

STEPPE WETLANDS



THERE are many large, rich wetlands associated with the steppe grasslands that extend from eastern Europe through central and western Asia to north-east Asia. Large numbers of waterbirds breed in the east Asian part of the steppes, including several threatened species, most notably the entire world population of Relict Gull and high proportions of the global populations of Swan Goose and White-naped Crane. This region is also important for several threatened grassland birds, which are covered in G01.

- **Key habitats** Freshwater and saline wetlands.
- **Countries and territories** **Russia** (Krasnoyarsk, Khakassia, Tuva, Irkutsk, Buryatia, Chita); **Mongolia**; **China** (Inner Mongolia, Xinjiang, Gansu); outside the Asia region, the steppes extend through central and west Asia to eastern Europe.

| | Threatened species | | | Total |
|----------------|--------------------|----|----|-------|
| | CR | EN | VU | |
| ● ¹ | — | 3 | 6 | 9 |
| ✈ | — | — | 2 | 2 |
| 🦢 | 1 | — | — | 1 |
| Total | 1 | 3 | 8 | 12 |

Key: ● = breeding in this wetland region.

¹ The Conservation Dependent Dalmatian Pelican also breeds in this region.

✈ = passage migrant.

🦢 = non-breeding visitor.

The steppes of eastern Mongolia are one of the main breeding grounds of White-naped Crane.

PHOTO: UTE BRADTER





Table 1. Outstanding Important Bird Areas in the steppe wetlands.

| IBA name | Status | Territory | Threatened species |
|-------------------------------|-----------------------|-----------------|--|
| 1 Torey basin | (PA) ^{AP,R} | Chita; Mongolia | Breeding Swan Goose, White-naped Crane and Relict Gull, small non-breeding population of Siberian Crane |
| 2 Uvs Nuur | PA ^{BR} | Mongolia | Breeding White-headed Duck and Swan Goose |
| 3 Ayrag Nuur | — ^R | Mongolia | The only active Dalmatian Pelican colony in east Asia, Swan Goose breeds, and White-headed Duck and Relict Gull have been recorded |
| 4 Khar Us Nuur NP | PA ^R | Mongolia | Breeding White-headed Duck and Swan Goose, Dalmatian Pelican formerly bred, Relict Gull recorded |
| 5 Ögiy Nuur | — ^{AP,R} | Mongolia | Breeding Swan Goose, Relict Gull has been recorded |
| 6 Onon and Uldz river valleys | (PA) | Mongolia | Breeding Swan Goose and White-naped Crane, large numbers of Hooded Crane on passage |
| 7 Mongol Daguur SPA | PA ^{AP,R} | Mongolia | Breeding Swan Goose and White-naped Crane, Hooded Crane on passage, and Swinhoe's Rail has been recorded |
| 8 Dalai Hu NNR (Hulun Nur) | PA ^{AP,BR,R} | Inner Mongolia | Breeding Swan Goose, White-naped Crane, Relict Gull and Manchurian Reed-warbler, Baer's Pochard on passage |
| 9 Huihe NR | PA | Inner Mongolia | Red-crowned Crane has occurred in large numbers on autumn passage, and is suspected to breed |
| 10 Ordos NNR | PA ^R | Inner Mongolia | Two large nesting colonies of Relict Gull, Swan Goose on passage |

Note that more IBAs in this region will be included in the *Important Bird Areas in Asia*, due to be published in early 2004.

Key IBA name: NP = National Park; NR = Nature Reserve; NNR = National Nature Reserve; SPA = Strictly Protected Area.

Status: PA = IBA is a protected area; (PA) = IBA partially protected; — = unprotected; AP = IBA is wholly or partially an Asia-Pacific waterbird network site (see p.35); BR = IBA is wholly or partially a Biosphere Reserve (see pp.34–35); R = IBA is wholly or partially a Ramsar Site (see pp.31–32).

OUTSTANDING IBAs FOR THREATENED BIRDS (see Table 1)

Ten large wetland IBAs with important breeding and passage populations of threatened waterbirds have been selected. Several of them also support some of the threatened grassland birds of G01.

CURRENT STATUS OF HABITATS AND THREATENED SPECIES

The steppes support a relatively low human population compared to many other parts of Asia, and the grasslands and their associated wetlands are largely intact. However, over-grazing, too frequent steppe fires, the indiscriminate use of

pesticides and other pressures have reduced the quality of many wetlands. Together with hunting, this has led to declines in the populations and ranges of several threatened waterbird species.

