

**LITTLE CURLEW AND OTHER MIGRATORY SHOREBIRDS ON
FLOODPLAINS OF THE CHANNEL COUNTRY, ARID INLAND AUSTRALIA,
1999-2004**

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ABSTRACT

New information is presented on occurrence of five species of migratory shorebird, some in substantial numbers, in floodplain wetlands of the Channel Country, in arid inland Australia. Until recently, Little Curlew and Oriental Pratincole had rarely been recorded in this bioregion.

INTRODUCTION

Knowledge of the occurrence, habitats, abundance and migration of shorebirds in the interior of the Australian continent is incomplete and is inadequate for conservation planning. In the Channel Country bioregion (DEH 2004), within the Lake Eyre Basin of arid inland Australia, records of migratory shorebirds have been opportunistically collected (e.g. Higgins & Davies 1996, Barter & Harris 2002). Commonly these records are from the southward migration period (September-November), partly because wetland habitats are relatively accessible at that time. In contrast, much of this region is typically inhospitable and/or inaccessible in the summer (December-February) and northward migration (March-April) periods.

From March 1999 to April 2004 I was engaged in waterbird surveys in middle reaches of the Eyre Creek (lower Georgina River), Diamantina River and Cooper Creek floodplains, in the Queensland part of the Channel Country. The surveys were infrequent and at irregular intervals but several surveys were in March-April following moderate to major floods in the river systems. During the survey program I witnessed several occurrences of substantial numbers of migratory shorebirds and some apparent northward migration.

OBSERVATIONS

Little Curlew *Numenius minutus*

On the Eyre Creek (Georgina) floodplain, the Little Curlew was recorded at 14 sites and in three flood seasons.

On 10 March 1999, I recorded a number of flocks, in total about 1400 birds, in a ground survey of a small portion (24° 49.0' S, 139° 51.0' E) of the south-eastern sector of a large (c. 20,000 ha) open lake that lies on the Eyre Creek floodplain. (The name of the

lake has been withheld at the landholder's request.) The lake was drying back, with less than half of its bed under water. The birds were in sparse, stunted tussock grassland of rat's tail couch *Sporobolus mitchellii*, which covered the dry and muddy bed of the lake, or in the outermost shallow water. Given that similar habitat was extensive around unsurveyed parts of the lakebed and that flocks of Little Curlew were visible in every direction, much higher numbers undoubtedly were present.

On 14 January 2001, four birds were seen in narrow shallow margins in the south-west of the same lake, which had filled beyond its normal capacity due to a particularly large, recently-peaked flood in the Georgina system. During aerial surveys on 22-23 March 2001, when water had extended far down the Eyre Creek floodplain and begun to dry back, I recorded nine flocks of 5-30 Little Curlew totalling 149 birds. They were on wide, bare drying mudflats and sparsely vegetated lignum *Muehlenbeckia florulenta* shrub swamps at sites between Bedourie, Queensland, and Goyder Lagoon, South Australia. During subsequent ground surveys, I saw four birds at a shallow marginal pool (24° 51.3' S, 139° 31.4' E) on the drying floodplain on 18 April 2001 and one at a muddy inlet of the above-mentioned lake on 19 April. The latest date for persistence of substantial numbers of Little Curlew in Australia, principally in northern coastal habitats, is 15 April (Rogers *et al.* 2001, Collins & Jessop 2001).

Most recently, I tallied 295 Little Curlew from scattered flocks, either flying low (invariably in an upriver direction) or feeding in marshy margins of the Eyre Creek floodplain, on 23-24 March 2004 (Jaensch 2004). Most of these birds were seen in a small portion (24° 52.8' S, 139° 43.9' E) of the south-western sector of the large lake, which was well below half full because only minor floods occurred in the summer of 2003-4. They were at the sparsely vegetated edges of lush, dense grass-sedge swamp and flocks were noted throughout the area surveyed so much higher numbers probably were present around the entire lakeshore.

On the broad Diamantina River floodplain, Little Curlews were seen in two flood seasons, at the same site.

Two birds were observed at the swampy edge of the Diamantina floodplain (25° 41.8' S, 140° 16.2' E) on 13 January 2001, between minor flood pulses.

