

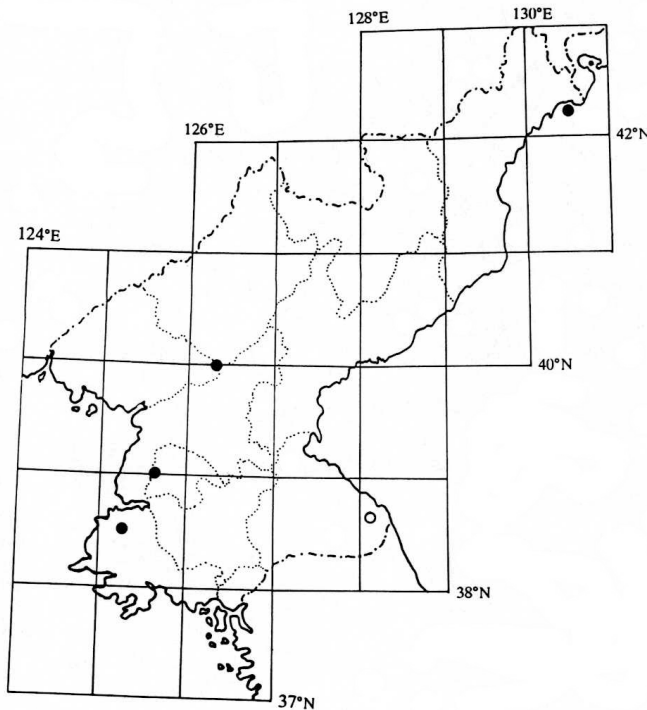
M e a s u r e m e n t s (7 specimens of the collection ZIP, 1 specimen of the collection MZB, 1 specimen of the collection ISEA):

	7♂♂	\bar{x}	?sex	?sex
wing	68-74	71.5	71	70
tarsus	15-21	17.6	17	17
bill	9-12	11.0	11	9.2
tail	43-52	47.3	43	46

Common breeding species and passage migrant. Observed from 3 Apr till 8 Sep. Mid-May the Yellow-rumped Flycatcher starts breeding and leaves for wintering at the end of Aug (FIEBIG 1995), meaning that birds seen in May, Jun and Jul are part of the breeding fauna. Nesting, apart from the nest found in Opha (WON Hong-Koo 1965) and Kaesong (PERTWEE, pers.comm), is indicated by: mating behavior of adult birds, food gathering and records of fledglings (TOMEK 1985, FIEBIG 1995). I observed the earliest family flock 5 Jun 1987 in Ponghwari. The Yellow-rumped Flycatcher was most frequently seen in hilly and forested areas as well as in city parks (FIEBIG 1995, my observations).

The Yellow-rumped Flycatcher is a breeding species in bordering territories: common in South Korea (WON Pyong-Oh 2000), fairly common in China (CHENG Tso-Hsin 1987) and abundant in Primorye (POLIVANOV 1981, NECHAEV 1998a). Only on the Japanese Islands it is an accidental visitor (MORIOKA 2000), where it is replaced by the Narcissus Flycatcher, which on the continent is very rare.

301. *Ficedula narcissina* (TEMMINCK, 1835)
Narcissus Flycatcher



Data:

Pyongyang (I): Ryongaksan (I-10): 15 May 1950 (WON);

Pyongan North (III): Myohyangsan (III-24): 12 May 1950 (WON);

Hamgyong North (VI): Alsom (VI-6): 12 May 1961 (WON);

Kangwon (VIII): Kungangsan (VIII-8): 12 Jun 1949 (WON);

Hwanghae South (X): Kuwolsan (X-6): 11 Apr 1999 (DUCK).

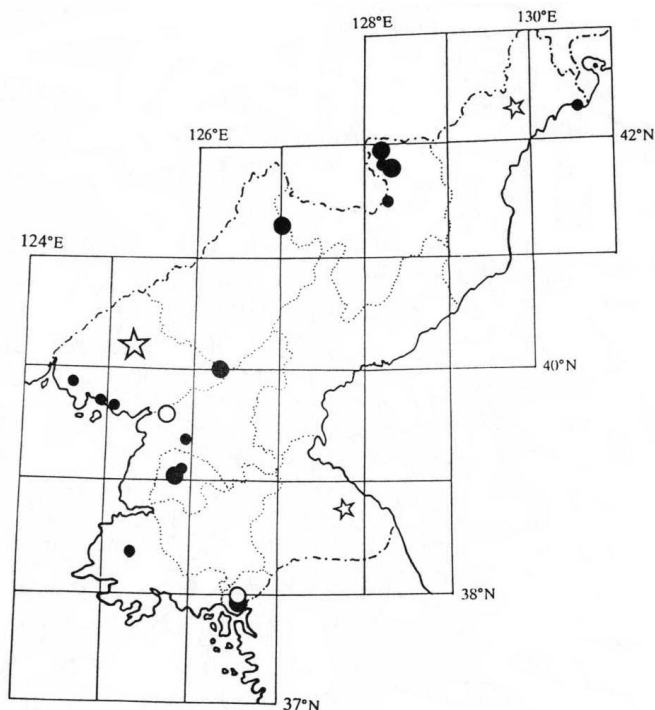
Vagrant. Till now only 5 records in North Korea, of these 4 were during spring migration. There is 1 record of the Narcissus Flycatcher during breeding season (12 Jun 1949) and on that basis WON Hong-Koo (1965) as well as O Hung-Dam (1988) assume that there may be nesting in the central part of the penin-

sula. The Narcissus Flycatcher is a common breeding species on the Japanese Islands (DISTRIB. 1981, MORIOKA 2000). It is also present, but only during migration, along the central and southern coasts of China (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). However the migrating route by-passes the Korean Peninsula since in both Primorye and South Korea this species appears very rarely (LABZYUK et al. 1971, NECHAEV 1998a, LEE Woo-Shin & RHIM Shin-Jae 1998, WON Pyong-Oh 2000) and it has there a status vagrant.

302. *Ficedula mugimaki* (TEMMINCK, 1835)

[*Siphia mugimaki*]

Mugimaki Flycatcher



Data:

Pyongyang (I): Pyongyang (I-1): 3 Oct 1968 (ZIP), 11, 14, 15 May 1980 (MAUERS), 16, 29 May 1988, 16 May 1990 (FIEB), Taesongsan (I-6): 3 Oct 1984 (TOM);

Pyongan South (II): Jasan (II-12): 9 Sep 1953 (ZIP), Anju (II-16): 15 May 1930, 6 May 1932 (WON);

Pyongan North (III): 24 May 1917, 7-24 May 1929 (AUST), Kohyonri (*III-4): 15 May 1955 (WON), Sambongri (III-8): 1 May 1958 (ZIP), Pankungri (*III-10): 11 May 1958 (WON), Myohyangsan (III-24): 22 May 1956, 15 May, 15 Jun 1957 (ZIP);

Chagang (IV): Okasan (IV-3): 22 Sep 1958, 21 Sep 1959 (HO);

Ryanggang (V): Jongbong (*V-6): 15 Jun 1958 (WON), Samjiyon (V-10): 25 Jun, 4 Jul 1958 (ZIP), 4 Jun 1980 (TOM), no date (HO), Sobaeksan (V-11): 18 Jun 1967 (ZIP), Mutubong (V-13): 23 Jul 1958 (WON), 8 Jun

1966 (ZIP), no date (HO);

Hamgyong North (VI): 25, 27 Sep 1917 (AUST), Kulphori (VI-4): 14 May 1961 (WON);

Kangwon (VIII): 11 Sep, 1 Oct 1914 (AUST);

Hwanghae South (X): Kohyonri (*X-10): 15 May 1955 (ZIP);

Kaesong (XI): Kaesong (XI-1): 10 Oct 1928, 28, 29 Sep, 7 Oct 1929, 5 May 1930, 19 May 1934, 4 Oct 1955 (WON), 20 Oct 1965 (ZIP);

no data: 2 specimens (ZIP).

M e a s u r e m e n t s (12 specimens of the collection ZIP, 1 specimen of the collection ISEA):

	9♂♂	\bar{x}	4♀♀	\bar{x}
wing	71-77	74.7	72-75	73.5
tarsus	15-18.5	16.6	16-19	17.5
bill	8-10	9.0	8.5-10	9.1
tail	50-57	52.9	46-50	48.3

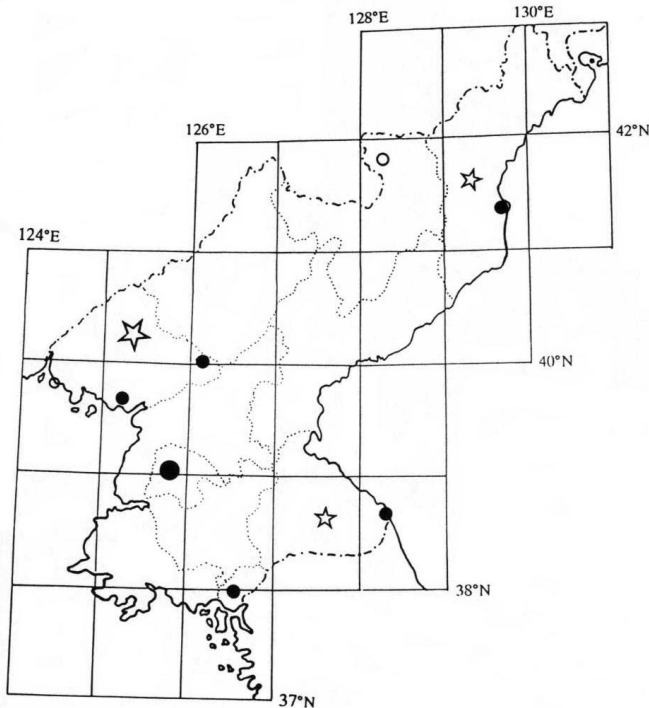
Probably a breeding species in the northern provinces and passage migrant. Observed from 1 May till 20 Oct. North of the Korean Peninsula the Mugimaki Flycatcher arrives mid-May, in Jun starts breeding and leaves for wintering in Sep (DEMENTEV & GLADKOV 1951-1954, NECHAEV 1991). Therefore it can be thought that birds observed in Jun and Jul are part of the breeding fauna. During this time there were records in Ryanggang (at least 6 records) and in the Myohyangsan Mountains (1 record). According to WON Hong-Koo (1965) the Mugimaki Flycatcher nests in the Ryanggang Province at an elevation of 1400-1900 m.

The Mugimaki Flycatcher is a nesting species in provinces of northeast China bordering Korea, and in southeast Russia (MEYER DE SCHAUENSEE 1984, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, KOLIK & MIKHAILOV 1994, MIKHAILOV et al. 1998, NECHAEV 1998a), but in Japan and South Korea it is known only as passage migrant (MORIOKA 2000, WON Pyong-Oh 2000). Thus, probably the border of the breeding area crosses the northern provinces of North Korea. However it requires better documentation.

303. *Ficedula parva* (BECHSTEIN, 1794)

[*Siphia parva albicilla*]

Red-breasted Flycatcher



Data:

Pyongyang (I): Pyongyang (I-1):
23, 24 Oct 1987, 16 Oct 1988 (FIEB),
30 Sep, 1, 2 Oct 2000 (DUCK);

Pyongan North (III): 26 May
1917, 8, 19 May 1929 (AUST),
Jongju (III-3): 21 Sep 1951, Tasado
(III-12): 8 May 1949 (WON), Hyangsan
(III-23): 30 Oct 2000 (DUCK);

Ryanggang (V): Kanpaegsan
(*V-10): no date (Ho);

Hamgyong North (VI): 20 Sep
1917 (AUST), Mayonho (*VI-29):
26 Sep 1989 (FIEB);

Kangwon (VIII): 30 Sep 1914
(AUST), Samil-pho (VIII-7): 9 Oct
1978 (TOM);

Kaesong (XI): Kaesong (XI-1):
20 Oct 1965 (ZIP).

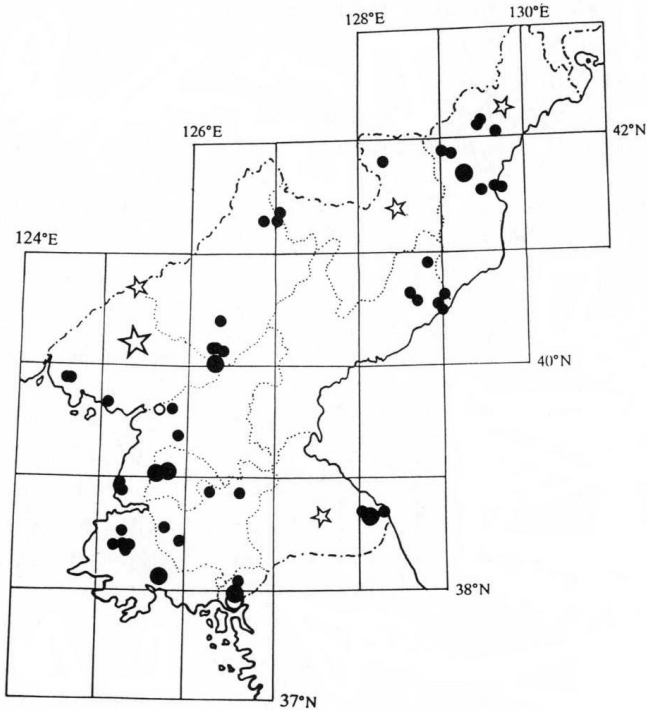
M e a s u r e m e n t s
(1 specimen of the collection
ZIP and 1 specimen of the col-

lection ISEA, sex unknown): wing 67.2, 67; tarsus 19.5, 17; bill 8, 9; tail 62.4, 51 mm.

Rare passage migrant. Observed during spring (8-29 May, at least 4 records) and autumn (20-30 Oct, at least 13 records) passage. The breeding area of the Red-breasted Flycatcher includes north-eastern Asia (MAUERSBERGER & PORTENKO 1963), Sakhalin (NECHAEV 1991), the Sikhote-Alin Mountains (VOLOSHINA et al. 1999), while the farthest nesting place in the south is Edinka in Primorye (NAZARENKO 1990). They migrate for wintering in southeast Asia across Chinese territory (and are during this period "fairly common" – CHENG Tso-Hsin 1987). The passage route by-passes the eastern coast i.e. Primorye and the Korean Peninsula because in both southern Primorye and

South Korea it is a rare passage migrant, and irregular visitor on the Japanese Islands (PANOV 1973, NECHAEV 1998a, GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000, MORIOKA 2000).