CONSERVATION ISSUES AND STRATEGIC SOLUTIONS (summarised in Table 3)

Habitat loss and degradation

■ CONVERSION TO AGRICULTURE

The conversion of the remaining grasslands for agriculture is a threat in many areas, notably in Mongolia where the government has plans for large-scale agricultural development in the steppe zone. This has the potential to greatly reduce the habitat of species such as White-naped Crane (see G01 for details and recommendations).

Relict Gulls nest only on steppe lakes in eastern Asia.



PHOTO: HE FENQI

Table 2. Threatened birds of the steppe wetlands.

| Species | | Distribution and population |
|--|------|--|
| Dalmatian Pelican <i>Pelecanus crispus</i> | ○ CD | Currently known to breed at a single lake in western Mongolia, having abandoned colonies elsewhere in Mongolia and in Xinjiang |
| White-headed Duck <i>Oxyura leucocephala</i> | ○ EN | Small numbers breed at lakes in western Mongolia and adjacent parts of Russia; reported to have bred in Xinjiang |
| Swan Goose <i>Anser cygnoides</i> | ● EN | A widespread breeding bird |
| Baikal Teal <i>Anas formosa</i> | ✈ VU | A widespread passage migrant |
| Baer's Pochard <i>Aythya baeri</i> | ○ VU | Breeds in Chita and Inner Mongolia, and possibly in eastern Mongolia |
| Pallas's Fish-eagle <i>Haliaeetus leucoryphus</i> | ○ VU | A widespread breeding bird |
| Siberian Crane <i>Grus leucogeranus</i> | ✈ CR | Small numbers of non-breeding birds overwinter in Chita and eastern Mongolia |
| White-naped Crane <i>Grus vipio</i> | ● VU | Breeds in Chita, north-east Mongolia and Inner Mongolia |
| Hooded Crane <i>Grus monacha</i> | ✈ VU | A widespread passage migrant |
| Red-crowned Crane <i>Grus japonensis</i> | ○ EN | A scarce passage and breeding species in Inner Mongolia, has bred in Chita and probably in eastern Mongolia |
| Swinhoe's Rail <i>Coturnicops exquisitus</i> | ○ VU | This poorly known species has bred in Chita, and occurred in eastern Mongolia |
| Relict Gull <i>Larus relictus</i> | ● VU | Breeds very locally on steppe lakes in Chita, Mongolia and Inner Mongolia, and just outside the Asian region in Kazakhstan |
| Manchurian Reed-warbler <i>Acrocephalus tangorum</i> | ○ VU | Recorded during the breeding season at Dalai Hu lake in Inner Mongolia |

Other threatened waterbirds recorded from this region as rare visitors are: Oriental Stork *Ciconia boyciana* and Marsh Grassbird *Megalurus pteryi*.

● = region estimated to support >90% of global breeding population, ● = 50-90%, ○ = 10-50%, ○ = <10%; ✈ = region estimated to support 10-50% of global population on passage, ✈ = <10%

■ DEVELOPMENT (URBAN, INDUSTRIAL, ETC.)

Steppe habitats are being affected by development in parts of eastern Russia and northern China, and the government of Mongolia is considering a number of industrial and infrastructural projects in the steppe zone (see G01 for details and recommendations).

■ STEPPE FIRES

Steppe fires, which are usually set by man in spring and early summer, are an important means of maintaining grassland quality, but they can negatively affect threatened waterbirds. For example, they sometimes destroy White-naped Crane eggs and young, and presumably affect other ground-nesting species (see G01 for details and recommendations).

■ FLUCTUATING WATER LEVELS

On the Mongolian breeding grounds of Dalmatian Pelican, fluctuations in water level frequently reduce nesting success. Elsewhere in the species's range, the provision of floating rafts at colonies has proved effective in reducing the problem of flooding. Plans for artificial nest platforms at Ayrag Nuur should be implemented. This technique could also be used to try to attract breeding birds back to the abandoned colonies at Khar Us Nuur and elsewhere in Mongolia and China.

■ LIVESTOCK GRAZING

Livestock levels in many areas exceed the carrying capacity of the grasslands, and overgrazing affects the long grass and marshland vegetation which is the nesting habitat of

some threatened waterbirds (see G01 for details and recommendations).

