

A SYSTEMATIC LIST AND STATUS OF WATERBIRDS IN QINGHAI-XIZANG (TIBET) PLATEAU

Li Laixing

(Northwest Plateau Institute of Biology, The Chinese Academy of Sciences, Xining, 810008)

Abstract

This paper presents a compilation of all waterbird recorded from Qinghai-Xizang plateau. The list of 131 species, in addition to 5 subspecies, is likely to be extended by further works. For each species or subspecies, records are given with detailed locations and months, and status is shown. Possible categories and future studies are discussed.

Key words: Waterbirds; Qinghai-Xizang Plateau; Wetland Ecosystem; Endangered Species

INTRODUCTION

Although quite a number of species of waterbirds had been named by Linnaeus in 1758, it was not known that about 54 species were found in Qinghai-Xizang, the highest plateau in the world. This was largely because no even one specimen had yet been taken from this area. Later, from the second half of last century to the first half of this century, about 44 birds collecting expeditions were mounted which obtained about 21000 specimens of 505 species, including waterbird (Vaurie, 1972). During the second half of this century, about 33 birds censuses were undertaken and the results were summed up in separate political provinces or areas, with an additional 20000 specimens taken (Cheng Tso-Hsin, 1983; Li Dehao, et al, 1989; Li Gui-Yuan, 1982; Wang Xiang-Ting, 1991; Pen Yian-Zhang, et al, 1987; Gao Xing-Yi, 1987; Holmes, P. R., 1986). From 1985 to 1992, the endangered Black-necked Crane (*Grus nigricollis*) was studied by us on its wintering ground in Tsangpo Valley, western Sichuan, north western Yunnan and western Guizhou, on the breeding grounds in Qinghai, northwestern Sichuan, northern Chang Tang and southeastern Gansu, and on the migration routes. The population size was assessed in all above areas. A winter waterfowl census was conducted in northeastern Qinghai, Koko Nor, eastern Zaidam and Amdo by our team. There are about 10,000

specimens of birds in our institute. The compilation of a systematic of the water-birds of this special area is now possible, based on the above.

SYSTEMATIC LIST

The Qinghai-Xizang plateau here is zoo-geographical, not political entity and its limits follow Vaurie (1972). Ringing data are taken from sonobe, K. and Usui, S (1993) and Lu Jianjian (1994). Species sequence in the systematic list follows Cheng Tso-hsin (1994) or Howard and Moore (1980). For each species, records are given with detailed locations and months while the source and years are omitted. If a species is common and its number of records are larger in some area, the name of the area is used as its detail location. The following status categories are used: R = resident, B = breeding confirmed, PB = probably breeding, P = passage migrant, PP = Probably passage migrant, S = presumed not to breed but remains in summer, W = winter visitor, Vg = presumed vagrant, L = little known, ? = status uncertain, * = rare, E = endangered, based on the 1994 IUCN RED DATA BOOK. Other categories (I, II, III, IV, V and VI) will be discussed below.

小鸕鶿 *Tachybaptus ruficollis*
 Little Grebe, TACRU, ?, * ; V
 Lhasa (I); Judian (I); Lhasa River
 角鸕鶿 *Podiceps auritus*
 Homed Grebe, PODAU, ?, * ; V
 Golmud (X, X).
 黑颈鸕鶿 *Podiceps nigricollis*
 Black-necked Grebe, PODNI, B, * ;
 I
 Kung-ho (VI); Koko Nor (V); Yung-
 an-cheng (V); Kurlyk Nor (X);
 Golmud (V - X).
 凤头鸕鶿 *Podiceps cristatus*
 Great Crested Grebe, PODCR, B; II
 Koko Nor (VI); Zaidam (IV, V)
 Alak Nor (VI); Golmud (III -
 Tso Kar (VI); Kala Tso (VI); Ru-

赤颈鸕鶿 *Podiceps grisegena*
 Red-necked grebe, PODGR, ?, * ; V
 Golmud (X, X).
 白鹈鹕 *Pelecanus onocrotalus*
 White Pelican, PELON, P, * ; III
 Koko Nor (IV); Kung-ho (IV).
 鸬鹚 *Phalacrocorax carbo*
 Common comorant, PHACA, B; II
 Throughout the Tibet Plateau
 (X); Yongdro Tso (I).
 苍鹭 *Ardea cinerea*
 Grey Heron, ARDCI, (1), B, S; I ;
 (2), B; V
 (1) A. c. jouyi; (2) A. c. rectirostris
 (1) Eastern and northeast Qinghai;
 Zaidam (I); Golmud (III - IV,
 VIII - I).

