

# Observations on waders in the south-west Mongolia in July and August 1993

Christophe Tourenq, Bjambaagijn Mönchtujaa, Claudia Feh & Ayurzany Avirmed

Tourenq, C., Mönchtujaa, B., Feh, C. & Avirmed, A. 1995. Observations on waders in the south-west Mongolia in July and August 1993. *Wader Study Group Bull.* 77: 32-37.

We present a list of observations we made during the summer 1993, giving background details on status of waders in the south-west Mongolia. We report the first mention of Curlew Sandpiper *Calidris ferruginea* and breeding Black-winged Stilt *Limosa limosa* in this area. It is shown that the wetlands visited offer stopping-places for migrant shorebirds, such as Solitary Snipe *Gallinago solitaria* and Curlew *Numenius arquata* (first records for the Gobi National Park), Wood Sandpiper *Tringa glareola*, Temminck's Stint *Calidris temminckii*, Little Ringed Plover *Charadrius dubius*, and Kentish Plover *C. alexandrinus*. The breeding of Black-winged Stilt, as well as that of Redshank *Tringa totanus* and the occurrence on migration of Curlew, were confirmed during the summer 1994

C. Tourenq, Institut de Recherche sur les Grands Mammifères. I.N.R.A., C.R.A. Toulouse, B.P. 27, 31326 Castanet Tolosan Cedex, France. (Present address Station Biologique de la Tour du Valat, Le Sambuc, 13200 Arles, France).

B. Mönchtujaa, Institute of Genetic and Experimental Biology, 210351 Ulan Bator, Mongolia.

C. Feh, Station Biologique de la Tour du Valat, Le Sambuc, 13200 Arles, France.

A. Ayurzany, Gobi National Park, Bayan Tooroi, Gobi Altai aimag, Mongolia.

## INTRODUCTION

We report here wader observations made during the summer 1993 expedition to study Mongolian Wild Asses *Equus hemionus luteus* in the south-west part of Mongolia, and especially in the Gobi National Park (see Feh *et al.* 1994).

Compared to other Asiatic countries, Mongolia's avifauna is poorly documented. There are guides by Vaurie (1965), Etchécopar & Hüe (1978), and detailed notes by Kitson (1978, 1979), recently collated by Davies (1989) in a review of the main Mongolian wetlands. In addition, many publications have been written by former Soviet or East German scientists (Grummt 1961; Baumgärt 1978; Mauersberger 1980; Mauersberger *et al.* 1982; Piechocki *et al.* 1981; Robel & Königstedt 1984, 1985; Nadler 1985; Stephan 1988; Skyabin & Toopitsyn 1992) but few concern the south-western part of Mongolia.

Zhirnov & Ilyinski (1986) published a report on fauna and flora of the Gobi National Park, but waders are barely mentioned.

## HABITAT DESCRIPTION

The three principal wetland types observed for shorebirds were: oases of the Gobi National Park (every day, 31 July-18 August), marshes of Tsagaan Nuur river (25 July) and the small lakes surrounding the town of Altaï (24 July, Figure 1).

### 1. Oases of the Gobi National Park

The Khonin Us oasis (45°20'N, 94°10'E), where we established our camp from 31 July to 18 August, is the largest wetland of the part B ("Dzungarian Gobi") of the Gobi National Park (Figure 2). It is an extensive depression of 8 km<sup>2</sup>, characterized by ground water springs that are more or less mineralized, some salt, others fresh.

Salt water springs are generally circular ponds with deposits of salt (MgCl). They are surrounded by sparse vegetation (*Elymus* spp., *Tamaryx* spp., *Nitraria* spp. and some *Phragmites* spp.) and are used by waders for foraging. Fresh water springs are deeper and irregular shaped. They are surrounded by *Phragmites* spp., *Carex* spp. and *Scirpa* spp. and situated within salt areas.

A permanent stream (0.300 l s<sup>-1</sup> in summer) flows into the middle of the oasis depression and when not masked by an important *Phragmites* spp. community, offers open ponds accessible to ducks, shorebirds and mammals. Dense concentrations of aquatic invertebrates (mostly *Gammarus* spp.) were noticed in the fresh water springs.

Apart from these permanent ponds, the water level fluctuates and floods in some places, creating water meadows with *Poa*, *Carex*, or *Scirpa* spp. grazed intensively by Mongolian Wild Asses, Persian Gazelles *Gazella subgutturosa* and rodents (pers. obs.).

