

LITTLE RINGED PLOVER AT LITTLE BOOL LAGOON

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SUMMARY

A Little Ringed Plover *Charadrius dubius* was observed during March and April 1981 at Little Bool Lagoon, a freshwater wetland in the South-East of South Australia. The diagnostic field marks of *C. dubius* were noted and plumage characters indicated that the plover was a first winter bird. The individual at Little Bool and those recorded in two other observations of *C. dubius* in southern Australia in 1980-81 were probably of the migratory subspecies *C. d. curonicus*, having originated in either Japan, Korea or eastern U.S.S.R.

Variation in leg colour is also reviewed.

INTRODUCTION

The Little Ringed Plover *Charadrius dubius* occurs throughout much of Europe, Africa and Asia and has three subspecies *curonicus*, *dubius* and *jerdoni*.

The breeding range of the migratory *curonicus* includes Europe as far north as the White Sea, and extends south to the Sahara in North Africa. Further east its breeding range reaches about 70° N., extending to Sakhalin, Japan, Korea and northern Mongolia, with southern limits in Iraq, Iran, Sri Lanka, Indo-China, the Malay Peninsula, the Philippines and Indonesia, with stragglers reaching Timor and New Guinea (Dement'ev *et al.* 1969, Rabor 1977, McKean *et al.* 1976).

Nominate *dubius*, which is considered non-migratory, occurs in the Philippine Islands, Hainan, southern China, Taiwan and southern Japan (Dement'ev *et al.* 1969).

Lastly, *jerdoni* (synonym *papuanus*) is sedentary in India, Sri Lanka, Thailand, Malaya and islands to the south-east including New Guinea (Dement'ev *et al.* 1969; Rand and Gilliard 1967).

Previously published Australian sight records of the Little Ringed Plover are all from northern Australia:

1. Two in winter plumage, October 1972, Mt Goldsworthy, Western Australia (Serventy and Whittell 1976).
2. One, February 1973, East Alligator River, Northern Territory (Schodde 1973).
3. Two in almost full breeding plumage, 29-30 September 1974, Sanderson Sewage Treatment Works, near Darwin, Northern Territory (McKean *et al.* 1976).
4. One immature, 14-21 October 1978, Sanderson.
5. One adult, 13 January 1979, Sanderson.
6. One immature, 11 September 1979, Holmes Jungle Swamp, Berrimah, Northern Territory.
7. One adult, 17 November 1979, Sanderson.
8. One immature, 13 January 1980, Sanderson. Records 4-8 are listed in McKean and Hertog (1981).
9. One, 9-10 February 1980, Sanderson (McKean 1980).

Two subsequent records of *C. dubius* are both from southern Australia:

10. A first winter bird, November 1980, at a drying lagoon near Minlaton, Yorke Peninsula, South Australia (Treloar and Underwood 1982).
11. One adult, between 8 February and 2 March 1981 at Lake Forrestdale, a shallow freshwater lake 24 km SSE of Perth, Western Australia (P. J. Curry, pers. comm., in prep.).

SIGHTINGS AT LITTLE BOOL LAGOON

Little Bool Lagoon (37° 06'S, 140° 41'E) is approximately 17 km SSW of Naracoorte and lies in the north-western part of the Bool Lagoon Game Reserve complex. Its water is essentially fresh and the lagoon margins are bare or lightly vegetated with sedge (? *Scirpus* sp.), being kept free of taller growth by grazing stock.

A single wader, later identified as a Little Ringed Plover, was observed at Little Bool Lagoon in March and April 1981. Dates of observation and other observers present were as follows:

1. 7 March, RJ with I. A. May.
2. 8 March, RJ with J. M. Bourne.
3. 15 March, RJ with R. Kurnot.
4. 27 March, reported by J. M. Bourne.
5. 9 April, RJ with C. Auricht.

The plover was seen only in imperfect light conditions but was watched for periods of up to 45 minutes and was carefully put to flight. Observations were made from within three metres of the plover. Optical aids used included 10 x 50 binoculars and a tripod-mounted 60 mm telescope with 20x and 40x

lenses. Some colour photographs were taken but are not suitable for publication.