- (2) Southern Tibet. 彩鹳 *Mycteria leucocephala*
Painted Stork, MYCLE, ?, * ; V
池鹭 *Ardeola bacchus* Lhasa (S).
Chinese Pond Heron, PRDBA, ?, * ; V
- V
白鹳 *Ciconia ciconia*
White Stork, CICCI, ?, * ; V
Rurgeti (M); Southern Tibet (W);
牛背鹭 *Bubulcus ibis coromandus* 黑鹳 *Ciconia nigra*
Black Stork, CICNI, ?, L, * ; V
Gyantse (VIII). Northern Chang Tang (M); Hsi-ning
(B);
大白鹭 *Egretta alba* Nien-po (VIII); Judian (I); Golmud
Large Egret, EGRAL, ?, * ; V
(1) *E. a. alba*; (2) *E. a. modesta*
(1) Hsi-ning (V); Daton (?); Koko
Nor (XI, VI); Zaidam (I); Gol-
mud (II, IV-VI, IX-XI);
(2) Lhasa (VI); Gyantse (VII).
- 白鹭 *Egretta g. garzetta*
Little Egret, EGRGA, L, ?, * ; V
Kangding (?); Luding (?); Golmud
(IX).
- 夜鹭 *Nycticorax nycticorax*
Black-crowned Night Heron, NYC-
NY, ?, * ; V
Golmud (XI).
- 紫背苇鳉 *Lobrychus eurhythmus*
Schrenck Bittern, IXOEU, L, ?, * ;
VI
Zayu (VII); Gongshan (V, X, XI);
Golmud (I)
- 大麻鳉 *Botaurus stellaris*
Great Bittern, BOTST, L, * ; V
Zaidam (V); Golmud (I)
- 彩鹳 *Plegadia falcinell*
Glossy Ibis, PLEFA, ?, L, * ; V
Ladakh; Drsa River (III).
- 白琵鹭 *Platalea leucorodia*
White Spoonbill, PLALE, ?, * ; V
Qhamdo (M); Golmud (IX-XI).
- 鸿雁 *Anser cygnoides*
Swan Goose, ANSCY, B; V
Zaidam (VI).
- 豆雁 *Anser fabalis*
Bean Goose, ANSFA, P; III
Hsi-ning (IX); Koko-Nor (IX); Gol-
mud (I)
- 白额雁 *Anser albifrons*
White-fronted Goose, ANSAL, ?, * ;

Lhasa (V); Tsangpo (W). 鸕鶿 *White-eyed Plover*
 灰雁 *Anser anser* V
 Greylag Goose, ANSAN, B; Zaidam (IV, V, VI, X); Koko Nor (III, IV, X); Golmud (III, IV, X).
 斑头雁 *Anser indicus*
 Bar-headed Goose, ANSIN, B, W; I
 Throughout the Tibet Plateau, Yongdro Tso (I); Lhasa River (I).
 大天鹅 *Cygnus cygnus*
 Whooper Swan, CYGCY, W, P; Koko Nor (I, VI, X-XII); Zaidam (M); Judian (I); Tuossu Tso (III-XII); Golmud (XI).
 小天鹅 *Cygnus columbianus jankowgkii*
 Whistling Swan, CYGCO, ?, L, *;
 V
 Rurgei (?); Dalay Dabasan Nor.
 疣鼻天鹅 *Cygnus olor*
 Mute Swan, CYGOL, ?, L, *; V
 Koko Nor (M); Kurlyk Nor (X); Rurgei (? or B).
 赤麻鸭 *Tadorna ferruginea*
 Ruddy Shelduck, TADFE, B, S, W; IV, W
 Throughout the Tibet Plateau, Yangdro Tso (I); Zaidam (I); Lhasa River (I); Golmud (I-VII).
 翘鼻麻鸭 *Taborna tadorna*
 Common Shelduck, TADTA, P; III

