about 4600 m a.s.l. Water covered only about 5% of this "bog", mostly in long narrow channels, and the rest of the area comprised dry hummocks and interconnected grassy banks. The bog was quite different to the riverine breeding season habitat described by Johnson (1964, 1965) in Chile.

On both days the birds foraged mainly within 10 metres of each other and rarely up to 60 m apart. The preferred feeding sites within the bog were areas with clear shallow water (with up to 50% cover by aquatic plants) over a soft-mud substrate. From 1400-1630 h on the first day (which was cold with snow falling intermittently) the birds foraged entirely by probing vertically into the mud of pools. Each probe lasted up to one second in length and usually comprised a number of rapid thrusts. After each series of probes (a multiple probe) the bird paused for a fraction of a second during which time the head was brought back to an erect position. The same spot was used for probing many times, with the birds feeding there for up to 30 seconds before taking another step.

On the second day feeding actions were more varied, comprising multiple probes (64%), single probes (27%) and pecks (9%) (N = 100). This day was sunny and warmer than the previous with temperatures of up to  $6^{\circ}$  or  $7^{\circ}$ C at 1230-1430h, and there was much more insect activity evident in and around the bog. By 1430h, however, the temperature plummeted and snow and hail fell intermittently for the rest of the afternoon. Brief observations at 1500 h indicated that the birds had returned almost exclusively to multiple probing, but they disappeared soon after.

The birds were inconspicuous when foraging, the most obvious features being the rufous nape and quivering of the tail (coinciding with probing). When alert, the birds were more

conspicuous, head held high during brief pauses, and they ran with jerky movements. At the beginning of a run there was a peculiar rapid wing-flicking action and the tail was simultaneously flicked upward for a fraction of a second. During each run the head was lowered, but not to below the level of the shoulder. Flight was undulating and passerine-like, comprising several rapid wing beats followed by a glide in which the bird dipped low to the ground before flapping again. No calls were heard.

Although it possesses a number of unusual features (such as a calidrine-like bill and barred underparts, and the feeding and flight behaviour described above), *Phegornis* nevertheless displays many plover features and is placed in the Charadriidae (Zusi & Jehl 1970). The long bill is likely to be a specialized feature, enabling the bird to survive in areas, and during periods, of low prey activity. Probe feeding is a feature of several sub-alpine waders including another plover, the Wrybill (*Anarhynchus frontalis*) and the Ibisbill (*Ibidorhyncha struthersii*), both of which probe for their food when it is inactive and hidden beneath stones (Pierce 1979, 1986). The bill of the Wrybill has a dual role including probing among riverbed stones and scooping up mudflat food. More work is needed on *Phegornis* to establish its annual habitat and feeding requirements. It is not clear instance whether its long bill is adpted primarily for probing into alpine bogs (the Peruvian scenario), or for probing among pebbles on riverbeds, which is a possible scenario on Chilean riverbeds.

Except for the barred underparts the plumage of *Phegornis* is not unlike that of the Shore Plover *Thinornis novaeseelandiae* of New Zealand (Zusi & Jehl 1970; Hayman et al. 1986). This resemblance may only be superficial as *Thinornis* has a short straight bill typical of *Charadrius* plovers, and its feeding and flight behaviour is *Charadirus*-like and wing-flicking has not been observed (A. Davis pers comm).

#### LITERATURE CITED

- Hayman, P., J. Marchant & T. Prater. 1986. Shorebirds: an identification guide to the waders of the world. London, Croom Helm.
- Johnson, A. W. 1964. Notes on Mitchell's Plover Phegornis mitchellii. Ibis 106:249-51.
- -...1965. The birds of Chile and adjacent regions of Argentina, Bolivia and Peru. Vol 1 Buenos Aires.
- Pierce, R.J. 1979. Foods and feeding of the Wrybill (Anarhynchus frontalis) on its riverbed breeding grounds. Notornis 26: 1-21.
- —. 1986. Observations on behaviour and foraging of the Ibisbill (*Ibidorhyncha struthersii*) in Nepal. Ibis 128:37-47.
- Zusi, R.L. & J.R. Jchl. 1970. The systematic relationships of *Aechmorhynchus, Prosobonia* and *Phegornis* (Charadiiformes; Charadrii). Auk 87:760-80.
  - \*Department of Conservation, PO Box 842, Whangarei, New Zealand

#### Datos de peso de aves argentinas. 2.

## Sergio A. Salvador\*

ABSTRACT.- Weight of Argentine birds. The present work informs about weights of 55 species of Argentine birds, obtained by the author and Lucio A. Salvador.

En la primera nota se destacó la importancia del peso de las aves y los principales trabajos que sobre el tema han sido publicados sobre aves argentinas (Salvador 1988). En esa