Special thanks to the rangers and personnel of the Protected Area and Wildlife Bureau in Baguio, who accompanied us in the field and made this work possible.

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The distribution of the Relict Gull *Larus relictus* in Maowusu Desert, Inner Mongolia, China

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A large breeding colony of the Relict Gull *Larus relictus* was found at Taolimiao-Alashan Nur in 1990; then in 1991 a larger breeding colony of 624 nests, a flock of about 420 non-breeding birds and some other scattered individuals at other localities were discovered, making a total of more than 2,730 individuals in Ordos in 1991.

During a study of the breeding ecology of the Relict Gull Larus relictus, from 3 May to 25 June 1991, information was collected on the distribution of the species, as well as on its population in Maowusu desert in Ordos. The region surveyed was approximately within the limits 38°35'-39°55'N and 108°45'-110°00'E, with an area of about 18,020 km^2, and included 21 lakes of different sizes, at some of which the species had been noted in 1990.

The species was recorded at ten localities, including two sites with breeding colonies and one site with a large flock of non-breeding individuals (Figure 1).

At Taolimiao-Alashan Nur, the breeding site found in Ordos in 1990 (Zhang Yin-sun *et al.* this issue), a total of 491 nests had been found by 3 June compared with 581 by 4 June 1990. However, the gulls laid 1,236 eggs, with an average of 2.52 eggs/nest in 1991, compared with 1,272 eggs and 2.19 eggs/nest in 1990.

A new breeding site of the Relict Gull was discovered at Aubai Nur, which is the furthest south-west that the species has so far been found breeding, and this is also the largest known colony.

Aubai Nur is an isolated lake in the hinterland of Maowusu desert, 38°55'N and 108°48'E, about 155 km south-west of Taolimiao-Alashan Nur, and is surrounded by mobile or semi-stabilised sand dunes. The lake is at an elevation of 1,314-1,321 m, highest in the north-west and lowest in the south-east, and has a water surface of about 5.5 km^2. The water is rather alkaline (pH 9.0).

Aubai Nur is still relatively undisturbed by human economic activities.

There are four islets in the middle of the lake, designated A, B, C, D from north to south. Islet A is the largest, and is about two-thirds covered by reeds.

The islets were visited on 17 June from 09h00 to 18h30 to count nests. A total of 624 nests was counted on the four islets: 518, 48, 6 and 52 on islets A, B, C and D respectively. Newly hatched young totalled between 1,000 and 1,100.

Another resident of the lake was the Gull-billed Tern *Gelochelidon nilotica*, with more than 680 nests found. About 200 nests were on the islets and there

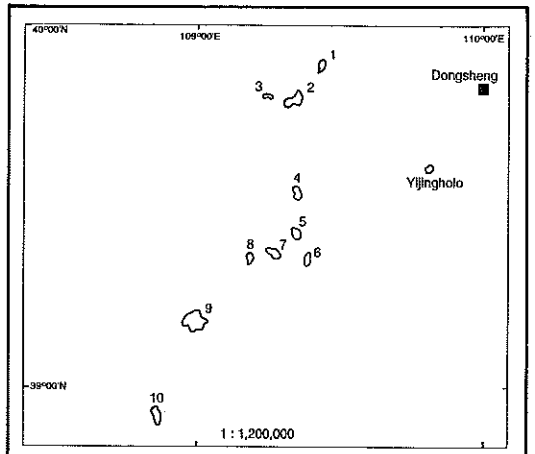

Figure 1. Distribution and numbers of Relict Gulls *Larus relictus* in Maowusu desert, Ordos in 1990 and 1991.

1. Boerjiang Nur: 48 birds (13 May 1991), 8 birds (17 May 1991).
2. Taolimiao-Alashan Nur: 491 nests (3 June 1991), 581 nests (4 June 1990).
3. Hojia Nur: 36 birds (11 May 1991), 15 birds (12 June 1991).
4. North Hadato Nur: 48 birds (15 June 1991).
5. Chigai Nur: no birds (15 June 1991), 12 birds (19 May 1990).
6. Hadato Nur: 426 birds (16 June 1991), 4 birds (19 May 1990).
7. Ulan Nur: 2 birds (15 June 1991), 22 birds (19 May 1990).
8. Quitz Nur: 5 birds (16 June 1991), no birds (19 May 1990).
9. Haotongchagan Nur: 1 bird (16 June 1991), 2 birds (19 May 1990).
10. Aubai Nur: 624 nests (17 June 1991).

were two colonies on the lake shore consisting of 432 and 46 nests respectively.

There were also some Pied Avocets *Recurvirostra avosetta* nesting on the sandbank.

No small or medium-sized carnivores were noted in the area. Black Kites *Milvus migrans* were twice seen preying on young Relict Gulls.

The flock of non-breeding birds at Hadato Nur appeared to consist entirely of adult plumaged birds. According to local shepherds, the highest numbers of the gull occur in July and August but some remained until late September, usually departing in early October.

The total number of Relict Gulls in Maowusu desert in 1991 was at least 2,730 individuals, including 1,115 breeding pairs. There are some lakes and other wetlands in the Maowusu desert still unexplored which might be suitable for the species, and it is possible that it also occurs in the Kubuchi desert north of the Maowusu and along the Yellow River; the total number of Relict Gulls in Ordos might therefore be higher than the currently known figure.