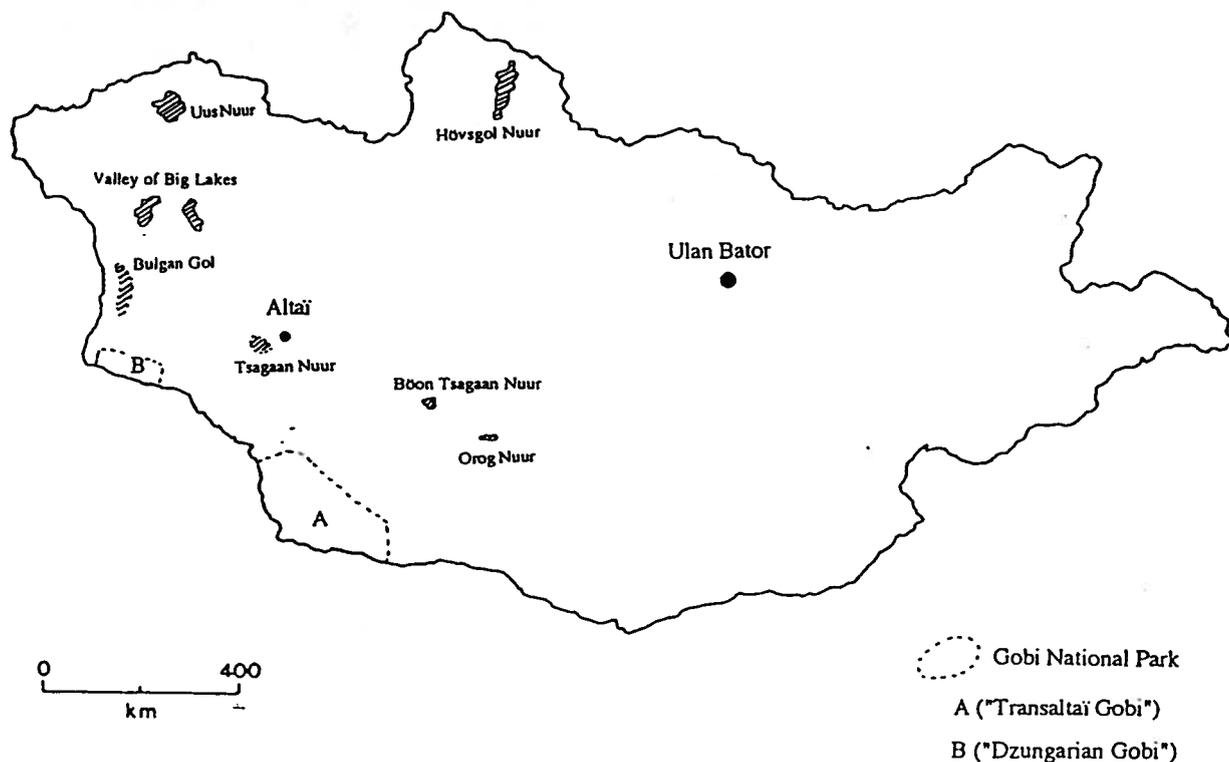


Figure 1. Areas of Mongolia mentioned in the text (after Davies 1989).

Isolated *Tamaryx* spp. of less than 2 m and *Phragmites* spp. around fresh water ponds constitute the tallest vegetation of Khonin Us.

A sandy belt with *Elymus secalinus* and *Acnatherum splendens*, separates the oasis from the shrub-desert characterized by *Haloxylon ammodendron*, *Nanophyton eninaceum* and *Anabasis brevifolia*.

In the same area, we visited the oasis of Sharin Us (13 August) in the middle of the mountains outside and north from the sector B of the Gobi National Park (Figure 2). Its vegetation is composed of grazed *Poa*, *Carex* or *Scirpa* spp. This oasis is frequented by breeders and their cattle, whereas the oases of the Gobi National Park are not accessible to domestic animals.

