

CENTRAL CHINESE WETLANDS



THIS region extends across central China, from Shaanxi in the west to Shandong and northern Anhui in the east. It is notable for supporting the only known wild population of Crested Ibis; the species was feared extinct, but was rediscovered in Shaanxi in 1981. There are also some important sites for wintering waterfowl and migrant cranes, mainly in the Yellow River valley.

- **Key habitats** Freshwater wetlands on riverine plains, and traditionally managed agricultural land.
- **Countries and territories** **China** (Shaanxi, Shanxi, Shandong, Henan, Anhui, Jiangsu).

	Threatened species			Total
	CR	EN	VU	
●	—	1	—	1
✈	1	1	2	4
🐦	—	2	3	5
Total	1	4	5	10

Key: ● = breeding in this wetland region.
✈ = passage migrant.
🐦 = non-breeding visitor.

Crested Ibis was feared extinct, but in 1981 a small wild population was discovered in Yang Xian county, Shaanxi. PHOTO: XI ZHINONG/BP



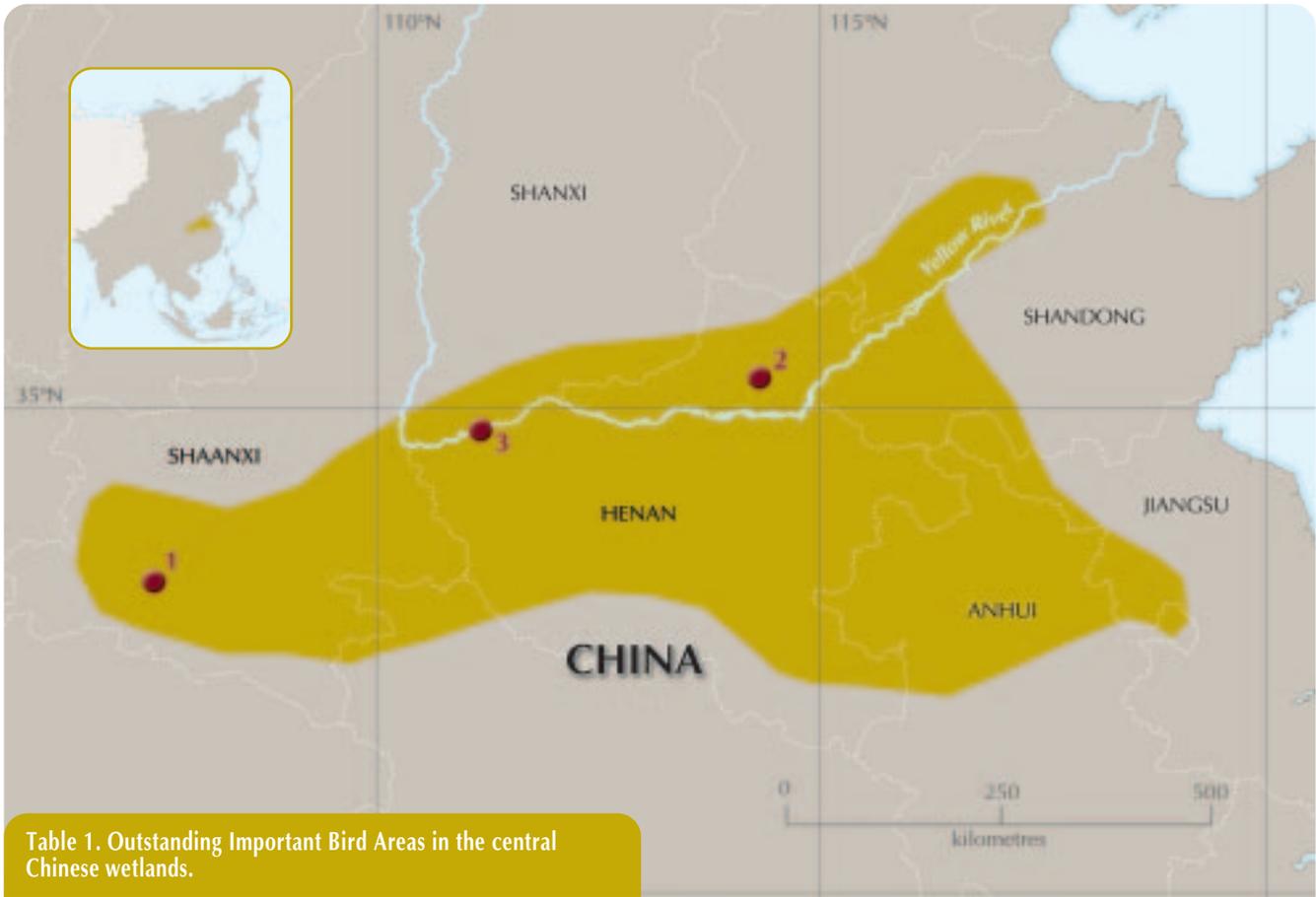


Table 1. Outstanding Important Bird Areas in the central Chinese wetlands.