304. *Cyanoptila cyanomelana* (TEMMINCK, 1829)
 [*Muscicapula cyanomelana*, *Muscicapa cyanomelana*]
 Blue-and-White Flycatcher



Data:

Pyongyang (I): Pyongyang (I-1): 11 May 1980 (MAUERS), 26 Apr 1987 (GŁOW), 14 May 1988 (FIEB), May 1999, 17 Sep 2000 (DUCK), Ryongaksan (I-10): 23 May 1980 (TOM), 18 Jun 1988 (FIEB);

Pyongan South (II): Jasan (II-12): no date (ZIP), Anju (II-16): 3-14 Aug 1931 (WON), Ansokri (II-23): 24 Apr 1958, Sakju (*II-24): 24 Apr 1963 (ZIP), Yonpung-ho (II-30): 7 Jun 1987 (TOM);

Pyongan North (III): 4 May 1917, 24 Apr-11 May 1929 (AUST), Kwaksan (III-4): 19 May 1955, Haksori (*III-10): 9, 10, 13, 17 May 1958, Pankungri (*III-10): 27 Apr 1958, Myohyangsan (III-24): 22 Jun 1954 (ZIP), 14 Jun 1955 (MAUERS), 21 Mar, 11, 13, 14, 15, 17, 21, 22 May, 8, 14, 19 Jun, 6 Jul, 21, 29 Aug,

8, 11, 14 Sep, 7 Dec(!) 1956, 30 May 1957, 18 May 1979 (ZIP), 6-21 Jun 1983 (TOM), from middle April 1988-1990 (FIEB), 8-12 Aug 1991 (BÁLDI), 28, 29 May 1997 (PERT);

Pyongan North-Chagang (III-IV): Amnok riv.(III-IV-?): before 1923 (SOWERBY);

Chagang (IV): Hwapyong (IV-2): 18 Aug 1958, Karimri (*IV-2): 29 Apr, 5 May, 5 Jul, 20 Aug 1958 (ZIP), Okasan (IV-3): 29 Apr, 20 Aug 1958 (HO; see footnote 2, page 20), Myongmun (IV-6): 17 May 1987, Masonri (IV-9): 13 May 1987, Huichon (IV-10): 16-18 May 1987, Chongsan (*IV-10): 14 May 1987 (TOM);

Ryanggang (V): Ryongjori (V-2): 17 Apr 1958, Kanpaegsan (*V-10): 26 Jun 1963 (ZIP), no date (HO);

Hamgyong North (VI): breeding season 1941 (AUST), Chayuryong (VI-13): 7-10 Jul 1983, Dongsakol (*VI-14): 2 Jul 1983 (TOM), Puryong (VI-16): Jun 1984, Yonsa (VI-20): 25 Jul 1959, Samphori (VI-21): 27 Jul 1959 (ZIP), Kwanmobong (VI-22): 21 May 1956 (WON), 29 May, 3, 10, 18, 20 Jun 1959, Osangri (*VI-25): 20 May 1959, Pukhaso (*VI-25): 18 Jun 1959, Kwanmori (VI-26): 21, 22, 23 May, 6, 26, 27 Jun 1959 (ZIP);

Hamgyong South (VII): Kumdok (VII-2): 29 May 1987, Machonryong (VII-5): 26-27 May 1987, Tongdokri (*VII-6): 2 Jun 1987, Sangryong (VII-7): 30 May, 3 Jun 1987, Yomsongdok (VII-13): 24 May 1987, Hochon (VII-14): 25 May 1987 (TOM);

Kangwon (VIII): 29 Jul 1929 (AUST), 25 Aug 1930 (WON cited by AUST, but WON does not mention this observation in his later publications), Samil-pho (VIII-7): 22 May 1980, Kumgangsán (VIII-8): 20-22 May 1980 (MAUERS), 22 Apr 1987 (GŁOW), 1-4 Aug 1991 (BÁLDI), Onjongri (*VIII-8): 20 May 1980 (MAUERS);

Hwanghae North (IX): Taegaksan (IX-4): 28 May 1962 (WON), Sohungo (IX-7): 3 May 1987, Sariwon (IX-16): 2 May 1987 (GLOW), Yonsan (IX-17): 20 May 1987 (TOM);

Hwanghae South (X): Kuwolsan (X-6): 5 Jul 1957, 12 Apr 1999 (DUCK), Talchonri (X-9): 3, 5 Jul 1957, Samchon (X-10): 17 Jun 1962, Kohyonri (*X-10): 20 Apr 1957, Onchon (*X-10): 18 May 1962 (ZIP), Suyangsan (X-24): 23 Sep 1978, 30 May 1980 (TOM), 28 Apr 1987 (GLOW);

Kaesong (XI): Kaesong (XI-1): 5, 15 Apr 1929, 9 Apr 1930, 25 May 1955, 20 Apr, 9 Jun 1957 (WON), 1 Apr 1962 (ZIP), Pagyon (XI-3): 15 Aug 1984 (KOLBE);

no locality: 12, 13 May 1956 (VLAD);

no data: 3 specimens (ZIP), several spec. (GLOW).

M e a s u r e m e n t s (67 specimens of the collection ZIP, 1 specimen of the collection ISEA):

	45♂♂	\bar{x}	23♀♀	\bar{x}
wing	85-101	92.9	85-93	88.9
tarsus	14.5-20	16.3	16-21	17.2
bill	10-13	11.3	10-14	11.8
tail	58-70	63.1	56-67	59.1

Common breeding species and passage migrant. Observed from 21 Mar till 23 Sep²⁰. Blue-and-White Flycatcher starts breeding in Korea at the end of May (WON Hong-Koo 1965: 28 May – nest with 1 egg, 11 Jun – female sitting on eggs), therefore all of the above mentioned records of birds from mid-May to Jul indicate nesting of these birds. This was confirmed (presence of nest) in Myohyangsan, Taegaksan and the Paekdusan region (WON Hong-Koo 1965, TOMEK 1985). The Blue and-White Flycatcher is a common species in hilly forested countryside. The fact that it is numerous is indicated by records in 1983 in 16 breeding territories in several valleys of the Myohyangsan Mountains and 6 territories in one valley Dongsakol (TOMEK 1985), and in 1987: 14 May 7 territories in Chongsan, 17 May 4 singing males in the Myongmun Pass and 24 to 31 Jun several dozen territories in the Tanchon region (my unpublished data).

The Blue-and-White Flycatcher is also common or abundant in all neighboring areas: in Primorye, China, Japan and South Korea (NECHAEV 1998a, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, MORIOKA 2000, WON Pyong-Oh 2000).

M o n a r c h i d a e

305. *Terpsiphone paradisi* (LINNAEUS, 1758)

[*Terpsiphone incei*]

Asiatic Paradise Flycatcher

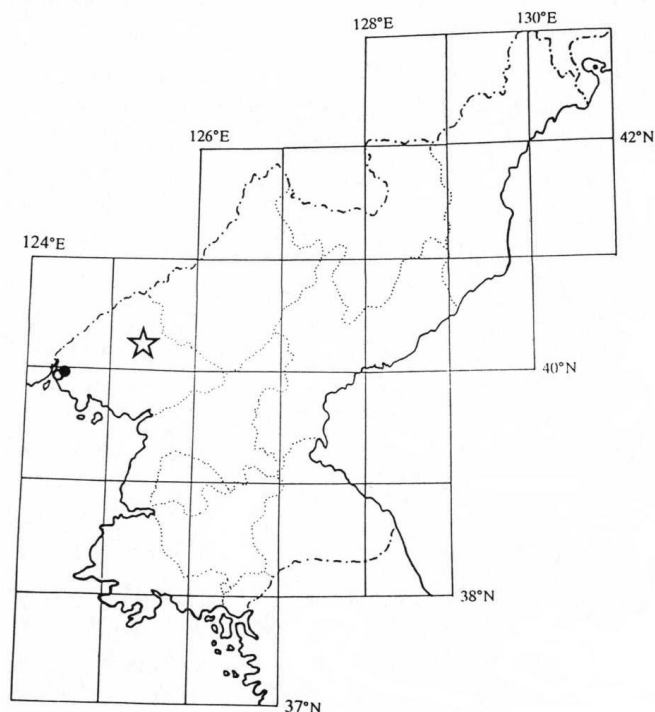
Data:

Pyongan North (III): 31 May, 4 Jun 1917, 25 May-4 Jun 1929 (AUST), Joho (*III-13): 23, 24 May 1950 (WON), Ryongampho (III-15): late May 1935 (AUST).

Observed only in the Pyongan North Province during the 1st half of the 20th century. In areas north of the Korean Peninsula the Asiatic Paradise Flycatcher returns after wintering at the beginning of Jun (NECHAEV 1981, NECHAEV in LER 1989) and fledglings were already seen at the begin-

²⁰

The observation in Dec in Myohyangsan is probably a mistake (an incorrect copying of the label?) because the below freezing temperatures during the winter make it impossible for any Flycatchers in the wild to survive.



confirmation (better nesting documentation). It would be the southeasternmost place for nesting, because in central and southern parts of the Korean Peninsula the *Terpsiphone atrocaudata* nests (and not, as MACKINNON & PHILLIPS 2000, write only *Terpsiphone paradisi* occurs on the entire peninsula).

306. *Terpsiphone atrocaudata* (EYTON, 1839)

Black Paradise Flycatcher

Data:

Pyongan South (II): Sansokri (II-?): 19 Jun 1962 (ZIP);

Hamgyong South (VII): Sinhungri (VII-32): 8 Jun 1960 (ZIP) or: Sinsang (VII-33): 8 Jun 1960 (ZIP cited by WON);

Hwanghae North (IX): Koksan (IX-3): 1962 (ZIP);

Hwanghae South (X): Talchonri (X-9): 30 Apr, 20, 24 Jun 1957 (ZIP, or: 17-30 Jun 1957 – ZIP cited by WON);

Kaesong (XI): Kaesong (XI-1): 16 Jun 1952 (ZIP), Pagyon (XI-3): 18 Apr 1959 (WON), 16, 19 Jun 1962 (ZIP), 15 Jun 1963 (WON);

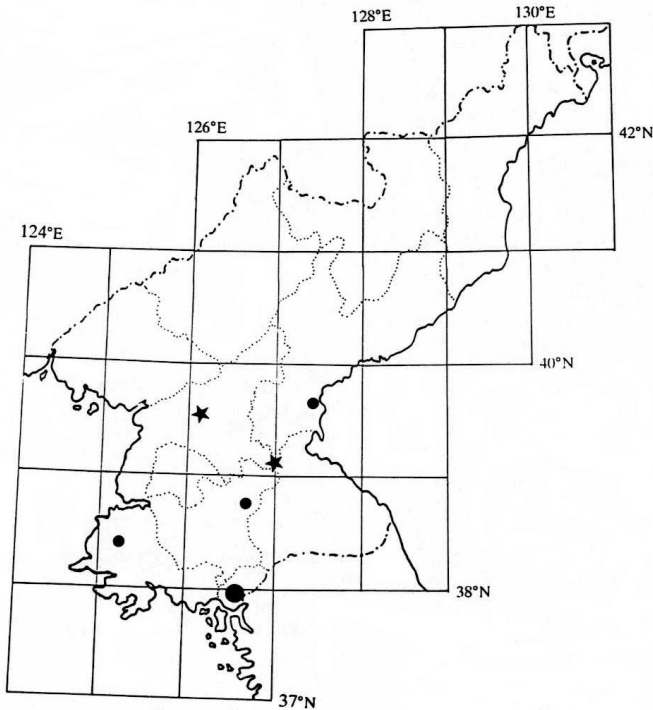
no data: 5 specimens (KIM Il-Sung University), 4 couple (in shops -GŁOW).

M e a s u r e m e n t s (6 specimens of the collection ZIP):

	♂	♂	♂	♀	♀	♀
wing	92	90	91	90	92	85
tarsus	13	16.5	15	15	17	16
bill	14	10.5	13	16.5	14	15
tail	288	42.9	26.6	89	67	85

ning of Jul (PIECHOCKI 1958). The dates of records (end of May-beginning of Jun) indicate that part of the birds belong to the breeding fauna.

The Asiatic Paradise Flycatcher nests in bordering areas, both in China (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000), and in Primorye (GLUSCHENKO & SHIBNEV 1985, NAZAROV 1986, NECHAEV in LER 1989) and nesting in the northern provinces of North Korea is very probable. WON Hong-Koo (1965) thinks that the Asiatic Paradise Flycatcher nests in the Pyongan North Province, however, apart from an observation date he does not give any other evidence of breeding. Therefore inclusion in the breeding fauna requires earlier



ZYUK et al. 1971, PANOV 1973, NECHAEV 1998a). The northwest border of the breeding area of the Black Paradise Flycatcher crosses North Korea.

Breeding species, observed from 18 Apr. Nesting recorded in Pagon (WON Hong-Koo 1965 – photo of nest) and Sansokri (nest in ZIP collection). The Black Paradise Flycatcher already occupies its breeding area in May (MORIOKA 1975) and in Jun sits on the eggs (JAHN 1942, WON Hong-Koo 1965). Therefore most of the above records indicate nesting. Black Paradise Flycatcher is a common breeding species on the Japanese Islands (MORIOKA 2000), also nesting in South Korea (WOO Han-Chung, HAM Kyu-Whang 1982, HAHM Kyu-Hwang 1990, WON Pyong-Oh 2000). However in the north: in China it was seen only during migration (CHENG Tso-Hsin 1987), in Primorye it is included to the vagrant category (LAB-

Aegithalidae

307. *Aegithalos caudatus* (LINNAEUS, 1758)

[*Mecistura caudata*, *Mecistura trivirgata*]

Long-tailed Tit

Data:

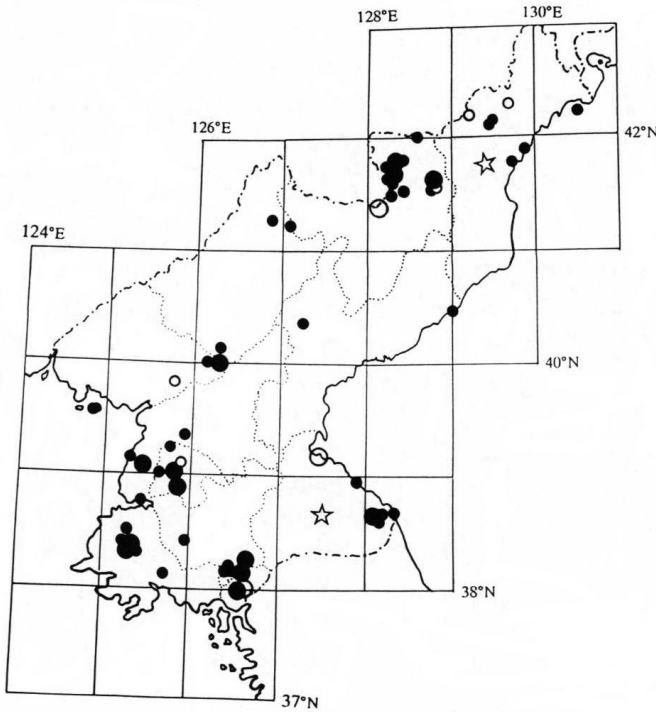
Pyongyang (I): Pyongyang (I-1): 29 Feb 1962 (ZIP), 26 Apr 1987 (GLOW), winters 1986-1988 (CHON Gil-Pyo 1988), 5, 29 Mar 1990 (FIEB), Sep, Nov 2000 (DUCK), Taesongsan (I-6): 13 Nov 1949 (WON), Ryongaksan (I-10): 21 Sep 1991 (TOM), Chunghwa (I-13): 23 Dec 1959, 24 Nov, 24 Dec 1965 (ZIP), Sogam (I-15): 24 Oct 1984 (TOM);