Other waders of similar size or plumage seen near the plover were Red-capped Plovers *C. ruficapillus*, Double-banded Plovers *C. bicinctus* and Red-necked Stints *Calidris ruficollis*.

DESCRIPTION

Impression. A small, slender plover with a white collar, fairly long yellow legs, long tertials, small short bill, indistinct buffy head pattern and dusky breast-band.

Proportions. A little longer than Red-capped Plover, but much slimmer in body, which was also held more horizontally. Fairly steep forehead and high crown. Bill considerably less than half the head length; downward curvature on upper mandible and slight bulges toward base and tip of lower mandible; closed tip sharply pointed. Legs longer than Red-capped Plover's, especially the tibiae. Spread wings longer and more pointed than those of Red-capped Plover or Red-necked Stint; wings longer than tail when folded, long tertials giving a drooping effect to the region of the tail.

Plumage. Narrow, complete white collar, barely visible from some angles. Fine blackish band between collar and mantle. Complete, dusky breast-band, actually a fine grey-brown and buff mottling, thin in mid-breast but broader at sides and asymmetrical when viewed from front. Chin white with light buff wash; throat above band off-white. Underparts below band white.

Head pattern not unlike that of a winter-plumaged Double-banded Plover. White, buff-washed frons; top of crown similar but mottled with brown; poorly defined pale eye-brow; rest of crown to top of collar medium grey-brown. Thin, dark brown band across lores from bill to eye; rest of face to collar grey-brown.

Mantle, back and wing-coverts uniform medium grey-brown noticeably darker than those of Red-capped Plover. A few indistinct rufous fringes to scapulars but no dark sub-terminal bands. Spread wings uniform, showing no wingbar. Tail not seen clearly in flight nor at rest due to long tertials.

Soft parts. Eye dark; thin, bright yellow eyering discernible at close range. Bill dark grey to black; small pale yellow spot on underside of lower mandible at base, barely visible from the side and only at close range. Legs bright yellow or orange, seeming paler at close range; any webbing between toes not clearly discernible due to muddy conditions.

Behaviour

The plover tended to keep within a five-metre stretch of shore and only occasionally entered the water or ventured as far away from it as one metre. The bird was generally active, making occasional short dashes and poking spasmodically at the surface of the mud. On several occasions it squatted briefly in small, dry depressions. The plover was fairly timid and was not involved in any noticeable interaction with other waders.

The flight of the plover was low, indirect and strong, with wristy, jerky wingbeats; in style

more like a Black-fronted Plover *Charadrius melanops* than a Red-capped Plover. It usually bobbed its head up and down two or three times on alighting and occasionally after running or when apparently alarmed.

A distinctive, short, shrill descending whistle, *sweeoo* or *psee-oo*, was uttered two or three times whenever the bird flew. This call was unfamiliar to me although somewhat reminiscent of the call of Horsfield's Bronze-Cuckoo *Chrysococcyx basalis*.

DISCUSSION

Field Identification

The diagnostic field characters of the Little Ringed Plover in all plumages are the bold yellow eyering and absence of a white wingbar. We therefore identified the plover at Little Bool Lagoon as a Little Ringed Plover rather than a Ringed Plover *C. hiaticula* or Semipalmated Plover *C. semipalmatus*, both of which show conspicuous white wingbars in flight and lack bold yellow eyerings (Prater *et al.* 1977). This then is the second record of *C. dubius* in South Australia (see Treloar and Underwood 1982).

C. hiaticula also has a different call from that of *C. dubius*: a liquid musical *too-it* or *queep* (Heinzel *et al.* 1974). The flight call of the Little Ringed Plover is usually described as a high-pitched, two note whistle, and written as *teeu* or *pee-oo* (Bruun 1970; Witherby 1940; Heinzel *et al.* 1974). This agrees fairly well with my notes and with those of McKean *et al.* (1976).