IBA name	Status	Territory	Threatened species
1 Yang Xian county	(PA)	Shaanxi	The only wild population of Crested Ibis in the world
2 Yubei Huanghe Gudao NNR	PA	Henan	Wintering Swan Goose and Lesser White-fronted Goose, and cranes (all four species) on passage
3 Sanmenxia NR	PA	Henan	Wintering Swan Goose, Lesser White-fronted Goose and Baer's Pochard, passage Red-crowned Crane

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: NR = Nature Reserve; NNR = National Nature Reserve.
 Status: PA = IBA is a protected area; (PA) = IBA partially protected; — = unprotected.

Crested Ibis was formerly widespread in North-East Asia, but Yang Xian county is now one of the few areas with tall trees suitable for nesting adjacent to unpolluted paddyfields.



PHOTO: XI ZHINONG/BP

OUTSTANDING IBAs FOR THREATENED BIRDS (see Table 1)

Three IBAs have been selected, covering the only wild population of Crested Ibis and two important sites for wintering waterfowl and migrant cranes in the Yellow River valley.

CURRENT STATUS OF HABITATS AND THREATENED SPECIES

The wetlands of this region have been utilised by man for several thousand years, and greatly altered by human activities. Large areas have been converted for agriculture or urbanised and virtually all large trees in the lowlands have been cut, and land reclamation, water pollution and hunting continue to affect the region's wetlands. Water is generally in short supply, and the levels in both the Yellow and Huai He rivers are now very low because of excessive water extraction, with the lower reaches of the Yellow River almost totally dried up in some years.

Despite these pressures, the last stronghold of Crested Ibis is in a remote part of this region. This species was widespread and locally common in North-East Asia until the late nineteenth century, but its population then

Farmers in Yang Xian county are given compensation for not using fertilisers and pesticides.

PHOTO: XI ZHINONG/BP



Table 2. Threatened birds of the central Chinese wetlands.

Species		Distribution and population
Oriental Stork <i>Ciconia boyciana</i>	EN	Rare passage and winter visitor
Crested Ibis <i>Nipponia nippon</i>	EN	The only known wild population is in Yang Xian county in Shaanxi, where c.200 wild birds were estimated at the end of the 2002 nesting season
Swan Goose <i>Anser cygnoides</i>	EN	Winters in the Yellow River valley and probably on the plains between the Yellow and Huai He rivers
Lesser White-fronted Goose <i>Anser erythropus</i>	VU	Winters in the Yellow River valley
Baikal Teal <i>Anas formosa</i>	VU	Winter visitor (at least formerly) to Nanxi Hu in Shandong
Baer's Pochard <i>Aythya baeri</i>	VU	Winters in the Yellow River valley and recorded at Nanxi Hu in Shandong
Siberian Crane <i>Grus leucogeranus</i>	CR	Occurs on passage in the Yellow River valley
White-naped Crane <i>Grus vipio</i>	VU	Occurs on passage in the Yellow River valley, and some birds may winter
Hooded Crane <i>Grus monacha</i>	VU	Occurs on passage in the Yellow River valley
Red-crowned Crane <i>Grus japonensis</i>	EN	Occurs on passage in the Yellow River valley, and some birds may winter

Other threatened waterbirds recorded from this region as rare visitors are: Scaly-sided Merganser *Mergus squamatus*, Pallas's Fish-eagle *Haliaeetus leucoryphus* and Relict Gull *Larus relictus*, and the Conservation Dependent Dalmatian Pelican *Pelecanus crispus* has also occurred. In addition to the waterbirds, Great Bustard *Otis tarda* (VU; see G01) occurs on migration and in winter on the riverine plains of this region.

= region estimated to support >90% of global breeding population; = region estimated to support <10% of global non-breeding population; = region estimated to support <10% of global population on passage

crashed—probably as a result of logging of nesting trees, wetland conversion for agriculture, hunting, agrochemicals and changes in agricultural practices—and it was feared to be extinct in the wild when the last wild birds in Japan were taken into captivity in 1981; however, in the same year a small population was discovered in Yang Xian county. By the 1980s, this was one of few areas where the combination of habitat features that the species requires still remained, with tall trees suitable for nesting adjacent to unpolluted paddyfields. Its numbers have increased steadily since its rediscovery, as a result of the prohibition of logging, firearms for hunting and agrochemicals in paddyfields, with compensation being given to farmers for not using fertilisers and pesticides, and protection of nests.

CONSERVATION ISSUES AND STRATEGIC SOLUTIONS (summarised in Table 3)

Habitat loss and degradation

■ **WETLAND CONVERSION AND AGRICULTURAL CHANGE**

Wetland loss and degradation are continuing in this region. For example, in Heyang county in Shaanxi wetlands are being converted into fishponds and being damaged by tourism development. Wetland protection and management therefore needs to be incorporated into the land-use

planning processes of the relevant Chinese provinces and counties. In Yang Xian county, the wetlands have been protected and managed for the benefit of Crested Ibis, and great efforts are made to protect the nesting pairs and help maximise their breeding success, but problems remain. The area of paddies has been declining on the breeding grounds since the early 1980s, which has forced parent birds to forage more widely, and malnutrition of chicks has been noted in some areas. There are a limited number of large trees suitable for nesting near the wetlands in Yang Xian county, which has forced young breeding birds to nest in relatively small trees more accessible to predators. The special measures to protect the Crested Ibises and their habitats need to be continued, and initiated in new areas when the species expands its range.