Pyongan South (II): Jasan (II-12): 17 Sep, 18 Nov 1953, Raksaengri (II-18): 19 Mar 1955 (ZIP), Chungsan (II-19): 2 Jan 1954, 13 Oct 1958 (WON), Nampho (II-26): 31 Jan 1995 (PERT);

Pyongan North (III): Sinmido (III-7): 10 Dec 1958 (ZIP), Hyangsan (III-23): Dec 2000 (DUCK), Myohyangsan (III-24): 22, 30 May 1956, 15, 22, 25 Jun 1957 (ZIP), 12 Aug 1979, 28 May 1980, 6-10 Jun 1983, 4 Oct 1986 (TOM), 9-13 Apr 1987 (GLOW), 8-12 Aug 1991 (BALDI), Apr 1999, Sep-Dec 2000 (DUCK), Nyongbyon (III-30): 10 Oct 1935 (WON 1965 or: 20 Oct 1933 WON cited by AUST and WON 1956);

Chagang (IV): Hwapyong (IV-2): 4 Nov 1969, Karimri (*IV-2): 4 Feb, 1, 12, 23 Jun, 18, 19, 26, 29 Oct 1958 (ZIP), Okasan (IV-3): 4 Feb, 12 Nov 1958 (HO; see footnote 2, page 18), Chongsan (*IV-10): 14 May 1987 (TOM);

Ryanggang (V): Hyesan (V-5): 28 Aug 1897 (YANK), 1 Feb 1931 (WON), Chimbong (*V-6): 21 Jul 1958 (ZIP), Naegokri (V-7): 12-18 Oct 1986 (TOM), Photae (V-8): 17 Sep 1952 (WON 1956), 27 Oct 1958, 9 Mar,



24 Nov 1964, 21 Oct 1967 (ZIP), no date (HO), Photoesan (*V-8): 3 Mar 1963, 23 Mar 1965 (ZIP), no date, Hongkyesu (*V-8): no date (HO), Rimyongsu (V-9): 30 Sep 1991 (TOM), Samjiyon (V-10): 1958, 19 Mar, 2, 18, 24 Oct 1963, 27 Mar, 16 Apr 1965, 14 Feb, 2 Mar 1966 (ZIP), 22, 23 Oct 1978, 25-28 Sep 1991 (TOM), no date (HO), Hohangryong (*V-10): 28 Apr 1965 (ZIP), Paegam (V-16): 18 Jun 1897 (YANK), 18 Sep, 22 Dec 1958 (WON), 25 Jul 1965, Hwangbong (*V-16): 18 Jun 1958 (ZIP), Mupo (V-20): 28 Sep 1991 (TOM);

Hamgyong North (VI): 7 Nov 1917, 26 Jul-3 Sep (AUST), 21 Feb (WON cited by AUST, but WON does not mention this observation in his later publications), Pipa (*VI-6): 30 May 1997 (EDW), Obongsan (VI-11): 15 Jun 1897, Musan (VI-12): 5 Jun 1897 (YANK), Chayuryong (VI-13): 10 Jul 1983, Dongsakol (*VI-14): 2 Jul 1983 (TOM), Chongjin

(VI-19): 18-20 Aug 1991 (BÁLDI), Ryongchonri (VI-35): 6 Oct 1991 (TOM);

Hamgyong South (VII): Sangryong (VII-7): 30 May 1987 (TOM), Jangjin (VII-26): 13 Nov 1956 (WON);

Kangwon (VIII): 9 Sep 1914 (AUST), Wonsan (VIII-3): 1885-1887 (TACZ), Sijungho (VIII-5): 24 Apr 1987 (GLOW), Samil-pho (VIII-7): 13 Oct 1991 (TOM), Kumgangsan (VIII-8): Apr 1987 (GLOW), 1-4 Aug 1991 (BÁLDI), Onjongri (*VIII-8): 13 Apr 1990 (FIEB), Kuryong (*VIII-8): 21 May 1980 (MAUERS);

Hwanghae North (IX): Sohungho (IX-7): 3 May 1987 (GLOW), 22 May 1987 (TOM), Kumchon (IX-13): 3 Feb 1972, Kumkyo (*IX-13): 18 May 1962, Wangkol (*IX-13): 15 May 1963, Sansongri (IX-14): 2 Apr 1957, 30 Jan 1962 (ZIP);

Hwanghae South (X): Kuwolsan (X-6): Apr 1999 (DUCK), Talchonri (X-9): 27 Jun, 23 Nov 1957, Samchon (X-10): 27 Jun 1957, 21, 22 Nov 1969, Kohyonri (*X-10): 27 May 1952, 14 Apr, 6, 27, 29 Jun, 11 Nov 1957, Ungyesan (*X-10): 2 Apr 1963 (ZIP), Suyangsan (X-24): 28 Apr 1987 (GLOW);

Kaesong (XI): Kaesong (XI-1): 25, 26 Oct 1929, 12 Feb 1930 (WON 1956), 26 Sep 1956, 24 Nov 1958 (WON), 30 Jan, 21 Feb 1962, 25 Feb, 15 Aug 1963 (ZIP), 24-25 Aug 1991 (BÁLDI), Pagyon (XI-3): 21 Oct 1984, 27 Sep 1986 (TOM), 24 May 1997 (PERT);

no locality: 19 May, 6 Sep 1956 (VLAD), 19 Apr 1963 (ZIP);
no data: 2 specimens (ZIP).

M e a s u r e m e n t s (54 specimens of the collection ZIP, 22 specimens of the collection and card-index ISEA):

	26♂♂	\bar{x}	19♀♀	\bar{x}	31 ?sex	\bar{x}
wing	54-67	63.6	60.3-69	63.0	60-68	63.0
tarsus	13-19	16.8	15.8-20	17.0	14.4-19	17.1
bill	5-9	7.0	5-8	6.2	5-8	6.6
tail	83-100	91.3	81-98.2	89.1	82-99	89.8

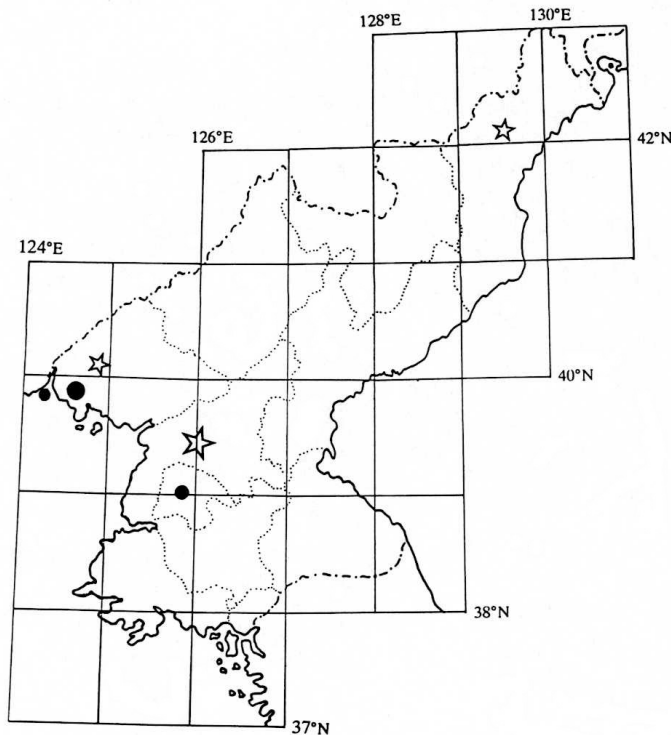
Common breeding species. Observed throughout the year in various forest types. The Long-tailed Tit is also a common breeding species in all adjacent areas (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, NECHAEV 1998a, VOLOSHINA et al. 1999, DISTRIB. 1981, MORIOKA 2000, WON Pyong-Oh 2000). Birds seen during the breeding period (Apr-Jul) represented forms both with white heads, seen as subspecies *Aegithalos caudatus caudatus* (LINNAEUS, 1758), and with a dark strip on head i.e. subspecies *Aegithalos caudatus magnus* (CLERK, 1907) (GŁOWACIŃSKI et al. 1989, FIEBIG 1995). According to the observations of GŁOWACIŃSKI et al. (1989) both forms of coloring occur during breeding season in the same terrain, and even form mixed pairs. The occurrence of both forms (or subspecies) in North Korea requires more detailed research since the zone where they occur (mixed subspecies?) runs between 38°N and 40°N i.e. from Kumgangsan Mt to Myohyangsan Mt (according to AUSTIN 1948 and WON Hong-Koo 1965 *Aegithalos c. magnus* occurs in the south reaching to only 38°N and *Aegithalos c. caudatus* nests in the northern part of the peninsula).

Remizidae

308. *Remiz pendulinus* (LINNAEUS, 1758)

Far East subspecies *Remiz pendulinus consobrinus* presently considered by some systematics (inc. SIBLEY 1996, CLEMENTS 2000) to be a separate species *Remiz consobrinus* (SWINHOE, 1870).

Penduline Tit



Data:

Pyongyang (I): Pyongyang (I-1): 1 May 1999 (DUCK);

Pyongan South (II): 13, 15 May 1917, 20 Apr 1918 (AUST);

Pyongan North (III): 25 Apr-2 May 1929 (AUST), Haksori (*III-10): 13 Oct 1956 (ZIP), 23 Apr 1958 (WON), Mumyongpyong (*III-14): 3 Apr 1965 (ZIP);

Hamgyong North (VI): 18 Apr 1918 (AUST).

M e a s u r e m e n t s (5 specimens of the collection ZIP):

	♂	♀	♀	♀	?sex
wing	52	53	52	55	53
tarsus	16	15	16	13	14
bill	9	10	9	8.4	8
tail	43	43	43	44	42

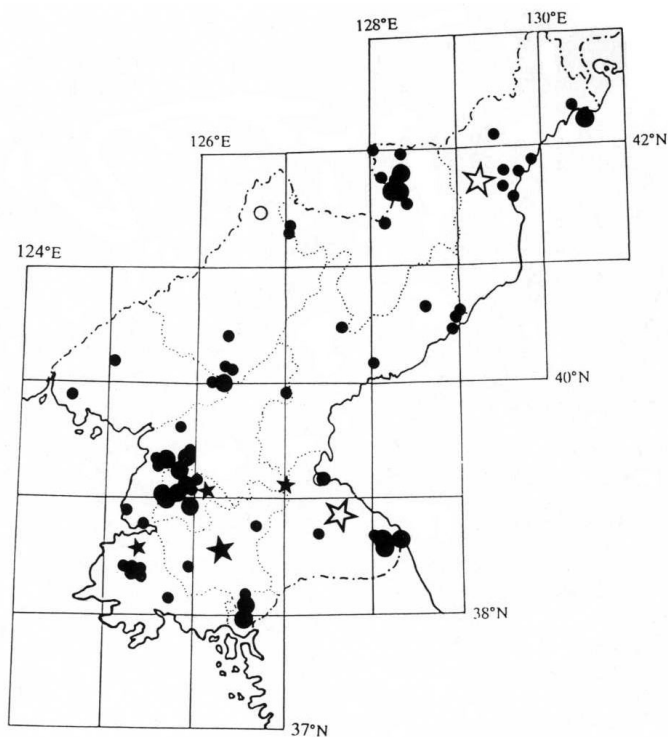
Rare passage migrant. Observed during spring (3 Apr-15 May, at least 8 records) and autumn (Oct, 1 record) passage.

The Penduline Tit nests in northern China (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000), Mongolia and southern Transbaicalia as far as central Amur (DEMENTEV & GLADKOV 1951-1954, FLINT et al. 1968) and Primorye (BURKOVSKIY 1998, NECHAEV 1998a). In northern parts of China, adjacent to North Korea it is present only during migration (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, WON Pyong-Oh 2000). Furthermore in the south of the Korean Peninsula and in southern Japan it is a rare winter visitor (WON Pyong-Oh 1993, WOO Yong-Tae et al. 1997).