Witherby (1940) wrote that *C. dubius* was more a fresh-water bird than the Ringed Plover which prefers marine environments (Heinzel *et al.* 1974). Therefore the habitat at Little Bool would be more suited to *dubius* than *hiaticula*.

Age of the plover at Little Bool Lagoon

In nuptial plumage, the Little Ringed Plover has a well defined black or blackish breast-band, mask and frontal bar, with a narrow white bar above the frontal bar. This pattern is retained by adults in subdued form during the northern winter. A first winter bird, having moulted out of juvenile plumage (into immature plumage) lacks the black frontal bar of adults and may have an ash-brown breast-band with broad buff edges decreasing in width towards the centre where it is all but incomplete (Witherby 1940). Juveniles have obscure brown head markings and breast-bands and extensive buff fringes (redder on lesser coverts) and faint dark sub-terminal bands on the upperparts (Prater *et al.* 1977).

These descriptions indicate that the plover at Little Bool could not have been an adult and was probably a first winter bird. The few pale fringes and dark facial marks imply that the plover had lost most of its juvenile feathers and had moulted into immature plumage.

Movements and Timing

This, and all previous Australian records are possibly due to extra-long distance winter migration. That is, all records fall between September and April inclusive: those are the principal months of departure and arrival respectively, for the eastern U.S.S.R., Korea and Sri Lanka (Dement'ev *et al.* 1969, Gore *et al.* 1971, Whistler 1944).

Plumage phases of birds sighted in Australia have been in sequence with northern hemisphere populations, full summer plumage being recorded only in September (McKean *et al.* 1976) and March (P. J. Curry, pers. comm.).

It is possible that the plover at Little Bool was the same bird as recorded by Treloar and Underwood (1982) on Yorke Peninsula: the dates are exclusive and plumages similar. North-westerly winds are a frequent feature of autumn weather patterns in southern South Australia, and such winds could have assisted the plover in moving south-east from Minlaton to Bool Lagoon.

Leg Colour

The only character of the plover at Little Bool which seems inconsistent is the bright yellow leg colour. The Little Ringed Plovers seen at Forrestdale and Minlaton in 1981 also had brightly-coloured legs: Curry (pers. comm.) noted brilliant deep orange legs at his first sighting and later salmon-pink legs when full breeding plumage had been attained while Treloar and Underwood (1982) noted the leg colour as yellow-orange. Furthermore, McKean (pers. comm.) considers that orange legs are a usual feature of Little Ringed Plovers seen in the Darwin area.

The literature indicates considerable variation in leg colour of *C. d. curonicus*: for example, flesh-coloured or inclining to pale yellowish-green (Heinzel *et al.* 1974), pale pink (Bruun 1970) and flesh-coloured or yellowish (Peterson *et al.* 1974) for leg colours in British and European populations. Eastern populations of *curonicus* have been poorly described in the literature. However, Gore *et al.* (1971) drew a bird with bright yellow-orange legs and described flesh-coloured to yellowish legs for Korean birds. In addition,

Deignan (1945) described fleshy yellow feet and toes for specimens of this subspecies from Thailand.

C. d. dubius is variously described as having yellow (Taiwan : Severinghaus *et al.* 1970), yellowish (Hong Kong : Webster and Phillipps 1976), flesh-colour (Philippines : Rabor 1977) or pinkish-black legs (Philippines : du Pont 1971).

C. d. jerdoni is said to have light brown or olive-flesh legs (Thailand : Deignan 1945), flesh-coloured legs and feet (New Guinea : Iredale 1956) or yellow feet (New Guinea : Rand and Gilliard 1967).

La Touche (1931-4) ascribes yellow leg colour to *curonicus* and *dubius* but is not explicit about *jerdoni*.

In my opinion, this variation would allow 'bright yellow' for leg colour of each subspecies, particularly *curonicus* and *dubius*. At least one description of leg colour of each subspecies cites the colour yellow.

Also, the occurrence of birds with yellow-orange or orange legs is perhaps less surprising.