■ PESTICIDES

Pesticides have been used in parts of the steppes to try to control periodic outbreaks in the numbers of Brandt’s voles *Microtus brandti*, and other ‘pest’ species, but White-naped Cranes have been reported to have been poisoned by pesticides, and it is very likely that some of the other threatened waterbirds and birds of prey have also been affected (see G01 for details and recommendations).

■ DISTURBANCE

Disturbance by people and domestic animals is a significant threat to nesting waterbirds at many steppe wetlands, leading to desertion of nests and increased predation. For example, disturbance by people, dogs and livestock seems to

be a significant problem in Buriatia (see G01 for details and recommendations).

Protected areas coverage and management

■ GAPS IN PROTECTED AREAS SYSTEM

Many of the most important steppe wetlands are protected in nature reserves, but some significant gaps remain. For example, in Russia the Daursky Nature Reserve should be enlarged to include Khotogor bay at Barun-Torey lake.

■ WEAKNESSES IN RESERVE MANAGEMENT

Given the plans to develop the steppes of eastern Mongolia (see *Development (urban, industrial, etc.)* above), it is important to ensure the effective protection of critical biodiversity in that part of the country by strengthening the management of the nine existing and 12 proposed protected areas, and by supporting biodiversity conservation and sustainable alternative livelihoods in the buffer zones of these reserves.

Exploitation of birds

■ HUNTING

Hunting of waterbirds is a problem in some parts of this region. For example, cranes are sometimes killed in Chita, foreign hunting parties have recently visited some steppe lakes in Mongolia, and Dalmatian Pelicans are reported to be hunted for their bills (which are used traditionally as sweat wipes for horses) in Mongolia (see G01 for details and recommendations).

Gaps in knowledge

■ INADEQUATE DATA ON THREATENED BIRDS

The ranges of most threatened waterbirds are poorly known in this region, especially in Mongolia. Surveys are required to investigate the distributions and numbers of Swan Goose, Pallas’s Fish-eagle, Swinhoe’s Rail and Relict Gull, to identify additional key sites. The non-breeding range of Relict Gull is poorly understood, and satellite-tracking of individuals may help locate the main passage and wintering areas (and possibly also undiscovered breeding colonies).

Swan Goose is a widespread breeding bird in the steppes, but has declined because of large-scale hunting on its wintering grounds in China.



PHOTO: FRANK TODD

Table 3. Conservation issues and strategic solutions for birds of the steppe wetlands.

| Conservation issues | Strategic solutions |
|--|---|
| Habitat loss and degradation | |
| <ul style="list-style-type: none"> ■ CONVERSION TO AGRICULTURE ■ DEVELOPMENT (URBAN, INDUSTRIAL, ETC.) ■ STEPPE FIRES ■ FLUCTUATING WATER LEVELS ■ LIVESTOCK GRAZING ■ PESTICIDES ■ DISTURBANCE | <ul style="list-style-type: none"> ➤ Reconsider plans to convert steppe to agricultural land in Mongolia and China ➤ Assess the environmental impact of proposed development projects in Mongolia ➤ Improve fire management, to avoid harm to nesting birds and their habitats ➤ Provide artificial nest platforms for Dalmatian Pelican at Ayrag Nuur, and possibly also at former nesting colonies ➤ Develop ecological management of grazing, encouraging nomadic herders to reduce their herds ➤ Promote alternatives to pesticides for the control of vole outbreaks ➤ Control disturbance in key breeding areas of threatened birds, and provide direct protection to nest sites if required |
| Protected areas coverage and management | |
| <ul style="list-style-type: none"> ■ GAPS IN PROTECTED AREAS SYSTEM ■ WEAKNESSES IN RESERVE MANAGEMENT | <ul style="list-style-type: none"> ➤ Enlarge Daursky Nature Reserve ➤ Strengthen the management of protected areas in Mongolia |
| Exploitation of birds | |
| <ul style="list-style-type: none"> ■ HUNTING | <ul style="list-style-type: none"> ➤ Improve enforcement of hunting laws, through training of law enforcers and conservation awareness work with hunters and the public ➤ Control gun ownership |
| Gaps in knowledge | |
| <ul style="list-style-type: none"> ■ INADEQUATE DATA ON THREATENED BIRDS | <ul style="list-style-type: none"> ➤ Survey threatened waterbirds to identify additional key sites ➤ Use satellite tracking to help locate the migration routes and wintering grounds of Relict Gull |