Koko Nor (X); Zaidam (X); Palay Dabasan Nor (III); Gyangtse (III); Kala Tso (V); Golmud (III, V, VII-X).
 针尾鸭 *Anas acuta acuta*
 Pintail, ANAAC, ?; V
 Serxii (M); Maqu (M); Koko Nor (M); Fenxiakou (M); Yiong (V); Bangong Tso (VIII); Ladakh (X); Tso Kar (X). Bam Tso (VI); Lhasa (I, III); Waterh (IV); Northern Chang Tong (B); Lhasa (I); Yongdro Tso (I); Golmud (I-III).
 绿翅鸭 *Anas creca creca*
 Common teal, ANACR, P, W; I
 Throughout the Tibet Plateau (M).
 Tongdro Tso (I).
 罗纹鸭 *Anas falcata*
 Falcated Teal, ANAFA, P, *; V
 Koko Nor (V); Nomokon (V); Golmud (III-V, VII-X).
 绿头鸭 *Anas platyrhynchos p.*
 Mallard, ANAPL, *, W; IV
 Koko Nor (I); Zaidam (I); Yingdro Tso (I); Judian (I); Golmud (I-VII).
 斑嘴鸭 *Anas poecilorhyncha zonorhyncha*
 Spotbill Duck, ANAPO, ?, *, V
 Hsin-ning (X); Lhasa (W); Golmud (III, IV, VII, X, XI).
 赤颈鸭 *Ansa penelope*

Wigeon, ANAPE, P, S; Northern Ladakh (?); Northern Chang Tang (X); Zaidam (III); Southern Chang Tang (S); Yongdro Tso (I); Golmud (III - V, VIII - XII).

赤膀鸭 *Anas strepera strepera* Gadwall, ANAST, P, S; Northern Chang Tang (X); Gyangtse (X); Ngayese (VI); Dobo (VI); Bam Tso (IV); Yongdro Tso (I); Lhasa River (I); Golmud (I - XII).

白眉鸭 *Anas querquedula* Garganey, ANAQU, ?, *; Nyema (IX); Koko Nor (M); Ladakh (IX); Northern Chang Tang (M); Southern Chang Tang (M, W); Golmud (III - X).

琵嘴鸭 *Anas clypeata* Shoveller, ANACL, ?, *; Koko Nor (III); Ladakh (VIII); Pomi (VI); Yiong (VI); Lhasa (W); Gyangtse (?); Golmud (III, IV, VI - XI).

赤嘴潜鸭 *Netta rufina* red-crested Pochard, NETRU, B; Zaidam (V, VI, IX, X); Yushu (IX); Grei-te (VI); Yongdro Tso (I); Golmud (II - XI).

红头潜鸭 *Aythya ferina* Common Pochard, AYTFE, B; Hsin-ning (III); Zaidam (III - VIII); Yongdro Tso (I); Pangong Tso (VIII); Kala Tso (8); Golmud (III - VII).

白眼潜鸭 *Aythya nyroca* White-eyed Pochard, AYTNY, P, S; Zaidam (III); Northern Chang Tang (IX); Ladakh (?); Yushu (VII); Palkon (VI); Lamdo (IV); Khamba Dzong (XI); Golmud (III, IV, VI, IX - XI).

青头潜鸭 *Aythya baeri* Baers Pochard, AYRVA, P; Bangong Tso (M); Yiong (M); Yiongdro Tso (M); Eastern Qinghai; Zaidam (M); Serxu (M).

凤头潜鸭 *Aythya fuligula* Tufted Duck, AYTFU, ?; Hsin-ning (III - X); Koko Nor (I, IV, V, VI, VII); Toussu Tso (I); Zaidam (I); Nagarese (V); Pomi (VI); Lhasa (W); Yongdro Tso (I); Golmud (III, IV, IX - XI).

斑背潜鸭 *Aythya marila* Scaup Duck, AYTMA, Vg. or ?, *; Danlung.

长尾鸭 *Clangula hyemans* Long-tailed Duck, CLAHY, ?, *; Golmud (II).