## 2. Wetlands of Tsagaan Nuur river (47°20'N, 95°00'E)

Situated in the desert-steppe between the town of Altai and the Altai Mountains, this wetland area is carpeted with *Poa* spp. which is intensively grazed by domestic animals (sheep, cows, camels and horses). The higher vegetation of the area we crossed is *Scirpa* spp. and *Tamarix* spp. The last herds of Mongolian Saiga Antelopes *Saiga tartarica mongolica* are found in the desert-steppe around the vegetation, here dominated by *Artemisia* spp. with some *Haloxylon ammodendron*, *Nanophyton eninaceum*, *Anabasis brevifolia*. The Tsagaan

Nuur river flows permanently and during the months before our arrival, there was heavy rainfall in the area.

## 3. The town of Altai (capital of the Gobi-Altai province; 46°20'N, 96°20'E).

There are two fresh water ponds situated only 300 m to the north of Altai. One is natural, the other a reservoir, both being about 1 ha in size. Situated in a typical steppe area, they are intensively grazed but some isolated patches of *Scirpa* sp. remain.

More information about the the main vegetation types of Mongolia, is given by Görner & Mauersberger (1982) and more recently Hilbig (1990).

## SPECIES OBSERVATION AND STATUS

### Solitary Snipe *Gallinago solitaria*

A small snipe, similar in size to the Common Snipe *Gallinago gallinago* but paler, was observed on 16 and 17 August at Khonin Us. The proximity of the Altai Mountains and the type of habitat lead us to consider it to be a Solitary Snipe. Indeed, the geographic breeding area of the Solitary Snipe is confined to the mountain areas of Pamir, Tien-Shan, Altai, Sayan and parts of Eastern Siberia (Flint *et al.* 1984). This species usually occurs at high altitudes above the forest limit (from 2,400 m to

5,000 m in the Himalayas), but can be seen at lower altitudes outside the breeding season, in water meadows or coastal swamps (Hayman *et al.* 1986). The Solitary Snipe migrates in autumn to Pakistan, Northern India, Japan and Hong-Kong (Hayman *et al.* 1986). It is believed to breed in north-west and west Mongolia, and

Mongolian Altaï (Vaurie 1965; Etchécopar & Hüe 1978), but according to Baltdelger (pers. comm.) its status is uncertain in Mongolia.