A major but short-lived flood passed through this site in late January 2004. During a brief ground survey at the site on 25 March 2004 (Jaensch 2004), I witnessed an obvious migration of many flocks of Little Curlew along the tree-less, swampy edge of the floodplain through the middle part of the day. All flocks were heading upriver on the same flight path; though bearing to the east at that point, by following the floodplain they would soon turn to the north. Some flocks numbering many hundreds of Little Curlew stopped to rest and preen in bare clay ponds with shallow water; others stopped in sparse low shrubland of wet samphire *Halosarcia* sp. Flocks passed by, at heights of up to 30 m, throughout the 2.5 hour observation period. A total of 4200 birds was tallied and there was no reason to doubt that this migration also occurred before and after the survey and thus involved thousands more birds. At this time, floodwater had receded from vast areas of the Diamantina floodplain around the site, leaving short green meadows. Habitat farther downriver, especially below Birdsville, was likely to comprise meadows as well as bare flats of wet and recently dried mud. Feeding habitat for Little Curlew on the middle and lower Diamantina therefore was extensive in summer 2004.

I have only one record from the Cooper Creek floodplain in Queensland. On 5 March 2004, a flock of 70 Little Curlew was observed during an aerial survey over floodplain downriver of Windorah, in wet meadow and muddy channels (25° 33.5' S, 142° 18.4' E) with sparse shrub cover dominated by northern bluebush *Chenopodium auricomum* (Jaensch 2004). A moderate flood ran through this area in late January 2004.

There have been few if any previous records of Little Curlew in the Queensland Channel Country and until now large numbers have not been recorded in Australia outside the tropics (Blakers *et al.* 1984, McFarland 1992, Watkins 1993, Barrett *et al.* 2003). The above records demonstrate that the Little Curlew does occur in this bioregion, on all three of the major floodplains. The species occurs in substantial numbers (many thousands), particularly in March but probably throughout the duration of summer-autumn floods. Northward migration via the river corridors has been documented. It is possible that the migrating birds stopover near the Gulf of Carpentaria (due north of some of the Channel Country sites), where sudden arrival of many thousands has been noted in late March on the Karumba Plains (M. Barter pers. com.), before continuing to their breeding grounds in Asia.

Habitats frequented by Little Curlew in the Channel Country include swamps, meadows, mudflats and lakebeds that are either shallowly inundated (drying) or have recently become dry. Such habitats occur extensively on all three floodplains. Short grasslands of Mitchell grass *Astrebla* spp. occur on some of the arid upland surrounding these floodplains and, as I have observed elsewhere, may provide additional foraging habitat for Little Curlews.

Black-tailed Godwit *Limosa limosa*

On 17 April 2001, I observed a flock of 152 Black-tailed Godwit in a shallow drying pool (24° 51.3' S, 139° 31.4' E) near the outer edge of a frequently inundated part of the Eyre Creek floodplain. The muddy pool was associated with a semi-permanent waterhole and merged into drying lignum swamp and recently dried meadows. Many of the godwits were in full breeding plumage. Only two godwits were present there 24 hours later. Conceivably, most of the flock had migrated upriver/northwards. This species is occasionally recorded in the Channel Country (eg. 6 in October 1999: Barter & Harris 2002) and other inland wetland systems (eg. 112 in December 1993, Lake Sylvester, Northern Territory: Jaensch 2003).

Sharp-tailed Sandpiper *Calidris acuminata*

On 18 and 19 April 2001, at and within a few kilometres of the godwit site on Eyre Creek (see above), I recorded flocks of 40-100 Sharp-tailed Sandpipers on seven separate occasions, flying low and fast over the drying floodplain wetlands. Most were travelling upriver and thus to the east at that point, but would soon turn to the north. Some additional birds were flushed from muddy pools among lignum shrubland and from wet meadows on the floodplain. The main branch of the Georgina system originates far to the NNW in the Northern Territory and it is possible that the sandpipers were using the local wetlands for feeding before migrating northwards along the river corridor. Cross-continent migration is documented for this species and most individuals leave Australia by the end of April (Higgins & Davies 1996, p. 301).