鹊鸭 *Bucephala clangula* Goldeneye, BUCCL, P, W; Hsin-ning (III); Fenxiakong (III, IV); Koko Nor (I, IV); Zaidam (II, III); Lhasa (III, IV); Gyangtse (I); Yongdro Tso (I); Golmud (II - VI, X - I).

斑头秋沙鸭 *Mergus albellus* Eastern Smew, MERAL, P, * ; VV ; Hsin-ning (I, IV); Koko Nor (M); - (III, X-IV).

中华秋沙鸭 *Mergus squamatus* Chinese Merganser, MERSQ, E, * ; V ; Hsin-ning (I). Seen by Beick, Jan. 27, 1929.

红胸秋沙鸭 *Mergus s. serrator* Red-Breasted Merganser, METSE, P, * ; V ; Hargi Gol (VIII); Zaidam (III). Koko Nor (I, V); Yungdro Tso (I, V).

普通秋沙鸭 *Mergus merganser* Goosander, (1) *M. m. merganser*; (2) *M. m. comatus*; MERNE, (1) W; M; (2) S, B, ?; Hsin-ning (1) Judian (W); (2) Qinghai (S); Ali (S); Ladakh (S); Lhasa (V); Raog (VIII); Koko Nor (I); Yushu (VII, VIII); Yungdro Tso (I); Golmud (I-V, VIII-XII); Chii-kou (?).

灰鹤 *Grus grus* Common Crane, GRUGR, p; III Koko Nor (N); Chamdo (?); Zaidam (III-IV); Kung-ho (W); Palay Dabadan Nor (X); Golmud (III-V, IX, X, XII).

黑颈鹤 *Grus nigricollis* Black-necked Crane, GRUNI, E, R; Qinghai (B); Ladakh (B); Ali (B); Northern Chang Tang (B); Valley of Tsangpo and Lhasa River (W);

Judian (M, W); Koko Nor (I); Sichuanho (N);

白鹤 *Grus leucogeranus* Siberian white Crane, GRULE, E, P, ?, * ; V

Koko Nor (M); Ladakh (X); Cool, FUAT, N

蓑羽鹤 *Antheropoides virgopennis* Demoiselle Crane, ANTVI, P, * ; V Koko Nor (M); Zaidam (M); Gyantse (?); Golmud (X).

普通秧鸡 *Rallus aquaticus korejewi* Water Rail, RALAQ, P, W, * ; VI Zaidam (I, N, XI); Kung-ho-chin (X); Kuei-te (I); Northern Chang Tang (VIII, X).

长脚秧鸡 *Crex crex* Corn Crake, CRECR, E, ? ; VI Ladakh (X).

小田鸡 *Porzana pusilla* Baillon's Crake, PORPU, P, S, * ; Hsin-ning (X); Zaidam (VIII); Ladakh (X); Chang Tang (X).

斑胸田鸡 *Porzana porana* Sooted Crake, PORPO, ? ; H Lake Qara Tagh (X).

棕背田鸡 *Amaurornis bicolor* Rufous-backed Crake, AMABI, ? ; V Meto (V).

红骨顶 *Gallinula chloropus* Moorhen, (1) *G. c. c.*; (2) *G. c. indica*; GALCH, ? ;

(1) Koko Nor (B); Ladakh (IX);
Sichuanho (X); Shigatze (IV);
Lhasa (VIII);

(2) Pulan (VIII)

白骨顶 *Fulica atra* (M);

Coof, FULAT, ?, V

Hsin-ning (X); Zaidam (V) Ladakh

(VI); Chang Tang (?); Southern

Tibet (?); Yangdro Tso (I);

Lhasa River (I)

水雉 *Hydrophasiannu chirrups*

Pheasant-tailed Jacana, HYDCH, ?;

Zaidam (I, V); Ladakh (VI);

Ladakh (VI)

彩鹬 *Rostratula benghalensis b.*

Pinted snipe, ROSBE, ?, *; V

Kharta Velley (S). seen by Vollaiston

in 1921.

蛎鹬 *Haematopuls ostralegus oscu-*

lans

Oyater-Catcher, HAEOS, ?, *; V

Rugon (X). Seen by Luldow in 1932.