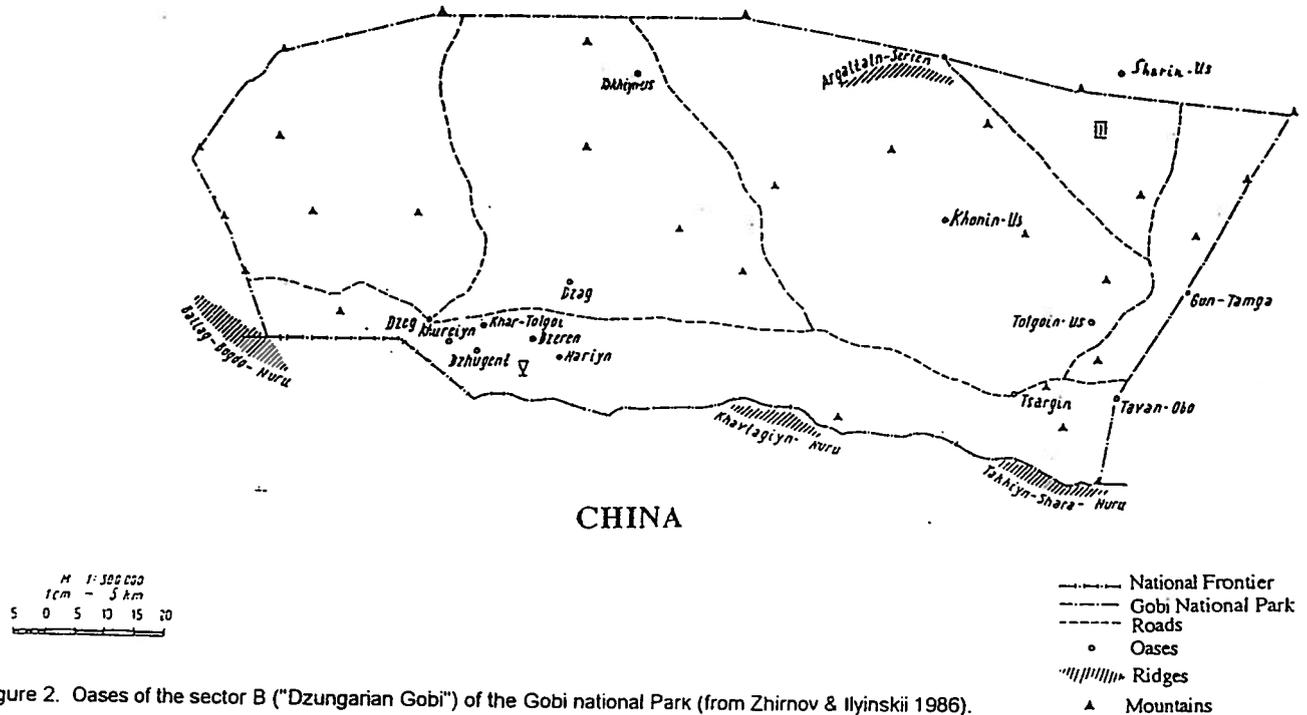


Figure 2. Oases of the sector B ("Dzungarian Gobi") of the Gobi national Park (from Zhirnov & Ilyinskii 1986).

Skyabin & Toopitsyn (1992) recorded this species as a rare breeder at the Hövsgol Nuur Lake (51°00'N, 100°30'E), north Mongolia, and one individual was collected by Stubbe (in Piechocki *et al.* 1981) near the Bulgan Gol River (47°30'-46°05'N, 90°52'-91°33'E), in the mountains north of the sector B of the Gobi National Park. Kitson (1979) observed three Solitary Snipes in the Eastern Gobi-Altaï (Orog Nuur Lake, 45°03'N, 100°45'E).

This is the first mention of this species for the Gobi National Park. According to Zhirnov & Ilyinski (1986), *Gallinago gallinago* and *Gallinago stenura* can be observed on migration in the oases of the sector A ("Transaltaï Gobi") of the Gobi National Park. Moreover, the ranges of *G. gallinago* and *G. solitaria* overlap during their migrations through Mongolia (Etchécopar & Hüe 1978). Common Snipe was observed in the mountains north of the Gobi National Park by Piechocki *et al.* (1981).

#### Curlew *Numenius arquata*

One individual was seen and heard on 3 August in Khonin Us. It was very pale and obviously of the sub-species, *N. arquata orientalis* see Vaurie 1965; Etchécopar & Hüe 1978; Hayman *et al.* 1986).

This is the first record of this species in this part of Mongolia. Zhirnov & Ilyinski (1986) only mention Little

Curlew *Numenius minutus* as being of rare occurrence on migration in the Transaltaï Gobi.

#### Redshank *Tringa totanus*

On 24 July, 10 individuals were seen at the reservoir north of the town of Altaï and the following day, 20 birds were observed on the shores of the Tsagaan Nuur river. On 30 July, three alarming pairs were seen in Khonin Us. On 31 July, and 3 August, one adult was observed in the same place on the salt springs. On 9 August, one pair and three young fledglings were seen in the oasis. Three days later, we found a freshly dead juvenile near the Khonin Us river (determined by Kayser, Station Biologique de la Tour du Valat).

This species breeds in a wide range of habitats in Mongolia from the taiga to the desert (Mauersberger 1980; Piechocki *et al.* 1981; Davies 1989). Kitson (1979) found the Redshank on several wetlands in the Eastern Gobi-Altaï but did not observe its breeding. According to Zhirnov & Ilyinski (1986), it is a rare breeder in the oases of the sector A of the Gobi National Park but can be seen on migration in the Dzungarian Gobi.

From the behaviour of the adults we observed in Khonin Us (alarming) and the age of the juveniles (just fledged), the Redshank can be considered as a breeder at this oasis of the sector B of the Gobi National Park.

### Green Sandpiper *Tringa ochropus*

On 3, 11 and 12, August one individual (possibly the same) was seen in Khonin Us.

In Russia, Green Sandpiper can be observed on migration in several different habitats, from the taiga forest to the desert (Flint *et al.* 1984). This appears also the case in Mongolia, but some doubts remain on its breeding in the Gobi area (Vaurie 1965; Kitson 1979; Mauersberger 1980). The breeding population of Mongolia is said to migrate through the Chinese Sien Kiang province (Etchécopar & Hüe 1978). This species is considered to breed in oases of the Transaltaï Gobi and rare during migration in the sector B (Zhirnov & Ilyinski 1986).

### Wood Sandpiper *Tringa glareola*

One individual was seen on 24 July, on the natural lake, north of the town of Altaï.