■ **POLLUTION/PESTICIDES**

Fertilisers and pesticides are widely used, although their application is carefully controlled in Crested Ibis areas. Pollution from industrial effluents is also a problem, including on the wintering grounds of Crested Ibis along the Han Shui river, where several birds have been killed by the ingestion of poisoned materials. Improved laws and their enforcement are required to reduce pollution, together with campaigns to inform farmers about the wise use of

fertilisers and pesticides, to minimise their impact on the environment. As the numbers and range of Crested Ibis increase, the use of agrochemicals in newly occupied areas will have to be minimised.

Protected areas coverage and management

■ GAPS IN PROTECTED AREAS SYSTEM

A Crested Ibis Conservation and Observation Station has been established in Yang Xian county (managed by Shaanxi Forestry Bureau), which protects ibis nest sites and feeding habitats, and local communities there have been well informed about wildlife conservation and the importance of the species. All of Yang Xian county has been proposed as a Non-Hunting Area, as accidental killing of this species sometimes occurs, and nature reserves are advocated in the wetlands along the Han Shui river, which have become an important feeding ground for Crested Ibis in recent years. Elsewhere in the region, wetland habitat is included in several protected areas, including Sanmenxia Nature Reserve in Henan. However, new protected areas should be considered (following surveys to assess their importance) at the other wetlands in the Yellow River valley and on the Yellow River–Huai He plain.

Exploitation of birds

■ HUNTING

Illegal hunting, including the use of poisoned baits, is widespread, and improved enforcement of hunting legislation is required, backed up by conservation awareness work. Although the protected status of Crested Ibis is now well known in Yang Xian county, and the government has confiscated hunters' guns, small numbers of ibises continue to be accidentally poisoned by hunters at the feeding grounds along the Han Shui river. Full enforcement of hunting laws is needed, especially if the population continues to expand and the ibises move into new areas.

Gaps in knowledge

■ INADEQUATE DATA ON THREATENED BIRDS

Information on waterbirds is generally sparse, and surveys are required to clarify the status of the threatened species and identify important sites for their conservation, especially on the Yellow River and Yellow River–Huai He plain. For example, it is unclear whether Red-crowned Cranes winter in the Yellow River valley or only occur there on migration. Further field surveys should be conducted in parts of the Crested Ibis's former range in mainland China, particularly in remoter regions where low-intensity agriculture is still practised and may be providing suitable habitat for this species, for example in southern Gansu. Several studies have been conducted on the ecology of Crested Ibis in Yang Xian county, but there is still scope for a major ecological study of the population. The long-term management of the species will depend on the highest-quality scientific information, and every effort should be made to determine as soon as possible the optimal ecological conditions for this last population.

Other conservation issues

■ CAPTIVE BREEDING AND REINTRODUCTION

It has been suggested that captive Crested Ibis (now over 100 birds in the Protection and Rearing Centre in Yang Xian county, and more in Beijing Zoo and Japan) should be reintroduced to parts of the species' former range. However, great care should be taken to follow IUCN guidelines, for example to avoid the danger of the transmission of disease from captive to wild birds.

Great efforts are made in Yang Xian county to protect the nesting ibises and help maximise their breeding success.



PHOTO: XI ZHINONG/IFP

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

Conservation issues	Strategic solutions
Habitat loss and degradation	
<ul style="list-style-type: none"> ■ WETLAND CONVERSION AND AGRICULTURAL CHANGE ■ POLLUTION/PESTICIDES 	<ul style="list-style-type: none"> ➤ Incorporate wetland protection and management into regional land-use planning processes ➤ Continue special measures to protect Crested Ibis habitats and nests, and initiate in new areas if they expand their range ➤ Improve enforcement of laws to reduce pollution, and inform farmers about the wise use of fertilisers and pesticides
Protected areas coverage and management	
<ul style="list-style-type: none"> ■ GAPS IN PROTECTED AREAS SYSTEM 	<ul style="list-style-type: none"> ➤ Designate all of Yang Xian county as a Non-Hunting Area, and create new reserves along the Han Shui river ➤ Establish new wetland reserves along the Yellow River and on the Yellow River–Huai He plain
Exploitation of birds	
<ul style="list-style-type: none"> ■ HUNTING 	<ul style="list-style-type: none"> ➤ Improve enforcement of hunting laws
Gaps in knowledge	
<ul style="list-style-type: none"> ■ INADEQUATE DATA ON THREATENED BIRDS 	<ul style="list-style-type: none"> ➤ Conduct wetland surveys to locate key sites on the Yellow River and Yellow River–Huai He plain ➤ Search for undiscovered populations of Crested Ibis in its former range in mainland China ➤ Study the ecology of Crested Ibis, to determine the optimal conditions for its survival
Other conservation issues	
<ul style="list-style-type: none"> ■ CAPTIVE BREEDING AND REINTRODUCTION 	<ul style="list-style-type: none"> ➤ Consider the reintroduction of Crested Ibis to parts of its former range in China