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SHORT NOTE

Notes on the feeding habits of the New Zealand Dotterel

Buller wrote in 1873 (*A History of the Birds of New Zealand*) that the New Zealand Dotterel (*Charadrius obscurus*) feeds mainly on small crustacea, mollusca and sandhoppers. In 1888 (second edition) he added insects to this list. Some interesting feeding habits and many specific items of prey have been recorded since then, though most works just quote Buller.

Hutton & Drummond (1923, *Animals of New Zealand*, 4th ed.) specified craneflies and grasshoppers as being important food items. In 1963 McKenzie & Sibson (*Notornis* 10: 350) recorded the taking of a cricket and a moth. New Zealand Dotterels have been seen feeding in rock pools and in grassland, tossing aside pieces of dry cowdung, by Edgar (*Notornis*, 16: 86) and worms are mentioned as part of their diet by Power (1971, *Waders in New Zealand*). Raking soft sand to flush sandhoppers was described by Jones (*Notornis* 22: 324), who also witnessed foot-trembling by New Zealand Dotterels (*Notornis* 31: 208). Heather watched New Zealand Dotterels on Great Barrier Island feeding on the little black mussel (*Xenostrobus pulex*)

pulling them off the rocks and swallowing them whole (*Notornis* 27: 164-166). Two different methods of catching fish have been recorded by Latham (*Notornis* 26: 36) and Habraken (*Notornis* 27: 159). Vigorous foot-paddling in shallow water to bring tiny aquatic creatures to the surface has been observed by Searle (*Notornis* 31: 208).

On 19 June 1982 I watched a pair of New Zealand Dotterels feeding along the fresh tideline just to the north-west of the Tarawera River mouth. They were feeding primarily on small, moribund specimens of the common rock crab (*Hemigrapsus edwardsi*), as they washed in. These were small enough, 20-30 mm across, to be eaten whole without any preparatory bashing.

When I visited the Rangitaiki River mouth on 12 June 1983 the beach was covered with the remains of a recent large wash-up of live horse mussels (*Atrina zelandica*). The Southern Black-backed Gulls (*Larus dominicanus*) had done a thorough job of breaking open the shells and eating the contents. There were, however, scraps of flesh clinging to many of the shells and it was on these that I watched a cock New Zealand Dotterel feeding, sometimes exerting considerable effort to free a piece. His mate, on the other hand, did not show the slightest interest in the shells during the half hour that I watched.

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On several occasions I have observed New Zealand Dotterels catching small crabs on mudflats. A dotterel would stand still watching an area of mud and, on sighting a crab, would run forward and pounce on it. On 12 December 1985, while having lunch in the car beside Pakiri River estuary, Northland, I watched half a dozen New Zealand Dotterels feeding. One bird caught a crab and then dismembered it. It seized the crab by one limb, shook it vigorously until the limb came off, and swallowed the limb. It then pounced on the crab before it could scuttle away. It removed all the limbs in this way, leaving the body, which it swallowed whole.

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This topic seems suitable for a co-operative or local study – New Zealand Dotterel foods and feeding methods. Have we similar *New Zealand* information on our distinguished rarer visitors? For example, Hugh Robertson, Jim Hamilton and Barrie Heather, at Porangahau estuary on 22 June 1986, watched a *Mongolian* Dotterel catching and dismembering crabs. It would race forward in a hunched flat-back posture, grab a small crab from the water, take it to 'dry' mud and beat it repeatedly until it could be swallowed. This can hardly be new; but we need systematic study rather than such casual anecdotes. – Ed.