This species can be found in several habitats from the taiga forest to the steppe zone in Russia (Flint *et al.* 1984). It breeds mainly in the northern forests of Mongolia, (Vaurie 1965; Etchécopar & Hüe 1978), but can be observed on migration in steppe and desert regions (Kitson 1979; Mauersberger 1980). It was recorded by Zhirnov & Ilyinski (1986) as rare migratory species in the Dzarman Oasis in the Transaltaï Gobi.

### Curlew Sandpiper *Calidris ferruginea*

On 25 July, three Curlew Sandpipers were observed in breeding plumage on the shores of the Tsagaan Nuur river. This species was also seen in the East Transaltaï Gobi on the salt lakes in August but it is doubtful if it breeds in this area (Mauersberger 1980). Until now there has been no record of the Curlew Sandpiper in south-west Mongolia (Piechocki *et al.* 1981).

### Temminck's Stint *Calidris temminckii*

On 13 August, one individual was seen in Khonin Us and another in Sharin Us, oasis in the middle of the mountains outside and north from the sector B of the Gobi National Park (Figure 2). Both were adults and in breeding plumage.

During its migration through southern Asia, this species occurs mainly on open shores of lakes, rivers, and other wetlands (Flint *et al.* 1984). Some individuals were seen by Mauersberger (1980) in mid-summer at ponds in the Gobi Desert and according to Etchécopar & Hüe (1978) this species could breed in the Eastern Mongolian Altaï but its breeding range in desert areas is uncertain (Vaurie 1965; Mauersberger 1980). Zhirnov & Ilyinski (1986) consider Temminck's Stint to be a rare breeder in the Dzarman oasis in the sector A of the Gobi National Park.

Our observation shows that this small shorebird can be seen on migration in the Dzungarian Gobi; moreover it

was observed by Kitson (1979) and Piechocki *et al.* (1981), respectively in the east and in the north of our study area.

### Black-winged Stilt *Himantopus himantopus*

On 25 July, we saw 10 individuals on the shores of the Tsagaan Nuur river. Some pairs were alarmed and had chicks. One Black-winged Stilt was observed on its nest. From 30 July through August, one pair alarmed in Khonin Us while we made our vegetation transects on meadows, but no nest or chicks could be found.

Although this species was noticed breeding in steppe and desert areas in Russia (Flint *et al.* 1984), it is rarely seen in the Mongolian Gobi (Vaurie 1965; Etchécopar & Hüe 1978; Kitson 1979). The Black-winged Stilt is considered to be a rare breeder in the Transaltaï Gobi (Piechocki *et al.* 1981). Baltdelger (pers. comm.) found nests, eggs and nestlings on the shores of the Uus Nuur Lake (49°59'-50°41'N, 92°13'-93°25'E), north-west Mongolia and breeding was confirmed in Böön Tsagaan Nuur, east of our study area (45°35'N, 99°10'E).

According to the behaviour (alarming and circling over the observer) of the pair we saw in Khonin Us, we consider this species as a possible breeder in the sector B of the Gobi National Park.

### Little Ringed Plover *Charadrius dubius*

On 24 July, 10 individuals were seen north of Altaï and on July 30, one was observed in Khonin Us.

This species is considered to breed throughout Mongolia (Vaurie 1965; Etchécopar & Hüe 1978; Kitson 1979), and was recorded both in the steppe near Ulan Bator and in the desert of the Transaltaï Gobi (Mauersberger 1980; Mauersberger *et al.* 1982).

Little Ringed Plovers were observed north of the Gobi National Park and in the desert-steppe around Tsagaan Nuur by Piechocki *et al.* 1981. According to Zhirnov & Ilyinski (1986), it is rare on migration in the sector A of the Gobi National Park. Our observations show that some individuals can cross the Dzungarian Gobi during migration too.

### Kentish Plover *Charadrius alexandrinus*

Four adults in breeding plumage were seen on the shores of Tsagaan Nuur river on 25 July. On 1 August, a female was observed in Khonin Us.

This species is found in desert areas around salt lakes having shallow and muddy shores in Mongolia (Kitson 1979; Mauersberger 1980; Mauersberger *et al.* 1982). It has been recorded breeding north of the Dzungarian Gobi (Piechocki *et al.* 1981) but this is the first record of the Kentish Plover in the sector B of the Gobi National Park.