P a r i d a e

309. *Parus palustris* LINNAEUS, 1758[*Poecile kamtchatkensis*]

Marsh Tit



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): 26 Oct 1986, 22 May, 8 Jun 1987 (TOM), 15, 26 Apr 1987 (GŁOW), winters 1986-1988 (CHON Gil-Pyo 1988), 1987-1990 (FIEB), Ponghwari (I-4): 5 Jun 1987 (TOM), Samsok (I-5): 28 Dec 1967 (ZIP), Taesongsan (I-6): 25 Oct 1986 (TOM), 1987-1990 (FIEB), 23 Sep 1991, Ryongaksan (I-10): 19 Sep 1978, 19, 20 Sep 1986, 21 Sep, 8 Oct 1991, Mankyongdae (I-11): 2 Oct 1984, 30 Sep 1986, Sogam (I-15): 2 Aug 1979, 24 Oct 1984, Tongmyongwang (I-16): 21 Sep 1986, 7 Oct 1988 (TOM);

Pyongan South (II): Kumsongri (II-4): 15 Jan 1966, Jehyonri (*II-11): 25 Apr 1954, Jasan (II-12): 16 Sep 1953, 11, 26 Feb, 9 Mar 1954, Pyongwon (II-17): 7, 8 Oct 1964, Janghungri (*II-17): 21 Sep 1963,

Opha (*II-17): 1 Jun, 13 Jul, 25, 26 Aug, 21 Sep 1963, 13 Jul 1964, Sakju (*II-24): 32 Apr 1963 (ZIP), Nampho (II-26): 31 Jan 1995 (PERT), Yonpung-ho (II-30): 1 Oct 1978 (TOM);

Pyongan North (III): Namsi (*III-10): 18 Oct 1954, Chonmasan (III-20): 5 Jul 1961 (ZIP), Hyangsan (III-23): 2-5 Oct 1986 (TOM), Myohyangsan (III-24): 33 specimens collected from 14 May 1955 till 16 Mar 1957 (ZIP), 23, 28 Apr 1963 (WON), 26-28 May 1980, 6-20 Jun 1983, 4-8 Oct 1986 (TOM), 10-13 Apr 1987 (GLOW), 1987-1990 (FIEB), 8-12 Aug 1991 (BALDI);

Chagang (IV): Chasong (IV-1): 4 Sep 1897 (YANK), Karimri (*IV-2): 2 Feb, 17, 18 Apr, 11 Jun, 11, 13 Sep, 5, 10, 12, 15, 16, 18, 20, 21, 31 Oct, 1, 11, 12, 14, 17 Nov 1958 (ZIP), Okasan (IV-3): 2 Feb-23 Nov 1958 (HO; see footnote 2, page 20), Myongmun (IV-6): 17 May 1987, Masonri (IV-9): 13 May 1987, Chongsan (*IV-10): 14 May 1987 (TOM);

Rygang (V): Ryongjori (V-2): 15 May 1958 (ZIP), Hyesan (V-5): 12, 19 Oct 1987, Naegokri (V-7): 12-18 Oct 1987 (TOM), Photae (V-8): 6 Mar, 17 May, 8, 9 Nov 1963, 15 Mar 1966, Photaesan (*V-8): 2, 21 Mar, 1 Nov 1963 (ZIP), Namphotae (*V-8): 19 Oct 1987, Rimyongsu (V-9): 30 Sep 1991 (TOM), Samjiyon (V-10): 6, 7 Mar, 20, 29, 30 Sep 1963, 14 Oct 1964 (ZIP), 1-6 Jun 1980, 25-30 Sep 1991 (TOM), Paekdusan (V-12): 2 Mar-29 Sep 1963 (WON), Sinmusong (V-14): 27 Jul 1963 (ZIP), Homultang (V-21): 27 Sep 1991 (TOM);

Hamgyong North (VI): 19 Apr-2 Jun 1912, 25, 26 Sep 1917, 26 Jul, 24 Jul-1 Sep, 27 Nov, 4 Dec 1929 (AUST), 25-30 Sep 1963 (WON), 20, 30 Pipa (*VI-6): 9 Apr 1996 May 1997 (Edw), Taeamri (*VI-7): 25 Sep 1963 (ZIP), Dongsakol (*VI-14): 1-2 Jul 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BALDI), Onphori (VI-23): 2 Oct 1955, Pukhaso (*VI-25): 16 Jun 1959 (ZIP), Oyuri (VI-33): 3 Oct 1991, Ryongchonri (VI-35): 6 Oct 1991 (TOM);

Hamgyong South (VII): Machonryong (VII-5): 26, 27 May 1987, Kwangchon (VII-6): 1 Jun 1987, Sangryong (VII-7): 3 Jun 1987, Hochon (VII-14): 25 May 1987 (TOM), Ryongsinri (VII-18): 15 Mar 1972 (ZIP), Pujon (VII-22): 5 Jul 1958 (RIM Chun-Hun 1961);

Kangwon (VIII): 11 Sep 1914, 16-30 Jun 1929 (AUST), ??, 9 Aug 1930 (WON cited by AUST, but WON does not mention this observation in his later publications), 3 Feb 1962 (WON), Wonsan (VIII-3): 18, 30 Sep 1897 (YANK), 9 Oct 1991, Samil-pho (VIII-7): 13 Jun 1980, 13 Oct 1991, Kumgangsán (VIII-8): 11-12 Jun 1980 (TOM), 19-22 Apr 1987 (GLOW), 20 Nov 1989 (STEP), 1-4 Aug 1991 (BALDI), Onjongri (*VIII-8): 10-13 Jun 1980, 10-14 Oct 1991, Manmulsan (*VIII-8): 11 Oct 1991 (TOM), Sambang (VIII-10): 3 Sep 1962 (ZIP);

Hwanghae North (IX): 30 Jan 1962, 3, 17 Apr, 17 May 1963 (WON), Koksán (IX-3): 3 Oct 1988, Sohungho (IX-7): 22 May 1987 (TOM), Sansongri (IX-14): 14 May 1964 (ZIP);

Hwanghae South (X): 17-20 May 1963 (WON), Talchonri (X-9): 6, 15 Jul 1957, Samchon (X-10): 18 Nov 1969, Kohyonri (*X-10): 22, 27 Apr, 31 May, 6 Aug, 16, 18 Sep 1957, Onchon (*X-10): 23 Mar 1962, Ungyesan (*X-10): 2, 3 Apr 26 Nov 1963 (ZIP), Suyangsán (X-24): 14 Oct 1984 (TOM);

Kaesong (XI): Kaesong (XI-1): 24-25 Aug 1991 (BALDI), 24 May 1997 (PERT), Pagyon (XI-3): 20 May 1963, 11, 14 May 1964 (ZIP), 22 Oct 1984, 26, 27 Sep 1986 (TOM), 22, 24 May 1997 (PERT);

no locality: 21 Nov 1956 (VLAD), 6 Jun 1957, 18 Oct 1958, 29 May 1963 (ZIP), Apr 1987 (GLOW);

no data: 3 specimens (ZIP).

M e a s u r e m e n t s (131 specimens of the collection ZIP, 21 specimens of the collection and card-index ISEA):

	73♂♂	\bar{x}	40♀♀	\bar{x}	39 ?sex	\bar{x}
wing	59-70	65.0	60-66	62.9	59.8-70	64.5
tarsus	14-18	15.7	13-19	15.4	14-17	15.7
bill	7-11	9.2	8-10.2	9.1	7-10.2	8.8
tail	53-69	60.2	53-62.2	58.2	53-66	60.2

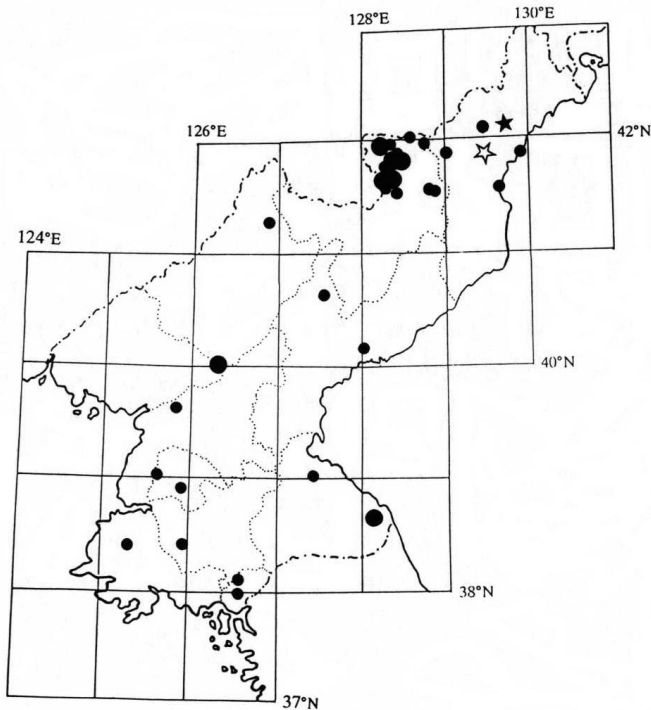
Breeding species. Observed year-round. It is one of the most commonly encountered species in the entire country. The relatively small number of localities reflects rather the lack of research in a given region than its absence, since the Marsh Tit is in almost all regions where European ornithologists have done research. Marsh Tit is also one of the most numerous birds: an estimation of numbers done by GŁOWACIŃSKI et al. (1989) showed that there are at least 14 breeding territories in 3 valleys in the Myohyangsan Mountains, a further 13 territories along a 7 km long valley of the Hyangsan River; in the Kumgangsan Mountains 8-9 pairs were seen along 3 transects for a total length of 10.5 km. Indirectly the large numbers of Marsh Tits in North Korea is shown by the ZIP collection including, e.g. in the Myohyangsan Mountains in just 1 year 1956 a total of 31 birds were collected, and other 32 birds in Okasan from 2 Feb till 17 Nov 1958. The Marsh Tits caught in North Korea belong to the subspecies *Parus palustris brevirostris* (TACZANOWSKI, 1872) (WON Hong-Koo 1965, BOCHENSKI et al. 1981, ZIP and ISEA collections).

The Marsh Tit is also a common resident species in all neighboring areas (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, NECHAEV 1998a, DISTRIB. 1981, MORIOKA 2000, WON Pyong-Oh 2000).

310. *Parus montanus* (CONRAD von BALDENSTEIN, 1827)

[*Parus atricapillus sachalinensis*, *Parus atricapillus baicalensis*]

Willow Tit



Data:

Pyongyang (I): Ryongaksan (I-10):
8 Oct 1991 (TOM), Tongmyongwang
(I-16): 9 May 1980 (MAUERS);

Pyongan South (II): Yonpung-
ho (II-30): 1 Oct 1978 (TOM);

Pyongan North (III): Myohyangsan
(III-24): 28, 29 May 1956, 23 Jun
1957, 19 Mar 1966 (ZIP), 21 Jun
1983 (TOM);

Chagang (IV): Karimri (*IV-2):
5 Jun, 18, 22 Sep, 1, 3, 7 Nov 1958
(ZIP);

Ryanggang (V): Naegokri (V-7):
12-17 Oct 1986 (TOM), Photae
(V-8): 29 Mar, 8, 9 Nov 1963, 19,
29! Feb 1966, 29 Sep 1967 (ZIP),
Namphothae (*V-8): no date (HO),
Photaesan (*V-8): 2, 21 Mar 1963,
9 Jan 1964, 26, 31 Mar 1965 (ZIP),
Rimyongsu (V-9): 29 Sep 1991
(TOM), Samjiyon (V-10): 15 Jun-18
Oct 1958, 2 Aug 1959 (WON), 15,

18 Oct 1958, 15 Mar, 26 Apr, 3 May 1962, 72 specimens collected at 1963-64, mainly Mar, Oct-Nov, 2, 20 Apr, 18 Nov 1965, 1, 9, 12, 24 Feb, 2 Mar 1966 (ZIP), 21-23 Oct 1978, 13 Oct 1986, 26-30 Sep 1991 (TOM), no date (HO), Kanpaegsan (*V-10): 18 Jul 1963, 21 Jun 1967 (ZIP), Pekebong (*V-10): Aug 1989 (FIEB), Mutubong (V-13): 29, 30 Oct 1963, 17 Oct 1964, Sinmusong (V-14): 27 Jul 1963, 5 hohongjang (*V-15): 16 Mar 1963 (ZIP), Paegam (V-16): 3 Sep 1958 (WON), Hwangbong (*V-16): 18 Sep 1958 (ZIP), Mupo (V-20): 28 Sep 1991 (TOM);

Hamgyong North (VI): Jan 1935 (AUST), 18 Sep 1958 (WON), Dongsakol (*VI-14): 2 Jul 1983 (TOM), Yonsa (VI-20): 2 Aug 1959 (WON), Osangri (*VI-25): 4 Oct 1991, Ryongchonri (VI-35): 5 Oct 1991 (TOM);

Hamgyong South (VII): Ryongsinri (VII-18): 17 Mar 1972, Hantaeri (VII-24): 2 Aug 1963 (ZIP);

Kangwon (VIII): Sokwangsa (VIII-4): 12 Oct 1978, Kumgangsán (VIII-8): 7 Oct 1978, 11 Oct 1991 (TOM);

Hwanghae North (IX): Sohungho (IX-7): 25, 26 Sep 1978 (TOM);

Hwanghae South (X): Kohyonri (*X-10): 24 May 1957 (ZIP);

Kaesong (XI): Kaesong (XI-1): 21 Oct 1984 (TOM), Pagyon (XI-3): 16 May 1980 (MAUERS).

M e a s u r e m e n t s (125 specimens of the collection ZIP, 19 specimens of the collection and card-index ISEA):

	71 ♂♂	\bar{x}	39 ♀♀	\bar{x}	34 ?sex	\bar{x}
wing	60-70	63.7	58-66	62.6	59-68	64.1
tarsus	15-19	16.8	13-20	16.3	12-19	16.5
bill	8-11.5	10.1	8-11	9.6	7-11	9.2
tail	54-66	60.2	54-65	59.4	54-67	60.6

Breeding species. Most records are from the migration period. During breeding season (from mid-May till the beginning of Aug) it was seen mainly in the north of the country: in the Myohyangsan Mountains, the Paekdusan region (Ryanggang Province), Karimri (Chagang Province), Dongsakol (Hamgyong North Province), Hantaeri (Hamgyong South Province) and also in the south of the country in Hwanghae South (24 May 1957 in Kohyonri). One can assume that in these places nesting takes place while direct evidence of nesting comes from observations on family flocks in Myohyangsan and Dongsakol (TOMEK 1985) or also birds in juvenile plumage in Myohyangsan and Sinmusong (ZIP collection) or Pekebong (FIEBIG 1995). The number of skins found in the ZIP collection indicate that in some mountainous regions the birds are abundant (from Myohyangsan 6 skins, from Photae – 16, Mutubong – 6, from Samjiyon – 86, of these 11 were taken just in May, 1963).

The Willow Tit is a common species nesting to the north of the Korean Peninsula (NAZARENKO 1984, NECHAEV 1998a, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000) and also in Japan (DISTRIB. 1981, MORIOKA 2000). On the Korean Peninsula till the seventies it was known only as breeding in the north (WON Hong-Koo 1965, GORE & WON Pyong-Oh 1971, WON Pyong-Oh 1987). Today it occurs also in the southern part of the peninsula because WON Pyong-Oh (1996, 2000) includes the Willow Tit as an uncommon resident on the entire Korean Peninsula.