Zhang Yin-sun (1991) suggested that the Relict Gull overlaps with the Brown-headed Gull *L. brunnicephalus* in western Inner Mongolia. Recently, Duan Wen-rui found one nest of the Brown-headed Gull at Chagan Nur, Xilinguole League, eastern Inner Mongolia, indicating that the two species overlap quite extensively.

It has been suggested that the Relict Gull was once widely distributed in most parts of central and eastern Asia, but has now been reduced to limited, disjunct colonies (Auezov 1971). If this supposition is correct it is difficult to explain the fluctuation in populations of the species at Ala Lake (Auezov 1975, Knystautas 1987) and at Torey Lake (Potapov 1971, Il'ichyev and Zubakin 1988) and the apparently recent appearance at Wuliangsu Hai (Xing Lianlian *et al.* 1988, Zhang Yin-sun *et al.* 1991).

The Relict Gull is a desert species inhabiting inland lakes (Zhang Yin-sun *et al.* 1991 and this issue). In Ordos the gulls usually frequent the saltwater lakes with a pH of 8.5+ and at an altitude of 1,200-1,500 m. The breeding site at Taolimiao-Alashan Nur is apparently long-established; according to the lake-watchman Mr Ge Ming-liang, in 1953 when his family moved to the lake shore, numerous gulls were nesting on islets in the lake and have been noted every year since.

Knowledge of the avifauna of Ordos has, until very recently, been poor – Seys and Licent (1933) described some birds collected in Ordos and a few other birds have been collected (Zhang Yong-rang *et al.* 1983) – but it was not until 1987 that a more comprehensive survey was carried out, providing more information on the birds of the area. It seems likely that the Relict Gull may be discovered in new localities in Ordos in the near future.

The main wintering range and habitat, as well as the migration routes of the Relict Gull are still uncertain. At Taolimiao-Alashan Nur it was noticed that almost all of the gull flocks, usually consisting of 20-30 individuals, arrived and departed due north and south respectively. It seems quite possible that the Relict Gull migrates overland, and perhaps even winters inland in flocks.

Some other waterbirds which breed in the highlands of Inner Mongolia, such as Black-necked Grebe *Podiceps nigricollis*, Greylag Goose *Anser anser*, Ruddy Shelduck *Tadorna ferruginea*, Red-crested Pochard Netta rufina and Common Pochard *Aythya ferina* are often found wintering in the highlands of south-western China, and it may be that the Relict Gull is also found there in winter.

We would like particularly to express our sincere gratitude to the Oriental Bird Club for the honourable decision that they made of granting us their *Forktail-Leica* Award 1990 which provided us an opportunity to continue our fieldwork, leading to the results set out in this paper.

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Feeding technique of a White-browed Crake Porzana cinerea

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On 29 December 1990 in a marsh area just outside the western border of Khao Sam Roi Yot National Park, Thailand, we (a group of German and Swiss birdwatchers) observed a White-browed Crake *Porzana cinerea* feeding at a distance of 30-50 m. During a period of about ten minutes the bird appeared out of the reeds for about 30 seconds to one minute at a time, before entering the dense vegetation again. It was feeding whilst walking over floating vegetation in a ditch (about 3 m broad) that was covered with the leaves of water-lilies Nymphaeaceae. Scattered stems of bulrush *Typha* gave enough cover for the bird. On several occasions the crake, while standing on a floating leaf, trampled vigorously, alternating from one foot to the other for periods of one to two seconds, causing the leaf to become submerged. After each bout of activity the crake started to pick intensively after prey items that appeared in the swirling water above the submerged leaf. We watched this behaviour several times before the bird was lost to sight.

The foot-trampling movements reminded me of the similar behaviour of Common Ringed Plover *Charadrius hiaticula* and Little Ringed Plover *C. dubius* in sandy or muddy habitats (Glutz von Blotzheim et al. 1975), but I found no reference to it in the literature referring to other Porzana species (Glutz von Blotzheim *et al.* 1973, Cramp 1980, Urban *et al.* 1986). Referring to *P. cinerea*, Rand and Gilliard (1967) mention that 'S. D. Ripley records seeing birds running freely over water-lily pads and floating lake vegetation almost as easily as jacanas'. Glutz von Blotzheim *et al.* (1973) admit that there is not much known about the feeding habits of European *Porzana* species.

My explanation for this behaviour is that the rapid foot-movements, which cause the leaves to flood, aid the crake in obtaining more food items from the surface of the water. This feeding method is used as an alternative to feeding from the still water surface between the reed stems. Khobkhet (1984) describes the White-browed Crake as an 'omnivorous feeder, feeding mainly on vegetation and insects'.

I would like to thank George Pilkington for aiding me with the English text.

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Wedge-billed Wren-Babbler *Sphenocichla humei*: a new species for China

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In the autumn of 1990 I surveyed the avifauna in the Dulong river valley in north-west Yunnan province, China. A bird captured in the undergrowth of evergreen broadleaf forest, at an altitude of 2,010 m, on 12 November, was identified as a Wedge-billed Wren-Babbler *Sphenocichla humei.* According to the literature, this species only occurs in Sikkim, Arunachal Pradesh, Assam, Nagaland, Manipur and northern Myanmar. This was, therefore, the first record of the species for China.

Measurements of the specimen were as follows:– total length: 179 mm; bill: 27.5 mm; wing: 71 mm; tail: 65 mm; tarsus: 28.3 mm; weight: 35 g.

The bird had a stout, heavy-looking body with powerful legs and feet, and