## Greater Sandplover *Charadrius leschenaultii*

On 12 August, five individuals were seen flying over Khonin Us and one adult female was observed in the shrub-desert near the oasis.

The Greater Sandplover migrates earlier than the similar Lesser Sandplover *Charadrius mongolus* and appears in its winter quarters in August. The first premigratory groups of young birds assemble on the breeding areas in July (Hayman *et al.* 1986). Large number of Greater Sandpipers were recorded on the "Valley of Big Lakes", north of Altaï and some individuals were observed in the desert-steppe around Tsagaan Nuur (Piechocki *et al.* 1981). Until now, it had been recorded mainly in the Transaltaï Gobi and Eastern Gobi-Altaï (Kitson 1979; Mauersberger 1980; Nadler 1989).

Although Greater Sandplover is said by Zhirnov & Ilyinski (1986) to migrate through the sector A of the Gobi National Park, we consider its status uncertain in the Dzungarian Gobi, because of a possible confusion with the eastern races of Lesser Sandplover. It is not easy to distinguish in the field between *C. leschenaultii* from *C. mongolus*, which is said to be a rare visitor and breeder in north-eastern Mongolia between 112°E and 116°E (Baitdelger pers. comm.). Indeed, the subspecies *mongolus* and *stegmanni* of the latter species which breeds in eastern Siberia, are very similar in morphology and plumage to the nominate race of *Ch. leschenaultii* (Prater *et al.* 1977; Mauersberger *et al.* 1982; Hayman *et al.* 1986).

## DISCUSSION

Mongolia appears to be important for waders moving between their summer and winter ranges. Situated between Russia and the People's Republic of China, Mongolia lies in the migratory flyway from Siberia to the Asiatic Pacific coasts (Vaurie 1965; Etchécopar & Hùe 1978; Flint 1984; Hayman *et al.* 1986).

Piechocki *et al.* (1981), Mauersberger *et al.* (1982) and Davies (1989) compiled observations of scientific expeditions in Mongolia, but little has been published about the birds of south-west Mongolia apart from some species recorded by Stubbe (in Piechocki *et al.* 1981) around Bulgan Gool river, in the mountains north of the Dzungarian Gobi. Indeed the Tsagaan Nuur area is only referred to by Davies (1989) without any indications about the avifauna. It is situated between the "Valley of the Big Lakes" and the natural barrier of the Mongolian Altaï, north of the Dzungarian Gobi Desert. Because of its location (46°20'N, 95°00'E) and according to our recent observations, the Tsagaan Nuur area appears to be a very interesting place for migratory waders, such as Curlew Sandpiper (ours is the first record for this species in south-west Mongolia) or Redshank (and perhaps waterfowl, but we did not see the Tsagaan Nuur Lake).

The observations made by Zhirnov & Ilyinski (1986) concern mainly birds seen in the sector A of the Gobi National Park. Our visit in the sector B showed that the big oases, like Khonin Us, offer stopping-places for shorebirds, such as Solitary Snipe and Curlew (first mention for the Gobi National Park), Wood Sandpiper, Temminck's Stint, Little Ringed Plover, Kentish Plover, and other birds on migration within a desert area (Tourenq *et al.* in prep.).

The observations of breeding Black-winged Stilt in Tsagaan Nuur and Khonin Us are both the first for south-west Mongolia. This may be exceptional and a consequence of the heavy spring rains prior to our visit. However, the breeding of the Black-winged Stilt in Tsagaan Nuur (eight alarming individuals), as well as that of Redshank (11 pairs) and the occurrence on migration of Curlew (five individuals) in Khonin Us, were confirmed during the summer 1994 by one of the authors.

During this last expedition (25 June to 15 July 1994) one Solitary Snipe, three Wood Sandpipers and two Kentish Plovers were recorded. No Black-winged Stilt was present on the site.

## ACKNOWLEDGMENTS

We would like to thank Dr. T. Boldsokh, General Secretary of the Mongolian Academy of Sciences and Dr. T. Adyasuren, Mongolian Ministry for Nature and Environment, for all their help in making this study possible. We are indebted to the "Basler Stiftung für Biologische Forschung", the Mammal Conservation Trust, the "Association pour le Cheval de Przewalski", and the Fondation AMOPA for their financial support.

Many thanks are due to Dr. P. Isenmann, CEFE Montpellier, for his help in compiling references, Dr. A. Johnson, Station Biologique de la Tour du Valat, and D. Batdelger, Mongolian Institut of Genetic and Experimental Biology, for their comments on earlier drafts of this paper.