风头麦鸡 *Vanellas vanellas*

Lapwing, VANVA, ?; VI

Hsin-ning (III); Koko Nor (VI);

Zaidam (X); Ladakh (?); Gyantse

(V); LhA (SP); Judian (I); Gol-

mud (III-V, VI-XI, II)

灰斑雉 *Pluvialis squatarola*

Grey Plover, P; V

Zaidam (M); Northern Chang Tang

(X); Golmud (V, VIII, IX)

金斑雉 *Pluvialis dominica fulva*

Eastern Golden Plover, PLUFU, P,

S; W

Thonghout the Tibet Plateau (P. S)

Yongdro Tso (I); Golmud (V -

X).

剑雉 *Charadrius hiaticula*

Ringed plover, CHAHI, ?, *; V

Ladakh (IX); Golmud (VI, VIII -

X).

长嘴剑雉 *Charadrius Placidus*

Long-billed Ringed Plover, CHAPL,

L; VI

Koko Nor (VIII); Temo Gompa (IX);

Tamnye (VI); Yirong Tso (II, V,

IX); Nang (X)

金眶剑雉 *Charadrius dubius*

Little Ringed Plover, CHADU, L; VI

(1) *C. d. curonicus*; (2) *C. d. jerdoni*

(1) Hsin-ning (V, VII, IX); Hsin-

cheng (V, VI);

(2) Tianzhy (m); Men yuan (V,

W); Chang Tang (IX); Ladakh

(IX); Zaidam (IV); Golmud

(IV, VI - VIII, X); Chii-kou (?).

(2) Zetang (s).

环颈雉 *Charadrius a. alexandrinus*

Kentish Plover, CHAAL, ?; II

Upper Tan-huang ho (IV); Koko Nor

(III, VI, VII, IX); Zaidam (IV, VIII,

IX); Ladakh (IX); Northern Chang

Tang (IX); Golmud (III - X)

蒙古沙雉 *Charadrius mongolus*

(1) *C. m. schäferi*; (2) *C. m. atrifrons*

(1) Dobo (V); Hai-yen (VI); Koko

Nor (VI); Oring - Nor (VI);

Sources of Huang-he (VI);
Ladakh (V, VI, VII, IX); Chang
Tang (VI, VII); Golmud (III -
VI);
(2) Southern Tibet (VI, VII, VIII,
IX).

铁嘴沙雉 *Charadrius leschenaultii*
Large Sand Plover, CHALE, P, *;
V

Koko Nor (IX); Ladakh (VIII); Golmud
(IV, V, VII - IX).

红胸沙雉 *Charadrius asiaticus*
Caspian Plover, CHAAS, P, *; V
Golmud (V).

中杓鹬 *Numenius Phaeopus p.*
Whimbrel, NUMPH, P, *; V
Nanarese (IX); Gyantse (IX); Bam
Tso (X); Ladakh (VIII); Golmud
(V - VI, VIII - IX).

小杓鹬 *Numenius minutus*
Little Whimbrel, NUMMI, ?, *; V
Golmud (IX).

白腰杓鹬 *Numenius arquata orientalis*
Curlew, NUMAR, P, *; V
Zaidam (IV); Chang Tang (VIII - IX);
Western Tibet (IX).

红腰杓鹬 *Numenius madagascariensis*

Red-rumped Curlew, NYMMA, P,
* ; V
Koko Nor (III).

斑尾塍鹬 *Limosa lapponica*

Bar-tailed Godwit, LIMLA, ?, *; V
Golmud (IX).

黑尾塍鹬 *Limosa limosa melanuroides*

Black-tailed Godwit, LIMLM, P, *;

III
Koko Nor (IV); Zaidam (M); Chang
Tang (M); Gyantse (V); South-
ern Tibet (IX); Golmud (III -

X).

鹤鹬 *Tringa erythropus*

Spotted Redshank, TRIER, ?, *; V
Tingri Dzeng (VI); Golmud (IV -

X).

红脚鹬 *Tringa totanus t.*
Common Redshank, TRITO, B, S;
VI, VII, VIII, IX, X;
Throughout the Tibet Plateau (S. B).

Yangdro Tso (I); Lhasa River
(I); Golmud (III - X).