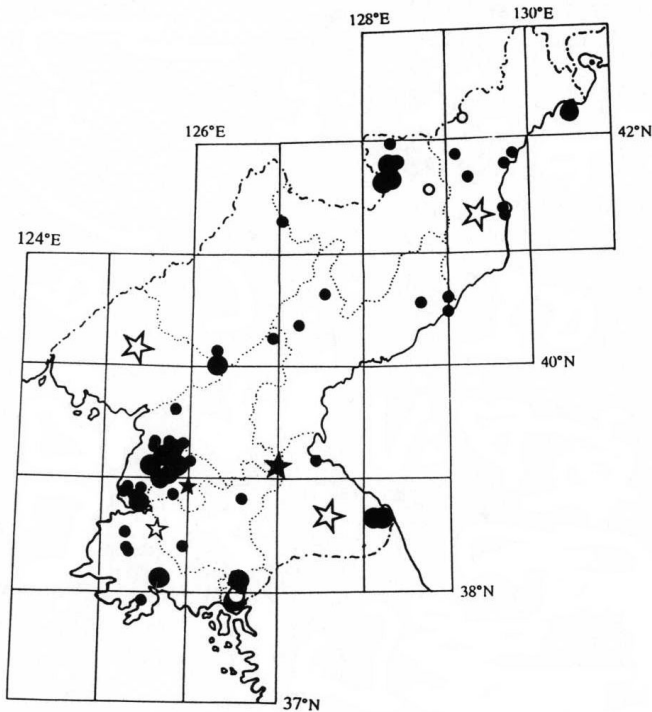
311. *Parus ater* LINNAEUS, 1758

Coal Tit

Data:

Pyongyang (I): Aug 1991 (BALDI), Pyongyang (I-1): 18 May 1980 (MAUERS), 20 May 1980 (TOM), 15 Apr 1987 (GLOW), winters 1986-1988 (CHON Gil-Pyo 1988), 1987-1990 (FIEB), 17 Nov 1989 (STEP), May 1999, Aug-Dec 2000 (DUCK), Ponghwari (I-4): 26 Oct 1984 (TOM), Taesongsan (I-6): 20 Oct 1955 (WON), 22 May 1980 (TOM), 1987-1990 (FIEB), 23 Sep 1991 (TOM), Hari (*I-8): 21-22 Oct 1952, 26 Oct 1956 (WON), Ryongaksan (I-10): 5 Aug 1979 (TOM), 26 Aug 1984 (KOLBE), 6, 7 Oct 1984, 19, 20 Sep 1986, 21 Sep 1991, Mankyongdae (I-11): 21 May 1980, 30 Sep 1986 (TOM), Chunghwa (I-13): 24 Feb, 24 Dec 1965 (ZIP), Sogam (I-15): 6 Aug 1979, 24 Jun 1983, 24 Oct 1984 (TOM), 17 Apr 1987 (GLOW);

Pyongan South (II): Rangrimri (II-1): 7 Jun 1960, Paeksongri (II-13): 25 Sep 1953 (WON), Jamosan (II-15): 11 Jul 1957, Pyongwon (II-17): 7 Oct 1964, Opha (*II-17): 22 Sep 1963, Taesongri (*II-21): 20 Oct



1963, 29 Jun 1967, Photaesan (*V-8): 13 Mar 1963 (ZIP), 19 Oct 1986 (TOM), Samjiyon (V-10): 15 Jun 1958, 28 Apr 1962, 18 specimens collected from Feb till Nov 1963, 29 Apr, 28 Jun, 21 Oct 1964, 27, 28 Jan, 2, 24, 25 Feb 1966 (ZIP), 22 Oct 1978, 1-6 Jun 1980, 28 Sep 1991 (TOM), no date (HO), Hohangryong (*V-10): 9 Feb 1966 (ZIP), Sinmusong (V-14): 26 Jul 1958 (WON), Paegam (V-16): 1 Jul 1897 (YANK);

Hamgyong North (VI): 30 May 1912, 26 Jul-29 Aug, 19 Oct 1929 (AUST), Pipa (*VI-6): 9 Apr 1996, 30 May 1997 (EDW), Musan (VI-12): 1 Aug 1929 (WON), Koanjuryong (VI-18): 6 Jul 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), Samphori (VI-21): 21 Apr 1959, Kwanmobong (VI-22): 22 Jun 1959 (WON), Orang (VI-28): 9 Jul 1983, Jangyon-ho (VI-29): 4 Jul 1983 (TOM);

Hamgyong South (VII): Machonryong (VII-5): 27 May 1987, Sangryong (VII-7): 30 May 1987, Yomsongdok (VII-13): 24 May 1987 (TOM), Hantaeri (VII-24): 2 Aug 1963 (ZIP), Jangjin (VII-26): 10 Oct-11 Sep 1956(?) (WON);

Kangwon (VIII): 11 Sep-2 Oct 1914, 9 Jul, 27 Nov 1929 (AUST), Wonsan (VIII-3): 24 May 1980 (MAUERS), Samil-pho (VIII-7): 13 Jun 1980 (TOM), Kumgangsan (VIII-8): 20 May 1980 (MAUERS), 1-4 Aug 1991 (BÁLDI), Onjongri (*VIII-8): 21 May 1980 (MAUERS), 8-9 Oct 1978, 10-13 Jun 1980, 11-13 Oct 1991 (TOM);

Hwanghae North (IX): Taegaksan (IX-4): 28 May 1962 (ZIP), Sohungho (IX-7): 24 Sep 1978 (TOM);

Hwanghae South (X): Kuwolsan (X-6): Apr 1999 (DUCK), Samchon (X-10): 21 Nov 1969 (ZIP), Kohyonri (*X-10): 6 Aug 1957 (WON), Kangryong (X-19): 25 Oct 1962 (ZIP), Suyangsan (X-24): 22 Sep 1978, 30 May 1980, 14 Oct 1984 (TOM);

Hwanghae (IX-X): 20, 21 Mar (AUST);

Kaesong (XI): Kaesong (XI-1): Oct 1926, 7, 20 Sep 1929, 30 Apr 1956 (WON), 21 Oct 1984 (TOM), 24-25 Aug 1991 (BÁLDI), Pagyon (XI-3): 16 May 1980 (MAUERS), 15 Aug 1984 (KOLBE), 22 Oct 1984, 26 Sep 1986, Kongminghang (XI-7): 24 Sep 1986 (TOM);

unknown province: Chonpansok: 25 Mar 1965 (ZIP);

1955, 14 Mar 1957, Ryonggang (*II-24): 6 Jun 1987 (TOM), Sakju (*II-24): 24 Apr 1962 (ZIP), Nampho (II-26): 28 Sep 1978 (TOM), 31 Jan 1995 (PERT), Usanri (II-27): 6 Jun 1987, Taesong-ho (II-28): 17 Oct 1978, Yonpung-ho (II-30): 1 Oct 1978 (TOM);

Pyongan North (III): 25 Oct 1917 (AUST), Myohyangsan (III-24): 28 May 1956 (WON), 13 Oct 1956, 19 Mar, 22 Apr 1957, 12 Apr 1963, 27 Mar 1964, 12 Mar 1979 (ZIP), 6-16 Jun 1983 (TOM), 8-12 Aug 1991 (BÁLDI), Apr 1999, Sep-Dec 2000 (DUCK);

Chagang (IV): Karimri (*IV-2): 18 Nov 1958 (ZIP), Okasan (IV-3): 4, 18 Nov 1958 (HO; see footnote 2, page 20), Chongsan (*IV-10): 14 May 1987 (TOM);

Ryongyang (V): Photae (V-8): 5 Aug 1960 (WON), 11, 20 Apr

no locality: 7 Nov 1956 (VLAD), 6 Jan 1960, 30 Jun 1964 (ZIP), "coniferous and mixed forests" 1987-1990 (FIEB), "almost all controlled coniferous and mixed tree stands": Apr 1987 (GŁOW).

M e a s u r e m e n t s (61 specimens of the collection ZIP, 6 specimens of the collection and card-index ISEA):

	34♂♂	\bar{x}	15♀♀	\bar{x}	18 ?sex	\bar{x}
wing	54-64	59.0	50.3-62	56.7	54-63	58.7
tarsus	14-20	16.1	13-19	16.0	15-19	16.6
bill	7-11	9.0	6.5-10	8.7	8-10	9.0
tail	40.7-54	47.3	38-49	44.4	42-48	45.7

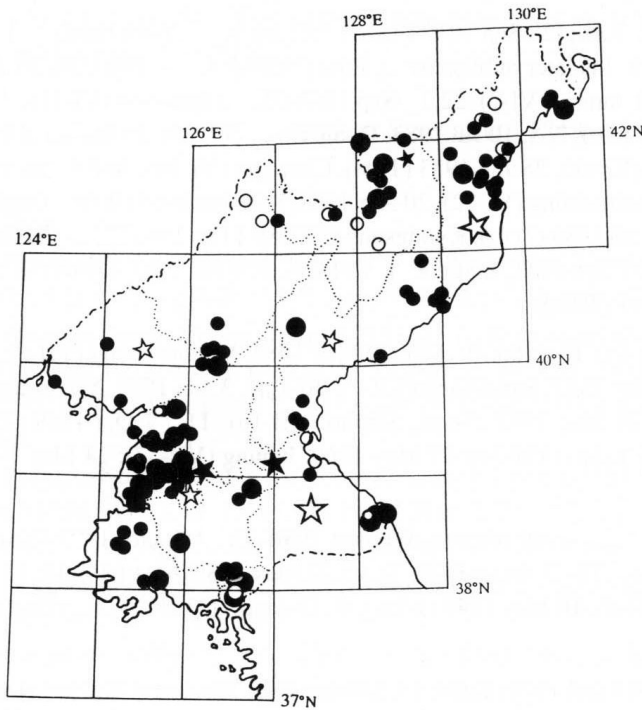
Common breeding species. The presence of the Coal Tit has been recorded in coniferous and mixed tree stands throughout the country. The small numbers of observation sites on the map reflects the lack of research done in many regions since it is a species recorded in almost all regions where European ornithologists have done research in coniferous and mixed tree stands (GŁOWACIŃSKI et al. 1989, FIEBIG 1995, my published and unpublished data).

The Coal Tit is also a common resident species in all adjacent territory (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, NECHAEV 1998a, VOLOSHINA et al. 1999, DISTRIB. 1981, MORIOKA 2000, WON Pyong-Oh 2000).

312. *Parus major* LINNAEUS, 1758

HOWARD & MOORE (1991) and many other authors treat Japanese Tit as the subspecies *Parus major minor* TEMMINCK et SCHLEGEL, 1848, however according to NAZARENKO (1971c) and NAZARENKO et al. (1999) it is a valid species *Parus minor* TEMMINCK et SCHLEGEL, 1848.

Great (Japanese) Tit



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), ◆, Sungho (I-2): 4 May, 23 Oct 1957, Songmunri (*I-2): 23 Dec 1956 (ZIP), Ponghwari (I-4): 28 Sep 1978, 26 Oct 1984, 5 Jun 1987 (TOM), Sijok (*I-5): 4 May 1956, 29 Dec 1965, 28 Jan 1966 (ZIP), Taesongsan (I-6): 13 Nov 1949 (WON), 5 Feb 1972, 21 Feb 1979 (ZIP), 22 May 1980, 3 Oct 1984, 23 Sep 1991, Ryongaksan (I-10): 19 Sep 1978, 5 Aug 1979, 6, 7 Oct 1984, 23 Sep 1991 (TOM) Mankyongdae (I-11): 7 May 1980 (MAUERS), 30 Sep 1986 (TOM), Chunghwa (I-13): 17 May 1980, Sogam (I-15): 6 Aug 1979, 24 Oct 1984 (TOM), Tongmyongwang (I-16): 9 May 1980 (MAUERS),

Samsin (I-?): 6 Jan 1966 (ZIP), Amisan (I-?): 6 May 1949 (WON);

Pyongan South (II): Unsan (II-10): 15 Jul 1954 (ZIP), Sunchon (II-11): 17 Feb, 16, 22 Oct 1952 (WON), Jasan (II-12): 28 Dec 1953, 26 Feb, 8, 30 Mar, 2 Apr 1954, Jamosan (II-15): 11 Feb 1957 (ZIP), Anju (II-16): 12 Sep, 31 Oct 1932 (WON), 24 Nov 1989 (STEP), Pyongwon (II-17): 7 Oct 1964, Janghungri (*II-17): 17, 23 Jun, 26, 29 Jul 1963, Opha (*II-17): 25 Aug 1962, 35 specimens collected from Apr 1963 till Oct 1964, Chungsan (II-19): 18 Feb 1968, Hamjongri (*II-19): 23 Apr 1958, Sijyok (*II-19): 4 May 1956 (ZIP), Nampho (II-26): 28 Sep 1978, 24 May 1980 (TOM), 11, 13 May 1980 (MAUERS), 31 Jan 1995 (PERT), Usanri (II-27): 6 Jun 1987, Taesong-ho (II-28): 17, 27 Oct 1978, 24 May, 6 Jun 1980, 13-15 Jul 1983, 6 Oct 1984 (TOM), Taeposan (*II-28): 5 Feb 1950 (WON), Yonpung-ho (II-30): 30 Sep, 1 Oct 1978, 7 Jun 1987 (TOM), sea-shore in region 39°30'N: 26 Nov 1989 (STEP);

Pyongan North (III): 12 Jun 1917 (AUST), Jongju (III-3): 18 Jul 1951 (WON), Tasari (III-11): 22 Mar 1958, Chonmasan (III-20): 20 Jun, 4 Jul 1961 (ZIP), Hyangsan (III-23): Aug-Dec 2000 (DUCK), Myohyangsan (III-24): 14, 16 Jun 1950, 14 Jun 1955 (WON), 19 May 1956 (ZISP), 11 May, 4 Jul 1956, 27 Mar 1964, 17 May 1979 (ZIP), ◆;

Chagang (IV): Chasong (IV-1): 23 Aug 1897, Hwapyong (IV-2): 16 Aug 1897 (YANK), Karimri (*IV-2): 12, 16 Apr, 4 May, 13 Sep 1958 (ZIP), Okasan (IV-3): 5 Feb, 12 Oct 1958 (HO; see footnote 2, page 20), Myongmun (IV-6): 27 May 1987, Masonri (IV-9): 13 May 1987, Huichon (IV-10): 16-18 May 1987, Chongsan (*IV-10): 14 May 1987 (TOM);

Rygang (V): Sinpha (V-3): 8-9 Aug 1897 (YANK), Hunghari (*V-3): 10 Sep 1960 (ZIP), Samsu (V-4): 25 Jul-2 Aug 1897 (YANK), Hyesan (V-5): 20 Oct 1978, Pochon (V-6): 21 Oct 1978, 12, 19 Oct 1986, Naegokri (V-7): 12-18 Oct 1986 (TOM), Photae (V-8): 21 Sep 1967 (ZIP), Rimyongsu (V-9): 30 Sep 1991 (TOM), Samjiyon (V-10): 19 Jun, 9 Oct 1958 (WON), 3 Oct 1963, 6 Jun, 9, 21 Oct 1964, 22 May 1965 (ZIP), 21, 23 Oct 1978, 13 Oct 1986, 25-30 Sep 1991 (TOM), no date (HO), Paekdusan (V-12): 22 Oct 1978 (TOM), 7 Mar 1983, 6, 10 May 1984, 10 Aug 1986, 20 Jul 1987, 16 Aug 1988 (JIN Dok-Jun & O Hung-Dam 1990), Kapsan (V-19): 2-3 Aug 1897 (YANK), Mupo (V-20): 28 Sep 1991 (TOM), Jungamsan (V-?): no date (HO);