## REFERENCES

- Baumgart, W. 1978. Ornithologische Eindrücke während eines Frühjahrsaufenthaltes in der Zentral-Mongolei. *Der Falke* 25: 372-385.
- Davies, J. 1989. Mongolian People's Republic. In: *A Directory of Asian Wetlands*. D.A. Scott (Ed). IUCN, Gland: 1-30.
- Etchécopar, R.D. & Hùe, F. 1978. *Les Oiseaux de Chine, de Mongolie et de Corée. Non-Passeriaux*. Edition du Pacifique, Tahiti. 585 pp.
- Flint, V.E., Boehme, R.L., Kostin, Y.V., & Kuznetsov, A.A. 1984. *A Field Guide to Birds of the USSR*. Princeton University Press. 353 pp.
- Feh, C., Bodsukh, T. & Tourenq, C. 1994. Are family groups in Equids a response to cooperative hunting by predators? The case of Mongolian kulans (*Equus hemionus luteus* MATSCHIE). *Rev. Ecol. (Terre Vie)* 49: 11-20.

- Görner, M. & Mauersberger, G. 1982. Strukturanalysen einiger mongolischer Habitats. Ergebnisse der mongolischen Gemeinschaftsreise von Ornithologen aus der DDR 1979. III. *Mitt. zool. Mus. Berlin* 58: 75-89.
- Grummt, W. 1961. Ornithologische Beobachtungen in der Mongolei. *Beitr. z. Vogelk.* 7: 349-360.
- Hayman, P., Marchant, J. & Prater, T. 1986. *Shorebirds, an identification guide to the waders of the world*. C. Helm Publ., London. 412 pp.
- Hilbig, W. 1990. *Die Pflanzengesellschaften des Mongolei. Biologische Ressourcen der Mongolischen Volksrepublik*. Martin-Luther Universität, Halle.
- Kitson, A.R. 1978. Notes on waterfowl of Mongolia. *Wildfowl* 29: 23-30.
- Kitson, A.R. 1979. Notes on the waders of Mongolia. *Wader Study Group Bull.* 27: 34-35.
- Mauersberger, G. 1980. Oekofaunistische und biologische Beiträge zur Avifauna Mongolica. II. Gruiformes bis Passeriformes. *Mitt. zool. Mus. Berlin* 56: 77-164.
- Mauersberger, G., Wagner, S., Wallschläger, D. & Warthold, R. 1982. Neue Daten zur Avifauna Mongolica. *Mitt. zool. Mus. Berlin* 58: 11-74.
- Nadler, T. 1989. Beobachtungen am Wüstenregenpfeifer in der Mongolei. *Der Falke* 36: 42-47.
- Piechocki, R., Stubbe, M., Uhlenhaut, K. & Sumjaa, D. 1981. Beiträge zur Avifauna der Mongolei. Teil III. Non-Passeriformes. *Mitt. zool. Mus. Berlin* 57: 71-128.
- Prater, T., Marchant, J. & Vuorinen, J. 1977. *Guide to the identification and ageing of the Holarctic waders*. BTO Guide, Tring, Herts. 168 pp.
- Robel, D. & Königstedt, D. 1984. Ornithologische Eindrücke von einer Touristenreise in die Mongolische Volksrepublik. Teil I. *Der Falke* 31: 381-383.
- Robel, D. & Königstedt, D. 1985. Ornithologische Eindrücke von einer Touristenreise in die Mongolische Volksrepublik. Teil II. *Der Falke* 32: 57-69.
- Skyabin, N.G. & Toopitsyn, I.I. 1992. Waders of the Khubsugul Lake, Mongolia. *Wader Study Group Bull.* 65: 24.
- Stephan, B. 1988. Ornithologische Beobachtungen in der Mongolischen Volksrepublik (Aves). *Faun. Ab. Staat. Mus. f. Tierk. Dresden* 15: 107-197.
- Vaurie, C. 1965. *The Birds of Palearctic Fauna. Non-Passeriformes*. H.F. & Witherby Ltd., London. 763 pp.
- Zhirnov, L.V. & Ilyinski, V.O. 1986. *The Great Gobi National Park - a refuge for rare animals of the Central Asian deserts*. UNEP, Moscow. 128 pp.