泽鹬 *Tringa stagnatilis*
Marsh Sandpiper, TRIST, ?, *; V
Golmud (IV - V, VII - IX); Ladakh

(M).

青脚鹬 *Tringa nebulatia*

Greenshank, TRINE, ?, VI
Dobo (IX); Koko Nor (VII); Chang
Tang (B); Ladakh (IV, VIII, IX);

Gyantse (II, VIII, X); Golmud
(IV - V, VII - XI).

白腰草鹬 *Tringa ochropus*

Green Sandpiper, TEIOC, ?, VI
Dobo (I, IX); Men-yuan (IV -
VI); Yangdro Tso (I); Lhasa Riv-

er (I); Ladakh (VI, IX); Chang Tang (VIII); Lhasa (R); Gyangtse (II, III, XII); Golmud (IV-V, VII-X).

林鹬 *Tringa glareola*

Wood Sandpiper, TRIGL, ?; II Dobo (IX); Men-yuan (V); Zaidam (VII); Chang Tang (VI); Ladakh (V, VIII, IX); Tso Kar (IX); Zanda (VIII); Raog (VIII); Golmud (IV-VI, VII-X).

矶鹬 *Actolitis hypoleucos*

Common Sandpiper, ACTHY, ?; I Dobo (V, IX); Men-yuan (V); Koko Nor (IX); Zaidam (VII, VIII); Chang Tang (VIII, IX); Golmud (IV-VI, VII-IX); Southern and Southeastern Tibet (I, V, VI, VIII, IX).

灰尾鹬 *Heteroscelus brevipes*

Grey-tailed Sandpiper, HETBR, P, *; II

Koko Nor (VI); Chang Tang (M).

翘嘴鹬 *Xenus cinereus*

Terek Sandpiper, XENCI, P, *; II Koko Nor (VIII); Chang Tang (M); Gyangtes (V); Golmud (IV-IX).

翻石鹬 *Arenaria interpres i.*

Ryddy Turnstone, AREIN, P, III Wei-Yuan-pu (VIII); Khara Nor (VIII); Chang Tang (VIII); Ladakh (?); Southern Tibet (IX); Golmud (V, VII-IX).

孤沙锥 *Gallinago s. solitaria*

Solitary Snipe, GALSO, W; IV Kuei-te (XII); upper Huang-ho (IV); Lhasa (I); Gyangtse (I, II, XII); Re Chu (I); Golmud (VI, IX).

林沙锥 *Gallinago nemoricola*

Wood Snipe, GALNE, *, E; V Namphu La (IX).

针尾沙锥 *Gallinago stenura*

Pintail Snipe, GALST, ?; VI Zaidam (VIII); Ladakh (VIII, IX); Chang Tang (IX); Lhasa (IX); Golmud (VIII-IX); Gyangtse (VIII); Lhasa River (I).

大沙锥 *Gallinago megalala*

Swinboe's Snipe, GALME, P, *; III Southeastern Tibet (M); Golmud (VII, IX).

扇尾沙锥 *Gallinago gallinago g.*

Common Snipe, GALGA, P; III Dobo (VI); Hsin-cheng (V); Koko Nor (IV, IX); Zaidam (VIII, X); Ladakh (IX); Chang Tang (IX); Golmud (V, VIII-X).

丘鹬 *Scolopax rusticola r.*

Eurasian Woodcock, SCORU, L, *; V

Lhasa (V); Kongtsuka (VI); Tangmu (II).

红腹滨鹬 *Calidris canutus rogersi*

Red Knot, CALCA, ?, *; V Koko Nor (IV, VI, X, XI); Zaidam (III).