Dement'ev *et al.* (1969) did not include leg colour in a list of colour differences (including soft parts) between *C. dubius* and *C. hiaticula*. Australian observers should probably follow Dement'ev *et al.* (1969) and identify 'ringed plovers' on criteria other than leg colour.

Origin of C. dubius occurring in Australia

Detection of leg colour would seem not to assist identification of *C. dubius* to the subspecific level. The most likely subspecies to occur in southern Australia is the only one known to be migratory, *curonicus*, specimens of which have been taken as close to Australia as Timor (McKean *et al.* 1976) and Japan Island, New Guinea (Rand and Gilliard 1967).

A number of Australian specimens of migrants having breeding distributions in the Northern Hemisphere have been attributed to east Asian subspecies, one example being the Mongolian Plover *C. mongolus mongolus* (Reader's Digest 1976). Therefore, given the breeding range of *C. dubius curonicus*, the most likely origin of *curonicus* reaching Australia would be eastern Russia, Mongolia, Korea or Japan.

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REFERENCES

- Braun, B., 1970. *The Hamlyn Guide to Birds of Britain and Europe*. Hamlyn : London.
- Deignan, H. G., 1945. *The Birds of Northern Thailand*: U.S. Nat. Museum Bull. 186. Smithsonian Inst., Washington D.C.
- Dement'ev, G. P., Gladkov, N. A. & E. P. Spangenberg, 1969. *Birds of the Soviet Union*, V. III. Israel Program for Scientific Translations, Jerusalem. Russian version, 1951.
- du Pont, J. E., 1971. *Philippine Birds*. Delaware Museum of Natural History : Greenville, Delaware.
- Gore, M. E. J. & Pyong -- oh Won, 1971. *The Birds of Korea*. Royal Asiatic Society.
- Heinzel, H., Fitter, R. & J. Parslow, 1974. *The Birds of Britain and Europe with North Africa and the Middle East*, Collins : London.
- Iredale, T., 1956. *Birds of New Guinea*. V. I. Georgian House : Melbourne.
- McKean, J. L., 1980. A sight record of the Ringed Plover *Charadrius hiaticula* in the Northern Territory. *Aust. Bird Watcher* 8 : 236-237.
- McKean, J. L. and A. L. Hertog. 1981. Some further records of uncommon migrant waders near Darwin, N.T. *N.T. Naturalist*, No. 4.
- McKean, J. L., Thompson, H. A. F. and J. A. Estbergs. 1976. Records of uncommon migrant waders near Darwin, N.T. *Aust. Bird Watcher* 6 : 143-148.
- Rand, A. L. & E. T. Gilliard, 1967. *Handbook of New Guinea Birds*. Weidenfeld & Nicholson : London.
- Reader's Digest, 1976. *Complete Book of Australian Birds*. Reader's Digest Services : Sydney.
- Schodde, R., 1973. "Birds" in *Wildlife Report, Alligator Rivers Region Environmental Fact Finding Study*. Dept. of the Northern Territory, Darwin (limited distribution).
- Serventy, D. L., & H. M. Whittell, 1976. *Birds of Western Australia* 5th. edn., Uni. of W.A. Press : Perth.
- Severinghaus, S. R., Kuo-wei Kang & P. S. Alexander, 1970. *A Guide to the Birds of Taiwan*. The China Post : Taipei.
- La Touche, J. D. D. 1931-4. *A Handbook of the Birds of Eastern China*. Vol. 2. Taylor and Francis : London.
- Treloar, K. and L. Underwood. 1982. A South Australian record of the Little Ringed Plover. *S. Aust. Orn.* 28 :
- Webster, M. & K. Phillips, 1976. *A New Guide to the Birds of Hong Kong*. Sino-American Publ. Co. : Hong Kong.
- Whistler, H., 1944. *The Avifaunal Survey of Ceylon*. Conducted jointly by the British & Colombo Museums.
- Witherby, H. F. (ed.), 1940. *The Handbook of British Birds*, V. IV, Witherby Ltd. : London.

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