On the same floodplain on 23-24 March 2004, a tally of 450 Sharp-tailed Sandpipers was realised after counts at sites on the south-west side of the large open lake (see Little

Curlew account, above) and a few kilometres downriver (Jaensch 2004). Total numbers on the floodplain probably were much higher given the vast extent of drying swamps and of lakeshore with wet mud and short, sparse, grass-sedge habitat.

These records are not the only substantial counts of this species from this lake or from other lakes and swamps in the Queensland Channel Country during 1999-2004 (e.g. Barter & Harris 2002) but they demonstrate that the species uses floodplains of this region during northward migration.

Oriental Pratincole *Glareola maldivarum*

Another migratory shorebird that has rarely been recorded in substantial numbers in the Channel Country is the Oriental Pratincole (Blakers *et al.* 1984, McFarland 1992, Watkins 1993, Barrett *et al.* 2003). Movements of this species within Australia are often associated with thunderstorms; the bird is typically an aerial feeder, capturing flying insects (Higgins & Davies 1996).

During the passing of a band of intense thunderstorms in January 2001, flocks of Oriental Pratincole were seen by the author in the Channel Country. On the middle reaches of the Diamantina River floodplain (25° 41.8' S, 140° 16.2' E), 725 Oriental Pratincole flew in to rest in an area of tree-less shallow pools and islets at the floodplain edge during intensely hot weather on 12 January 2001. On 14 January, at the peak of a major Georgina flood, 507 birds were counted along c. 2 km of the south-western shore of the large lake on the Eyre Creek floodplain (see Little Curlew account, above). These birds were resting at or near the stony edge of the lake, which was full. On the same day, at a large claypan (25° 3.0' S, 139° 36.0' E) just south of and separate from the Eyre Creek floodplain, 205 Oriental Pratincole were hawking insects over shallowly inundated, grass-shrub swamp at dusk.

I did not see any Oriental Pratincole in the Channel Country in March-April 2001 or March 2004. Although the floodplains were wet, there were no thunderstorms during these later surveys.

Australian Pratincole *Stiltia isabella*

Though migratory to parts of Indonesia, the Australian Pratincole is generally thought to be nomadic in the arid zone of Australia (Higgins & Davies 1996). However, a recent observation lends weight to the idea that some seasonal migration may occur at least in the Channel Country.

On 25 March 2004, I recorded flocks of many tens to many hundreds of Australian Pratincole moving upriver along the Diamantina floodplain, associated with flocks of Little Curlew (see above) (Jaensch 2004). When a flock of Little Curlew came past, a flock of Australian Pratincole often was flying underneath. Over the 2.5 hour survey, 1200 Australian Pratincole were counted and this is likely to have been only part of the total movement that day.

Otherwise, during surveys from 1999 to 2004, at varied stages of the flood cycle, it was not uncommon to count groups of several hundred Australian Pratincoles on the Diamantina and Georgina floodplains, especially at large lakes. Totals represented only a portion of the probable total number present.

CONCLUSIONS

In conclusion, recent surveys have revealed that both Little Curlew and Oriental Pratincole occur in substantial numbers in the Queensland Channel Country, well south of the principal Australian haunts of these migrants. The surveys have thus contributed to addressing the relatively poor understanding of the ecology of these species in Australia (Bellio *et al.* 2004). Probably these species have been overlooked in the past because access and survey conditions on the floodplain habitats have usually been difficult when the birds have been present.

Secondly, since summer/autumn floods occur in at least one of the Channel Country rivers every few years, the region can be considered a key feeding and migration stopover area for (several) shorebirds in the arid zone of Australia. This applies to major and moderate floods, which provide habitat that covers hundreds of thousands of hectares, but to some extent also to minor floods.

In regard to sustaining shorebird use of Channel Country floodplains, I contend that the principal management issue is to ensure that all river and overland water flows are neither reduced nor hindered. This should permit floodwaters to reach their full extent and reinvigorate shorebird feeding habitat both on the higher floodplain margins (important during northward migration) and in lower lying areas and lakes where water persists (important especially during southward migration). As this inland region experiences low rainfall (annual mean < 300 mm), shorebird habitat would be scarce but for the habitat provided by the inflowing river systems.

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Wetlands mentioned in this article, and the surrounding country, support active cattle grazing enterprises. As these operations are conducted on Queensland leasehold land, access may be secured only through negotiation with the property managers, with appropriate notice.

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