红颈滨鹬 *Calidris ruficollis*
 Red-necked Stint, CALRU, P, * ;
 Dobo (X); Golmud (V, X).
 长趾滨鹬 *Calidris subminuta*
 Long-toed Stint, CALSU, P, * ; V
 Dobo (V); upper Huang-ho (V);
 Raog (VIII); Golmud (VII—IX).
 小滨鹬 *Calidris minuta*
 Little Stint, CALMI, P, * ; V
 Ladakh (VIII); Zasaar (X); Golmu
 (VI—IX)
 青脚滨鹬 *Calidris temminckii*
 Temminck's Stint, CALTE, L, VI
 Hsin-ning (IV, V, X); Dotong
 (V); Koko Nor (X); Zaidam
 (IV, VII—IX); Golmud (IV—IX);
 Ladakh (V); Northern Chang
 Tang (X); Yangpa ching (X); Ari
 (VII—IX); Lhasa River (I);
 southern and southern Tibet (IV,
 V).
 斑胸滨鹬 *Calidris melanotos*
 Pectoral Sandpiper, CALME, ?, * ;
 V
 Golmud (X).
 尖尾滨鹬 *Calidris acuminata*
 Sharp-tailed Sandpiper, CALAC, P,
 * ; V
 Northern Chang Tang (X); Golmud
 (VII—IX).
 黑腹滨鹬 *Calidris alpina*
 Dunlin, CALAL, P, * ; V
 Ghaz (XI); Golmud (IV—VI, VIII—

XI).
 弯嘴滨鹬 *Calidris ferruginea*
 Curlew Stint, CALFE, P, * ; V
 Ladakh (X); Chang Tang (M); Kala
 Tso (M); Golmud (V—IX).
 三趾鹬 *Crocerhia alba*
 Sanderling, CROAL, P, * ; V
 Southern Tibet (M).
 阔嘴鹬 *Limicola falcinellus*
 Broad-billed Sandpiper, LIMFA, ?,
 * ; V
 Golmud (V, VII—IX).
 流苏鹬 *Philomachus pugnax*
 Ruff, PHIPU, P, * ; III
 Ladakh (X); Chang Tang (VIII—IX);
 Lhasa (X); Gyantse (X); Dochen
 (X).
 鸕嘴鹬 *Ibidorhyncha struthersii*
 Ibis-bill, IBIST, B, ? ; VI
 Hsin-ning (III, V); Dotong (V,
 VIII); Wei-Yuan-Cheng (III); Hua-
 Lung (XII); Kui-te (VIII); Source
 of Whang-ho (IV); Tuossu Nor
 (I, III); Koko Nor (IV); Zaidam
 (I, IV, V); Ladakh (X);
 Gyantse (VI, XII); Pome (I—
 XII); Pulan (VI, VIII); Degern
 (I); Lhasa River (I); Yushu
 (VI, VII, X).
 黑翅长脚鹬 *Himantopus himantopus*
 Black-winged Stile, HIMHI, P, S; VI
 Koko Nor (X); Zibm (V); Chang
 Tang (X); Gar (X); Bam Tso
 (X); Golmud (IV—IX).

反嘴鹈 *Recurvirostra avosetta*
Pied Avocet, RECAV, L; W
Koko Nor (?); Zaidam (VI, X); Bam
Tso (?); Yadong (IV, V); Yangdro
Tso (I) Lhasa River (I); Golmud
(III - V, VII - X).

红颈瓣蹼鹈 *Phalaropus lobatus*
Red-necked Phalarope, PHALO, ?;
* ; V
Koko Nor (IX); Kala Tso (V); Tsela
Dzong (V); Golmud (VII - IX).

领燕鸻 *Glareola pratincola*
Gollared pratincole, GLAPR, ?; * ;
V
Golmud (VI).

普通燕鸻 *Glareola maldivarum*
Oriental Pratincole, GOAMA, L, * ;
V
Hsin-ning ho (IV); Chii-Kou (V);
Chih-to (VIII); Golmud (VIII - IX).

海鸥 *Larus canus*
Mew Gull, LARCA, ?; * ; V
Golmud (III - IV, XI - XII).

银鸥 *Larus argentatus cachinnans*
Herring Gull, LARAR, P, * ; V
Heimahe (X), Golmud (III - V, X
- XI).

小黑背鸥 *Larus fuscus*
Lesser Black-backed Gull, LAR-
FU, ?; * ; V
Golmud (III - V, X - XI).

渔鸥 *Larus ichthyactes*
Great Black-headed Gull, LARIC, B;

II
Koko Nor (III - IX); Yangdro Tso
(I); Lhasa River (I) Zaidam
(S); upper Huang-ho (S); Ladakh
(VIII); Chang Tang (VIII); Ari (VIII,
IX).