Hamgyong North (VI): 2, 16 Apr 1912, 23 Aug-28 Sep 1917 (AUST), ?22 Jul 1929 (WON cited by AUST, but WON does not mention this observation in his later publications), Pipa (*VI-6): 9 Apr 1996, 28, 30 May 1997 (EDW), Unggi (VI-7): 24 Apr (WON), Taemri (*VI-7): 22, 29 Sep 1963 (ZIP), Obongsan (VI-11): 7 Jun 1897, Chayuryong (VI-13): 22 May 1897 (YANK), 7, 8, 10 Jul 1983, Dongsakol (*VI-14): 29 Jun-2 Jul 1983 (TOM), Koanjuryong (VI-18): 12 May 1897 (YANK), 28 Jun 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), Samphori (VI-21): 27 Jul 1959, Kwanmobong (VI-22): 20 Apr 1958, 8-26 Jun 1959 (WON), Onphori (VI-23): 27 Jun 1983, Ryongsanri (VI-24): 5 Jul 1983 (TOM), Kyongsong (VI-25): 1 Oct 1955 (ZISP), Osangri (*VI-25): 4 Oct 1991, Mehyangri (VI-27): 27 Jun 1983, Jangyon-ho (VI-29): 4, 9 Jul 1983, Oyuri (VI-33): 3 Oct 1991, Ryonghyonri (VI-36): 5 Oct 1991 (TOM);

Hamgyong South (VII): 5 May 1903 (AUST), Kumdok (VII-2): 29 May 1987, Machonryong (VII-5): 26, 27 May 1987, Tongdokri (*VII-6): 26, 28 May 1987, Sangryong (VII-7): 30 May, 3 Jun 1987, Yomsongdok (VII-13): 24 May 1987, Hochon (VII-14): 25 May 1987 (TOM), Sinpho (VII-16): 11, 17 Oct 1969 (ZIP), Jangjin (VII-26): Jun 1955-5 Nov 1956, Chowonri (VII-34): 27 May 1960, Inhung (VII-37): 24 May 1962, Haejungri (*VII-38): 2 Apr 1960 (WON);

Kangwon (VIII): 22 Sep 1914, 15 Jun-9 Jul 1929 (AUST), Wonsan (VIII-3): 6-11 Oct 1897 (YANK), Sokwangsa (VIII-4): 12 Oct 1978, Samil-pho (VIII-7): 9 Oct 1978 (TOM), 22 May 1980 (MAUERS), 10, 13 Jun 1980, 13 Oct 1991 (TOM), Kumgangsán (VIII-8): 10 May 1949 (WON), ◆, Onjongri (*VIII-8): ◆, Yonghung (VIII-14): 19-27 Oct 1897 (YANK);

Hwanghae North (IX): Sinpyong (IX-1): 13 Oct 1978 (TOM), 19, 25 May 1980 (MAUERS), Koksán (IX-3): 3 Oct 1988, Sohungho (IX-7): 25-25 Sep 1978, 23 May 1987 (TOM), Kumchon (IX-13): 16 May 1963, Ungyesan (*IX-13): 2 Apr, 27 Nov 1963, Sansongri (IX-14): 14 May 1964 (ZIP);

Hwanghae South (X): Anak (X-3): 13 Feb 1973 (ZIP), Kuwolsan (X-6): Apr 1999 (DUCK), Talchonri (X-9): 30 Jun 1957, Kohyonri (*X-10): 12 Feb, 22 Apr, 29, 31 May, 11, 14 Sep 1957 (ZIP), Pyoksong (X-21): Jan 1957 (WON), Suyangsan (X-24): 22-24 Sep 1978, 30-31 May 1980, 12, 14 Oct 1984 (TOM);

Kaesong (XI): Kaesong (XI-1): 20 May 1917, 10 Nov 1926, 10 Oct 1927, 27 Jan 1928, 20 Mar, Apr, 5, 19 Oct 1929, 8 Apr, 14, 24 Oct 1933, 22 Nov 1945, 18 Jun 1946, 23 Aug 1955, 5 Nov 1958 (WON), 21 Oct 1984 (TOM), 24-25 Aug 1991 (BÁLDI), 23, 24 May 1997 (PERT), Pagyon (XI-3): 18 May 1964 (ZIP), ◆, Kongminghang (XI-7): 16 May 1980 (MAUERS), 20 Oct 1984, 24-25 Sep 1986, 7 Oct 1988 (TOM);

no locality: 29 May, 24 Jun, 16 Sep 1963, 30 Jun 1964 (ZIP), "most frequent and most numerous tit species in parks as well as in deciduous and mixed tree stands" Apr-May 1987 (GŁOW), 1987-1990 (FIEB);

no data: 4 specimens (ZIP).

M e a s u r e m e n t s (71 specimens of the collection ZIP, 38 specimens of the collection and card-index ISEA):

	50♂♂	\bar{x}	26♀♀	\bar{x}	33 ?sex	\bar{x}
wing	66-75	70.3	64-73	67.9	66-73	69.0
tarsus	14-21	18.3	14-21	18.0	17-20	18.5
bill	8-11.7	9.8	8-13	9.7	8-11	9.7
tail	60-75	65.4	56-71	63.0	59-72	64.4

Common breeding species. Belongs to the most common species in all types of forests, city parks and various tree stands. The relatively few points on the map results from lack of research in some parts of the country or from the fact that many authors did not mention observation sites due to the very frequent encounters (WON Hong-Koo 1965, GŁOWACIŃSKI et al. 1989, FIEBIG 1995).

The Great Tit is an abundant resident on the entire Korean Peninsula (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000), in China (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000) and Japan (DISTRIBUTION 1981, MORIOKA 2000), however in the southeast Russia it migrates (KNYSTAUTAS & SHIBNEV 1986, NECHAEV 1998a, VOLOSHINA et al. 1999), although a few individuals stay for winter (NAZARENKO 1971c).

313. *Parus varius* TEMMINCK et SCHLEGEL, 1848

Varied Tit

Data:

Pyongyang (I): Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), 17 Nov 1989 (STEP), Apr-May 1999 (DUCK), Ryongaksan (I-10): Apr 1987 (GŁOW), Amisan (I-?): 29 Apr 1949 (WON);

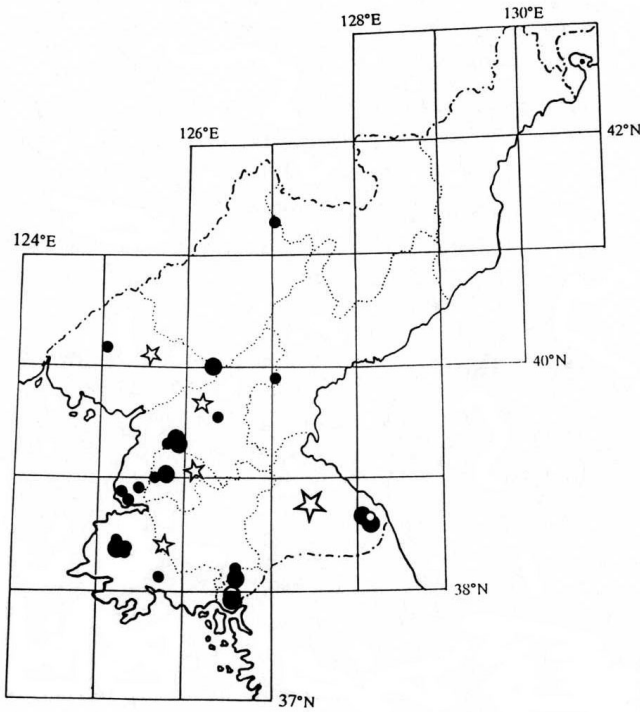
Pyongan South (II): Jun, 20 Jun 1917 (AUST), Kumsongri (II-4): no date, Namsangri (II-7): no date, Jasan (II-12): 7 Jul 1953, 23 Feb 1954 (ZIP), Paeksongri (II-13): 12 Oct 1953, Feb 1954 (WON), Jamosan (II-15): 8 Jun 1963 (ZIP), Ryonggang (*II-24): 6 Jun 1987, Usanri (II-27): 6 Jun 1987, Taesong-ho (II-28): 17 Oct 1978 (TOM);

Pyongan North (III): Jun, 18 Oct 1917 (AUST), Unrimri (*III-20): 9 Jul 1961 (ZIP), Myohyangsan (III-24): 15 Jun 1950 (WON), 12, 13, 14, 16, 19, 22 May, 2, 21, 28 Jul, 14 Sep, 14, 21, Nov 1956 (ZIP), 4 May, 17 Jun 1956 (ZISP), 17 Apr, 25 Jun 1957, 11, 12 Apr 1979, 10, 11 Jun 1963 (ZIP), ◆;

Chagang (IV): Karimri (*IV-2): 15 Apr, 17 Jun, 15 Oct 1958 (ZIP), Okasan (IV-3): 29 Apr, 15 Oct 1958 (HO; see footnote 2, page 20);

Kangwon (VIII): 12 Mar 1916, 13 Jun-3 Jul 1929, 3 Jun 1936 (AUST), Kumgangsan (VIII-8):◆, Manmulsan (*VIII-8): 11 Jun 1949 (WON), 11 Oct 1991 (TOM), Kuryong (*VIII-8): 8 Aug 1979, 12 Oct 1991 (TOM);

Hwanghae North (IX): Sansongri (IX-14): 24, 30 Jan 1962 (ZIP);



Hwanghae South (X):
 Kuwolsan (X-6): Apr 1999 (DUCK),
 Woljongri (X-8): 17 May 1957,
 Talchonri (X-9): 31 Jun(!) 1951, 10,
 20 Jun 1957, Samchon (X-10): Dec
 1961, Kohyonri (*X-10): 17, 19,
 22, 23 Apr, 25, 26 May, 13 Jun,
 22 Sep 1957 (ZIP), Suyangsan
 (X-24): 28 Apr 1987 (GŁOW);
 Hwanghae (IX-X): May 1918
 (AUST);
 Kaesong (XI): Kaesong (XI-1):
 Jan 1927, Feb 1929, 11 Aug, 12 Sep
 1955, 13, 14 May 1957 (WON), 1 Apr
 1962 (ZIP), 24-25 Aug 1991 (BALDI),
 Pagyon (XI-3): ◆;
 no locality: 23 Aug 1956, 15 Mar
 1957 (VLAD), 29 Jun 1976 (ZIP);
 no data: 4 specimens (ZIP).

M e a s u r e m e n t s (40 specimens of the collection ZIP, 4 specimens of the collection ISEA):

	25♂♂	\bar{x}	11♀♀	\bar{x}	8 ?sex	\bar{x}
wing	71-84	79.4	73-81	76.7	71-80	75.8
tarsus	18-21	19.7	18-22	19.8	19-22.5	20.2
bill	11-15	12.7	10.5-13.8	12.2	11-15	12.4
tail	52-62	57.1	51-64	55.4	51.5-61	56.3

Breeding species. Varied Tit is a resident species and probably nests everywhere it was observed. Nesting was recorded in Myohyangsan, Talchonri and Kumgangsan (TOMEK 1984, 1985, FIEBIG 1995, GŁOWACIŃSKI et al. 1989 and skins of young birds stored in the ZIP collection). It is not a common bird (FIEBIG 1995), but in an appropriate environment such as the Myohyangsan Mountains or the forested foothills near Kaesong it is not rare. This is shown in the ZIP collection (10 skins taken in May and Jun 1956 in Myohyangsan or 9 skins – of these 7 ♂♂ taken in Kohyonri) as well as the research of GŁOWACIŃSKI et al. (1989), who found the existence of 4 breeding territories along a 4 km river section in Kumgangsan. Varied Tits to date have not been found only in northeastern provinces (Ryanggang, Hamgyong North and South). Probably the northern distribution border of the Varied Tit on the continent crosses North Korea farther south of the above mentioned provinces, because it is known as a rare breeding species only in the eastern part of the Chinese Liaoning Province and the southwest part of Jilin Province (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). However in areas neighboring Korean Ryanggang and Hamgyong North Provinces (i.e. eastern Jilin, Heilongjiang and southeast Russia) the Varied Tit does not nest (NECHAEV in LER 1989, NECHAEV 1998a, MIKHAILOV et al. 1998, VOLOSHINA et al. 1999, MACKINNON & PHILLIPS 2000). At the same time it is a common breeding species in South Korea

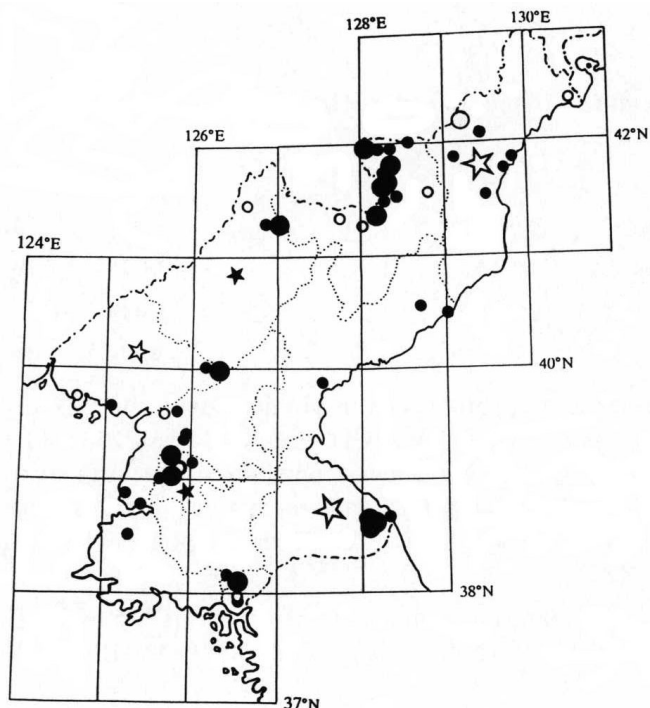
(WON Pyong-Oh 2000), Japan (DISTRIB. 1981, MORIOKA 2000) and the Kuril Islands (NECHAEV & FUJIMAKI 1994).

