## SHORT NOTES

## OBSERVATIONS ON KIWIS ON STEWART ISLAND

Present interest in kiwis makes any field observations on their habits and ecology worth recording. The following notes are based on my observations with Mr J. Kalff in the Lords River area of Stewart Island between 3 and 10 July 1971 and supplement those given by Horgan (1970) for the Port Pegasus area of Stewart Island. Observations of 10 birds were made on six days when weather varied from fine and sunny with dry forest floor to overcast and windy with wet forest floor. No days of heavy rain were experienced. The time of these observations varied between 10 a.m. and 2 p.m. with sightings mostly around 11 a.m. to noon. Time spent in the field on sighting days was between 9 a.m. and 3 p.m.

Several areas of typical beak holes in the ground were noted, the most extensive puncturing seen being 30 holes in mossy ground cover in an area 5 ft by 5 ft, but the puncturing was generally much less than this. The holes also varied in size, some in moss or lichencovered dirt forming cone-shaped openings with a surface diameter

reaching 5 inches.

In all cases birds were seen in clearings and bare areas close to stands of Saw Fern (Blechnum discolor) which grows on most of the ridge tops, on some of the extensive flat areas and in some of the gully heads. Birds were observed feeding on and under logs, bare and moss-covered, on bare ground, and in shallow leaf mould and grass.

All sightings indicated a similarity of feeding habit. On each occasion the beak alone was used to locate food which was taken near the end of the bill and dexterously devoured or crushed for eating. The feet were not seen on any occasion to be used to secure food. In walking the bird replaces its bill at each step while feeding. When disturbed or apparently listening with its bill, the bird remains quite still. On two occasions birds were seen to apparently sample the air with the beak held at about 45° to the ground, moving it in a gentle probing fashion.

Undisturbed, the kiwis could be approached to within about 10 feet but, once they were aware of human presence, they became more sensitive to movement and certainly to sound. Indications were that eyesight was apparently not used to nearly the same extent as hearing and smell. On two occasions we noted that disturbed birds stood still under the fronds of the Saw Fern to evade detection rather

than running off into thicker cover.

Regarding the birds' habitat, kiwis were seen over the whole area, comprising mature Rata, Rimu and Kamahi with an undergrowth of sparse Saw Fern, mosses, *Coprosma*, Supplejack and a few mature Pungas (*Dicksonia squarosa*) ranging to 15 feet high. Ground plants had been heavily browsed during preceding months and possibly over several years, few species favoured by deer being noted above seedling size although the deer population has been gratly rduced.

NOTORNIS 19: 186-189 (1972)

All birds seen were in apparent good health and had bright plumage with a sheen in the feathers, which is of particular interest since daylight appearance of species regarded as nocturnal is often indicative of poor health amongst other things. None of us has previously seen such numerous signs of kiwis and the population was considered to be prolific in our experience. The importance of keeping predators, dogs in particular, from such areas is obvious. If worms form a major part of the birds' diet, then this food is abundant also judging from the numbers of casts seen. Contrary to popular opinion, it would appear that the kiwi is not solely nocturnal. Hearing and smell, rather than sight, were used to identify intruders. No calls were heard during our observations but only occurred at night.

This area would provide an excellent study ground for investigations into the ecology of kiwis and it certainly appears that such a study for zoological and park captivity purposes is desirable.

## REFERENCE

HORGAN, K. P. 1970. Notes on calling and behaviour of the Stewart Island Kiwi. Notornis 17 (2): 132.

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## MARSH SANDPIPER AT NAPIER

On 22 January 1972, two OSNZ members and I were checking mixed birds at Ahuriri, Napier, when we noticed a small, slender, grey and white wader feeding amongst a group of Pied Stilts in shallow water. It was noticeably smaller than its companions and its method of feeding was a sweeping movement as well as quick prods. After being chased out of the water by a stilt, the little wader stood on the sand-flat for a short time when we were able to take some details down.

Predominantly white from the face down through the underparts, it had a grey head, with the grey extending down over the back and had a dark line along the shoulders. Olive-green long legs and a slender 1½" long black bill were other features of this wader. At a second attempt to feed in the water it was again chased by a stilt and put to flight, and this time we were able to see the white rump with the white extending up the back, and the legs beyond the tail.

We identified this bird as a Marsh Sandpiper (Tringa stagnatilis) and this identification was confirmed next day by Mr N. B. MacKenzie and Mr B. A. Ellis. This is the first occasion that this species has been recorded at Ahuriri, and only six sight records for the whole of New Zealand are listed in the OSNZ Annotated Checklist (1970). Also seen at Ahuriri during the same period were 12 White-winged Black Terns (Chlidonias leucopterus). Although generally hawking after insects one was seen to break the water and take a small fish.

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