红嘴鸥 *Larus ridibundus*
Black-headed Gull, LARRI, P, * ;
III
Ladakh (VIII); Zaidam (III); Yangdro
Tso (I); Golmud (III - V; X,
XI).

棕头鸥 *Larus brunnicapillus*
Brown-headed Gull, LARBR, B; II
Throughout the Tibet Plateau (III -
X); Koko Nor (I - VII); Yangdro
Tso (I); Lhasa River (I).

细嘴鸥 *Larus genei*
Slender-billed Gull, LARGE, ?; * ;
V
Golmud (III - V).

小鸥 *Larus minutus*
Little Gull, LARMI, P, * ; V
Ladakh (IX); Golmud (IX).

须浮鸥 *Chlidonias hybrida*
Whiskered Tern, CHLHY, P, * ; V
Ladakh (IX, X); Golmud (VI, VIII
- IX).

白翅浮鸥 *Chlidonias leucoptera*
White-winged Black Tern,
CHLLE, ?; * ; V
Koko Shili (VIII); Yamdro Tso (VIII);
Golmud (V - IX).

- 黑浮鸥 *Chlidonias niger* Koko Nor (V—K).
 Black Tern, CHLNI,?, * ; V
 Zaidam Nor (B); Turgenii Nor (VII);
 Golmud (V—X).
- 鸥嘴噪鸥 *Gelocheldon nilotica*
 Gull-billed Tern, GELNI,?, * ; V
 Golmud (IV).
- 普通燕鸥 *Sterna hrundo tibetana*
 Common tern, STEHI, B; II
 Throughout the plateau (V—VI);

- 北极燕鸥 *Sterna paradsaea*
 Arctic Tern, STEPA,?, * ; V
 Ladakh (VII); Golmud (X).
- 白额燕鸥 *Sterna albifrons*
 Little Tern, STEAL,?, * ; V
 Golmud (VI, X).

DISCUSSION

During the last two centuries, 131 species, in addition to 5 subspecies, of waterbirds in Qinghai-Xizang Plateau have been recorded. Those can be divided into six categories. The first four are regular. I, Resident, only one species, the Black-necked Crane; II, Breeding and summer birds, as the status codes B, PB and S, e. g., the Bar-headed Goose (*Anser indicus*), 20 species; III, Wigrant, as P and PP, e. g., the Common Crane (*Grus grus*), 11 species, and IV, Winter visitor, for example, Whooper Swan (*Cygnus cygnus*), 7 species. This class has 39 species, one third of the total number of waterbirds, but their population may be the two third of the total, playing an important role in the wetland ecosystems of Qinghai-Xizang Plateau. Ecological study on this class is of prime importance.

The secons class, codsed V, consisting of Vg, L.? and *, has 73 species, a half of the total number of species, but all are irregular or rare, some having been recorded only once in two centuries, included here are endangered, extralimita breeders, such as Siberian Crane (*Grus leucogeranus*) and Chinese Merganser (*Mergus squamatus*), and Possibly former residents, such as Crested Ibis (*Nipponia nippon*); their status are influenced by large-scale changes and degradation of the environment.

The last class, codes VI, has 24 species, the one fifth of the total number of species. Of these, many have appeared regularly, but their status is uncertain. If their main population breeds to the north of plateau, some individuals stay and winter.

The rise of Qinghai-Xizang Plateau may have interrupted their migratory routes and some suitable breeding or wintering habitats may have evolved here. Thus, the rise of the Plateau not only changes the distribution of the birds in the world; but

also causes new subspecies to evolve. Clearly, further studies of this class of waterbirds are valuable and important.

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青藏高原水鸟系统名录及其状况

李来兴

(中国科学院西北高原生物研究所, 西宁, 810001)

摘要

本文对自林奈首创双名法以来记录到的青藏高原的水鸟给出了系统名录, 共有 131 种及 5 亚种。根据资料列出每一个种和亚种的记录时间、地点和居留情况, 并对其种群状况作了初步分析, 讨论了在今后的研究工作中应考虑的重点。

关键词: 水鸟; 青藏高原; 湿地生态系统; 濒危物种