Sittidae

314. *Sitta europaea* LINNAEUS, 1758

[*Sitta amurensis*]

Eurasian Nuthatch



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), 14 Nov 1987 (FIEB), 25 May 1997 (PERT), Aug-Dec 2000 (DUCK), Ponghwari (I-4): 26 Oct 1984 (TOM), Taesongsan (I-6): 5 Dec 1948, Ryongaksan (I-10): 15 Oct 1954 (WON), Sogam (I-15): 24 Oct 1984 (TOM), 17 Apr 1987 (GŁOW);

Pyongan South (II): Othanri (*II-11): 22 Nov 1954 (WON), Jasan (II-12): 7 Jan 1954 (ZIP), Anju (II-16): 24 Oct 1932 (WON), Onchon (II-24): 24 Apr 1963 (ZIP), Nampho (II-26): 31 Jan 1995 (PERT), Yonpung-ho (II-30): 30 Sep, 1 Oct 1978 (TOM);

Pyongan North (III): Oct, 2 Oct 1917 (AUST), Kwaksan (III-4): 26 Jan 1968 (ZIP), Cholsan (III-9): 2 Jan 1949 (WON), Hyangsan (III-23):

4 Oct 1986 (TOM), Myohyangsan (III-24): 19 Mar 1955, 3, 12, 13, 14, 16, 21, 28 May, 2 Jun, 22, 29, 30 Aug, 9 Sep, 9, 19 Nov 1956, 19 Apr, 2, 26 Jun 1957, 2 Jun 1958, 30 Aug 1964 (ZIP), ◆;

Chagang (IV): Chasong (IV-1): 4 Sep 1897 (YANK), Karimri (*IV-2): 2, 4 Feb, 22, 30 Apr, 12, 13 Sep, 4, 13, 17 Nov 1958, 16 Oct 1968 (ZIP), Okasan (IV-3): 2 Feb, 17 Nov 1958 (HO; see footnote 2, page 20), 4 Jun 1960 (WON), Kambang (IV-?): 2 Apr 1959 (ZIP);

Ryanggang (V): Sinpha (V-3): 20-21 Aug 1897, Samsu (V-4): 9 Jul, 6-7 Aug 1897 (YANK), Hyesan (V-5): 20, 21 Oct 1978, 11, 12, 19 Oct 1986, Pochon (V-6): 21 Oct 1978, Naegokri (V-7): 12-19 Oct 1986 (TOM), Photae (V-8): 19 Oct 1958 (WON), 19 Feb, 16 Mar 1966, 25 Sep 1967 (ZIP), Namphothae (*V-8): 19 Oct 1986, 26-28 Sep 1991 (TOM), no date (HO), Rimyongsu (V-9): 30 Sep 1991 (TOM), Samjiyon (V-10): 20 Jul-13 Oct 1958 (WON), 23, 24 Oct 1978, 1-6 Jun 1980, 13 Oct 1986 (TOM), no date (HO), Paekdusan (V-12): 20 Aug 1983, 19 May 1984, 10 Aug 1986 (JIN Dok-Jun & O Hung-Dam 1990), Mutubong (V-13): 30 Jun 1958, Sinnusong (V-14): 31 Jun 1958 (WON), Paegam (V-16): 21 Jun 1897 (YANK), Mupo (V-20): 28 Sep 1991 (TOM);

Hamgyong North (VI): 21 Apr-18 May 1912, 4, 16, 25 Sep 1917, Manpo (VI-2): 11, 19 Oct 1929 (AUST, WON), Musan (VI-12): 6 Jun 1897 (YANK), 25 Jul-1 Aug (WON 1956), Dongsakol (*VI-14): 2 Jul 1983,

Koanjuryong (VI-18): 6 Jul 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), Samphori (VI-21): 31 Jul-1 Aug 1959, Kwanmori (VI-26): 19, 27 Jun 1959 (WON);

Hamgyong South (VII): Sangryong (VII-7): 3 Jun 1987, Yomsongdok (VII-13): 24 May 1987 (TOM), Hamhung (VII-30): 31 Jan 1990 (FIEB);

Kangwon (VIII): 10, 14 Sep 1914, 20 Jun-12 Jul 1929 (AUST), 5, 8 Aug 1930 (WON), Samil-pho (VIII-7): 13 Oct 1991 (TOM), Kungangsan (VIII-8): 31 Aug 1962 (ZIP), ♦, Kuryong (*VIII-8): ♦, Onjongri (*VIII-8): ♦;

Hwanghae North (IX): Kumchon (IX-13): 3 Feb 1972 (ZIP);

Hwanghae South (X): Kuwolsan (X-6): Apr 1999 (DUCK);

Kaesong (XI): Kaesong (XI-1): 20 Sep 1929 (WON), 21 Oct 1984, Pagyon (XI-3): 21, 22 Oct 1984, 26, 27 Sep 1986 (TOM);

no locality: 14, 16 May 1956 (VLAD).

M e a s u r e m e n t s (52 specimens of the collection ZIP, 9 specimens of the collection and card-index ISEA):

	26♂♂	\bar{x}	23♀♀	\bar{x}	12 ?sex	\bar{x}
wing	76-84	80.7	67-83	79.0	70-84	78.2
tarsus	18-21	19.0	18-22	19.1	17-20	19.2
bill	16-20.5	17.7	15-19	17.6	14-19	16.3
tail	39-45	43.3	35-53	42.7	39-49	43.2

Common breeding species. This species is most often seen in old deciduous and mixed tree stands (e.g. Myohyangsan, Kungangsan – see: TOMEK 1985, GŁOWACIŃSKI et al. 1989, FIEBIG 1995) where nesting has been recorded. These type of tree stands occupy most of the northern provinces (Pyongan North, Chagang, Ryanggang, Hamgyong North) and most probably this species is also common as in Myohyangsan. Birds found in the ZIP and ISEA collections belong to the subspecies *Sitta europaea amurensis* SWINHOE, 1871.

The Eurasian Nuthatch is also common or abundant in all neighboring areas (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, DISTRIBUTION 1981, MORIOKA 2000, NECHAEV 1998a, WON Pyong-Oh 2000).

315. *Sitta villosa* VERREAUX, 1865

[*Sitta canadensis*, *Sitta canadensis villosa*]

Chinese Nuthatch

Data:

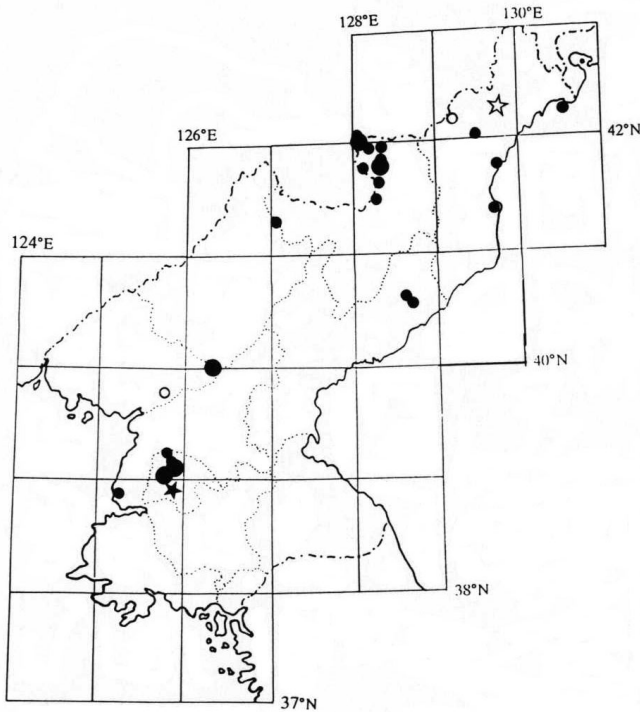
Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), no date (FIEBIG 1992), Aug-Oct 2000 (DUCK), Taesongsan (I-6): 22 Sep 1988 (MAUERSBERGER 1989), 23 Sep 1991 (TOM), no date (FIEBIG 1992), Ryongsong (I-7): no date (FIEBIG 1992), Sogam (I-15): no date (FIEBIG 1992);

Pyongan South (II): Sakju (*II-24): 23 Apr 1963 (ZIP);

Pyongan North (III): Myohyangsan (III-24): 18 Jun 1954 (ZIP), 8 Dec 1956 (ZISP), 12 May-13 Sep, 12 Nov 1956 (WON), 19 May, 8, 13 Nov 1957, 30 Aug 1957 (ZIP), no date (FIEBIG 1992), Nov, Dec 2000 (DUCK), Nyongbyon (III-30): 20 Oct 1933 (WON);

Chagang (IV): Karimri (*IV-2): 8 May 1958 (ZIP), Okasan (IV-3): 8 May 1958 (HO; see footnote 2, page 20);

Ryanggang (V): Jongbong (*V-6): 17 Jun 1958, Photae (V-8): 24 Oct 1958, Samjiyon (V-10): 2, 25 Jul 1958, 2, 8 May 1963, 2 Jun 1967 (ZIP), no date (HO), Pekebong (*V-10): no date (FIEBIG 1992), Paekdusan (V-12): 3, 31 Jul 1958 (ZIP), 26 Sep 1991 (TOM), Nongsari (*V-12): no date (HO), Mutubong (V-13): 31 Jul 1958, Sinmusong (V-14): 3-31 Jul 1958 (WON), Homultang (V-21): no date (FIEBIG 1992);



Hamgyong North (VI): no data, 30 Jul-29 Aug 1929 (AUST), Pipa (*VI-6): 28, 30 May 1997 (EDW), Musan (VI-12): 5, 10 Aug 1929 (WON), Sinchamri (*VI-15): no date (FIEBIG 1992), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), Jangyon-ho (VI-29): no date (FIEBIG 1992);

Hamgyong South (VII): Yomsongdok (VII-13): 24 May 1987, Hochon (VII-14): 25 May 1987 (TOM).

M e a s u r e m e n t s (20 specimens of the collection ZIP, 1 specimen of the collection ISEA):

	8♂♂	\bar{x}	8♀♀	\bar{x}	5 ?sex	\bar{x}
wing	63-68	66.0	63-67	64.4	61-68	64.5
tarsus	14-17	15.7	15-18	15.9	14-18	16.1
bill	12-16	13.6	12-15.5	13.8	11-14.5	13.1
tail	32.5-38	35.8	33-36	34.7	32.5-36	34.1

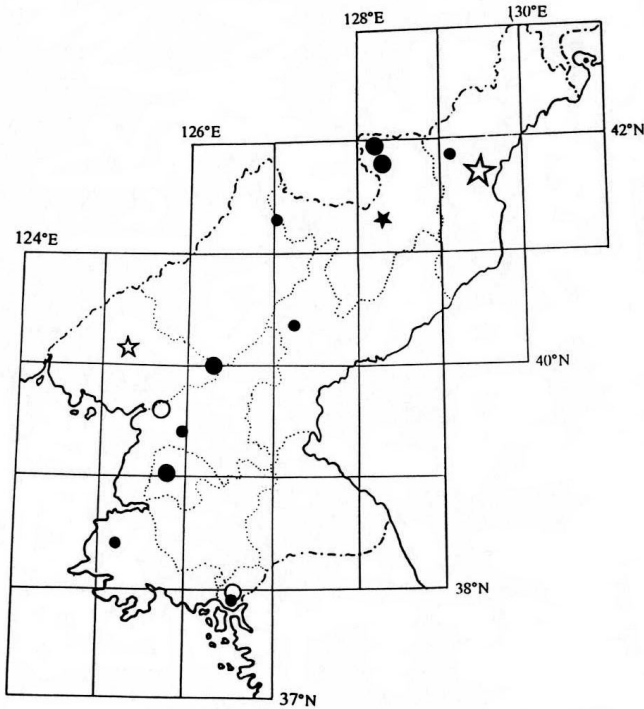
Rare breeding species. Seen primarily in northern provinces with coniferous and mixed tree stands (MAUERSBERGER 1989). It was also observed in the lowland part of the country (including during the breeding period in Yomsongdok and Hochon, Hamgyong South Province – my unpubl. data) and regular nesting was recorded even in a city park in Pyongyang (FIEBIG 1995).

The Chinese Nuthatch is a rare species living in northern and northeastern China (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000), and its breeding area reaches Primorye (NAZARENKO 1988, NECHAEV in LER 1989, NECHAEV 1998a) and the northern part of the Korean Peninsula. Judging by the numerous skins coming from the North Korean area and found in museum collections (ZIP – 23, one of which was a juvenile without plumage, ZISP – 2, ISEA – 1 specimen) one can assume that this is really a rare species, however it is significantly more frequent and numerous than in Primorye, where in the seventies the numbers there were estimated to be 20-30 pairs only (NECHAEV in LER 1989).

In South Korea the Chinese Nuthatch was recorded only after the breeding period (GORE & WON Pyong-Oh 1971) and presently it is a rare passage migrant (WON Pyong-Oh 2000), while it was not recorded at all in Japan (MORIOKA 2000). Therefore the southeastern border of their breeding area crosses North Korea.

Certhidae

316. *Certhia familiaris* LINNAEUS, 1758
Common Treecreeper, Eurasian Treecreeper



Data:

Pyongyang (I): Pyongyang (I-1): no date (WON), winters 1986-1988 (CHON GIL-PYO 1988);

Pyongan South (II): Othanri (*II-11): 23 Nov 1954 (ZIP), Anju (II-16): 31 Oct 1929 (WON, or 31 Oct 1932 WON 1956, or 31(!) Nov 1932 WON cited by AUST);

Pyongan North (III): Jul 1917 (AUST), Myohyangsan (III-24): 17 Jun 1983 (TOM), 8-12 Aug 1991 (BÁLDI), Dec 2000 (DUCK);

Chagang (IV): Karimri (*IV-2): 5 Jul 1958 (ZIP), Okasan (IV-3): 5 Jul 1958 (HO; see footnote 2, page 20);

Ryanggang (V): 14 Aug 1989 (FIEB), Samjiyon (V-10): 19 Jun 1958, 2 Oct 1963, 21 Oct (ZIP), 22 Oct 1978 (TOM), no date (HO), Mutubong (V-13): 31 Jul 1958, 17 Oct 1964 (ZIP);

Hamgyong North (VI): 11 May-2 Jun 1912, 22-26 Oct 1929 (AUST), Samphori (VI-21): 2 Aug 1958 (ZIP, or: 29 Jul, 2 Aug 1959 – ZIP cited by WON);

Hamgyong South (VII): Jangjin (VII-26): 30 Oct-13 Dec 1956 (WON);

Hwanghae South (X): Talchonri (X-9): 18 Feb 1958 (ZIP);

Kaesong (XI): Kaesong (XI-1): Nov 1926, 9 Mar, 11 Nov, 25 Dec 1929, 6 Feb, 10 Mar 1930, 19 Jan, 19 Feb 1931, 4 Nov 1935, 19 Nov 1957 (WON);

no data: 1 specimen (ZIP).

M e a s u r e m e n t s (14 specimens of the collection ZIP, 1 specimen of the collection ISEA):

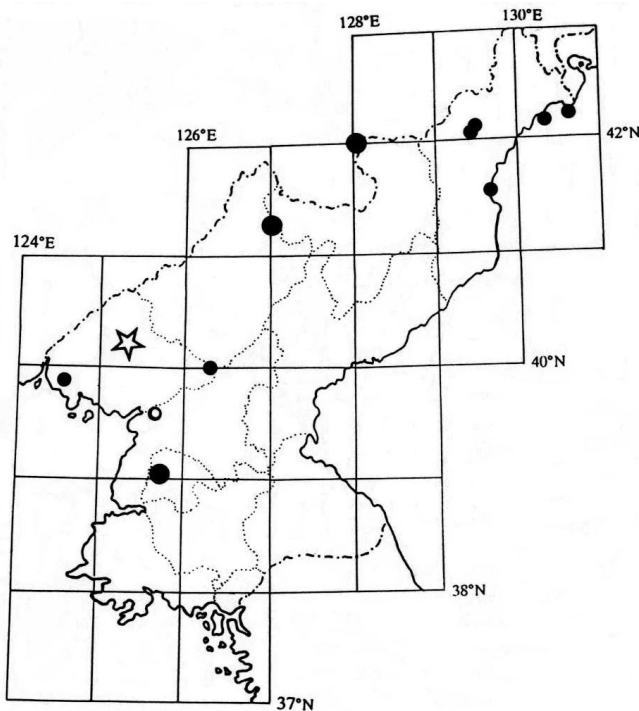
	7♂♂	\bar{x}	♀	♀	♀	5 ?sex	\bar{x}
wing	62-67	64.6	62	64.5	66	60-66	63.0
tarsus	13.5-16.5	14.9	13	13.5	15	14-15	14.5
bill	13-17	14.9	12	10	15	12-15	13.6
tail	55.5-68	62.7	65	65	59	57-65	61.6
big toe claw	8-11	9.1	9	8	—	8-11	9.2

Probably a rare breeding species. Observed year-round. It is a resident species and only in winter migrates short distances. Therefore one can suppose that those individuals whose presence was re-

corded during the breeding period (Apr, May, Jun) belong to the breeding fauna. Observations to date indicate nesting only in northern provinces (Pyongan North, Chagang, Ryanggang, Hamgyong North – 10 records). Nesting is indicated by the record of a juvenile specimen in Samphori 29 Jul 1959 (WON Hong-Koo 1965). Probably the breeding area border of the Common Treecreeper crosses North Korea since in South Korea this species was observed only after the breeding period (WON Pyong-Oh 1993, 2000)²¹. At the same time it is a common breeding species in areas north of the border forming Amnok and Tuman Rivers (CHENG Tso-Hsin 1987, NAZARENKO 1984, NECHAEV 1998a, MACKINNON & PHILLIPS 2000) and on the Japanese Islands (DISTRIB. 1981, MORIOKA 2000).

Zosteropidae

317. *Zosterops erythropleura* SWINHOE, 1863 Chestnut-flanked White-eye



Data:

Pyongyang (I): Pyongyang (I-1):
Sep-1 Oct 2000, 13 May 2001
(DUCK);

Pyongan South (II): Anju (II-16):
23 May 1933 (WON);

Pyongan North (III): 8 Jul 1917,
16 May 1929 (AUST), Kachado
(*III-10): 4 May 1967, Myohyangsan
(III-24): 25 Jul 1979 (ZIP);

Chagang (IV): Karimri (*IV-2):
7 Jun 1958 (ZIP), Okasan (IV-3):
7 Jun 1958 (HO; see footnote 2, page
20), 25 May, 14 Jun 1960 (WON);

Ryanggang (V): Paekdusan
(V-12): 7 Sep 1983, 20 May 1984
(JIN Dok-Jun & O Hung-Dam
1990)²²;

Hamgyong North (VI): Sosura
(VI-5): 23 Sep 1963 (ZIP),
Chayuryong (VI-13): 10 Jul 1983,
Dongsakol (*VI-14): 30 Jun, 2 Jul
1983 (TOM), Pukhaso (*VI-25): 16 Jul

1959 (ZIP), near Rajin (VI-39): 1 Oct 1989 (FIEB).

²¹

While WON Hong-Koo (1965) recorded as if this was a breeding species throughout the entire peninsula he did not give any data from the breeding period in the southern part of the peninsula.

²²

JIN Dok-Jun & O Hung-Dam (1990) write about a record of the *Zosterops japonica*, however without giving the diagnostic characters differentiating the Japanese White-eye from that met in the Paekdusan region the Chestnut-flanked White-eye. I assume that they were representatives of the Chestnut-flanked White-eye and that they were mistakenly put in the wrong species, which differs only slightly in coloring.

M e a s u r e m e n t s (5 specimens of the collection ZIP, 1 specimen of the collection ISEA):

	♂	♂	♀	♀	♀	♀
wing	—	63	59	59	61	58
tarsus	15	17	16	16	16.5	16
bill	11	11	10	10	10	9.8
tail	43	43	34	37	39	38

Probably breeding species in northern provinces. Observed from 4 May till 1 Oct (at least 17 records). Chestnut-flanked White-eye in areas north of the Korean Peninsula breed in Jun and Jul. The presence of birds at this time in North Korea also indicates the probability of breeding there. This is even a greater probability since the Chestnut-flanked White-eye is known in areas bordering Korea in China and Primorye (PANOV 1973, CHENG Tso-Hsin 1987, KOBLIK et al. 1997a, MIKHAILOV et al. 1998, MACKINNON & PHILLIPS 2000). At the same time in the southern part of the peninsula the Chestnut-flanked White-eye to date was seen only once during spring migration (GORE & WON Pyong-Oh 1971), and not seen at all in Japan (MORIOKA 2000). So, the southeastern distribution border of this species crosses North Korea.

Zosterops japonica TEMMINCK et SCHLEGEL, 1847

[*Zosterops palpebrosa ijimae*]

Japanese White-eye

In the literature there are 2 records of the Japanese White-eye in North Korean territory (JIN Dok-Jun & O Hung-Dam 1990). However they are doubtful and without better documentation can not be accepted (see footnote 22). The Japanese White-eye occurs on Sakhalin (NECHAEV 1991), the Japanese Islands (KANOUCI et al. 1998, MORIOKA 2000) and in the south of the Korean Peninsula (GORE & WON Pyong-Oh 1971, HAHM Kyu-Hwang et al. 1994, HAHM Kyu-Hwang & WOO Han-Chung 1994, CHON Gyong-Sok & HAHM Kyu-Hwang 1996, PAK Woon-Kee et al. 1996, WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000) and apart from the above mentioned publication (JIN Dok-Jun & O Hung-Dam 1990) this species was not recorded in the northern part of the peninsula.

E m b e r i z i d a e

318. *Emberiza leucocephala* GMELIN, 1771

[*Emberiza leucocephalos*]

Pine Bunting

Data:

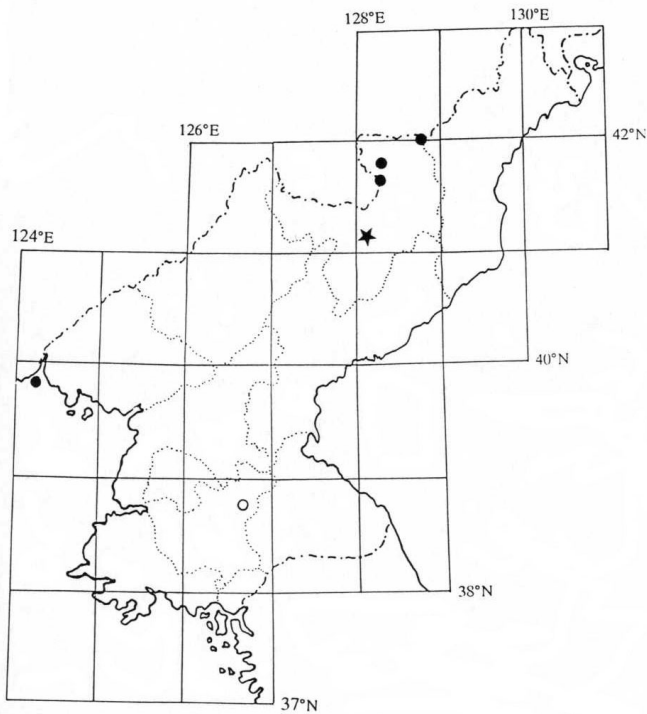
Pyongan North (III): Ryongchon distr. (*III-13): 30 Oct 1961 (ZIP), or: Sindo (III-14): 20 Oct 1963 (ZIP cited by WON), ?Myohyangsan (III-24): 8-12 Aug 1991 (BÁLDI);

Ryanggang (V): no date (HO), Photae (V-8): 28, 29 Sep 1967 (ZIP), Samjiyon (V-10): 13 Oct 1958 (WON), Yukok (*V-15): 26 Mar 1960 (ZIP);

Hwanghae North (IX): Koksan (IX-3): 21 Mar 1914 (AUST, WON);

?Kaesong (XI): 24-25 Aug 1991 (BÁLDI);

no data: 1 specimens (ZIP).

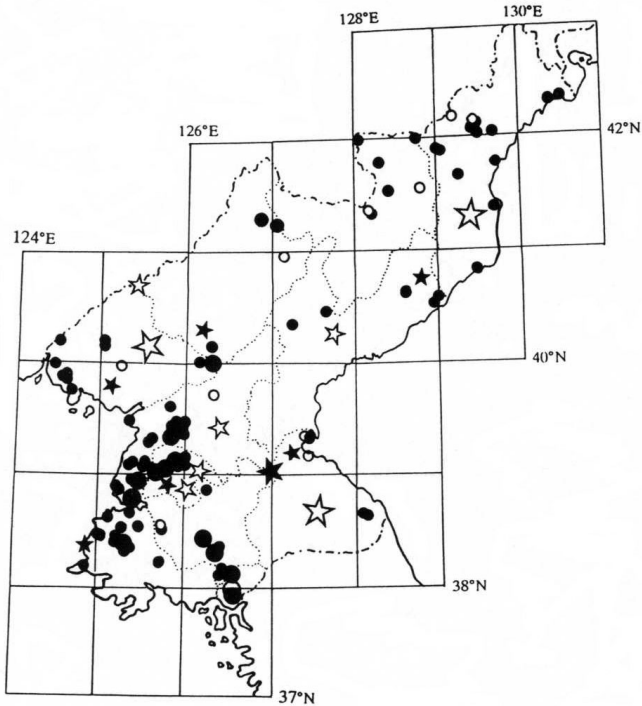


M e a s u r e m e n t s (4 specimens of the collection ZIP):

	♂	♂	♀	?sex
wing	95	95	93	91
tarsus	19.5	20	21.5	19
bill	12	12	12	12
tail	82	75	80	72

Rare passage migrant. To date observed a very few times during spring (Mar, 2 records) and autumn (end of Sep, Oct, at least 4 records) passages. Furthermore 2 records raise doubts: in Kaesong and Myohyangsan. They were done in Aug i.e. when this species is still in its breeding area (NECHAEV 1991) in Siberia, northeastern China and on the Sakhalin i.e. a significant distance from the Korean Peninsula (DEMENTEV & GLADKOV 1951-1954, PORTENKO & STÜBS 1971a, NECHAEV 1991, CHENG Tso-Hsin 1987). Although NAZARENKO (1971a, 1971d, 1990) mentioned insular nesting in South Primorye. On one hand the possibility of nesting also in northeastern provinces of North Korea can not be eliminated, on the other hand it is not impossible that there was a mistake in identification. Females and young in 1st plumage of many representatives of the genus *Emberiza* are similar and the authors (BÁLDI & WALICZKY 1992), apart from a list of species observed, do not give any details about observation or diagnostic details. In South Korea, Japan and Chinese territory bordering Korea the Pine Bunting is known as a rare migrating and/or wintering species. Therefore without certain evidence of nesting one can not include the Pine Bunting in the breeding fauna of North Korea.

319. *Emberiza cioides* BRANDT, 1843
Siberian Meadow Bunting



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), no date (FIEB), Ponghwari (I-4): 26 Oct 1984, 5 Jun 1987 (TOM), Samsok (I-5): 29 Dec 1965 (ZIP), Sijok (*I-5): 2 Apr 1950 (WON), Taesongsan (I-6): 31 Jan, 21 Mar 1956 (ZIP), 26 Oct 1987 (FIEB), Ryongaksan (I-10): 7 Oct 1984 (TOM), Mankyongdae (I-11): 20 Apr 1956, 20 Apr 1957 (ZIP), Juamsan (I-?): 27 Apr 1949, Amisan (I-?): 2 May 1949 (WON);

Pyongan South (II): 30 Apr, 14 May 1917 (AUST), Sunchon (II-11): 29 Jul, 3 Aug 1954, 15 Jan 1956, 10 Feb 1957, Ponghakri (*II-11): 14, 16 Mar 1956, Jehyonri (*II-11): 28 Jan, 23, 25 Aug 1954, Ankukri (*II-11): 15 Apr 1956, Kochonri (*II-11): 10, 15 Feb 1957

(ZIP), Othanri (*II-11): 23 Nov 1954 (MAUERS), Jasan (II-12): 12, 25 Nov 1953, 5, 12 Jan, 7, 16, 20, 24 Feb, 5, 8, 12 Mar, 1, 2, 5, 6, 7, 30 Apr, 4 Jun 1954, 28 Dec (ZIP), 22 Feb 1954 (MAUERS), Paeksongri (II-13): 14 Mar 1956 (ZIP), Pyongwon (II-17): 29 Mar 1956 (WON), Sori (*II-17): 14 Mar 1955, Jangkongri (*II-19): 22 Mar 1958, Phungjongri (*II-19): 27 Mar 1958 (ZIP), Taedong (II-21): 12 Apr 1956 (ZISP), Tochon (*II-21): 5 May 1957 (ZIP), Onchon (II-24): 7 Apr 1956 (WON), Sakju (*II-24): 23 Apr 1963 (ZIP), Nampho (II-26): 6 Mar, 2 Apr 1990 (FIEB), Apr 1999, Aug 2000 (DUCK), Taesong-ho (II-28): 1 Oct 1986 (TOM), 26 Apr 1987 (GŁOW), no date (FIEB), Taeposan (*II-28): 5 Feb, 1 Apr 1950 (WON), Yonpung-ho (II-30): 7 Jun 1987 (TOM), Tokchon (II-33): 11 Nov 1949 (WON), sea-shore in region 39°30': Nov 1989 (STEP);

Pyongan North (III): 3 Jun 1912, 3-12 Jun 1917, 7-10 Apr 1929 (AUST), 26 Dec 1929 (WON cited by AUST, but WON does not mention this observation in his later publications), Sangsokri (*III-9): 24 Jan 1966, Haksori (*III-10): 19 Mar 1958, Namsi (*III-10): 29 Oct 1954, Pankungri (*III-10): 18 Apr 1958 (ZIP), Yangsi (*III-13): 21 May 1950 (WON), Uiju (III-16): 10 May 1988, Chonmasan (III-20): 17 Jun 1961, Unrimri (*III-20): 23 May, 27 Jun 1961, Rimhungri (*III-23): 17 Jul 1956, Myohyangsan (III-24): 14, 15 Jun 1955, 14 Jun, 4 Nov 1956 (ZIP), 28 May 1980 (TOM), 8-12 Aug 1991 (BÁLDI), Kusong (III-27): 26 Dec 1927 (WON), Synuiju-Anju (III-28-II-16): 30 May 1997 (PERT);

Pyongan North-Chagang (III-IV): Amnok riv.(III-IV-?): before 1923 (SOWERBY);

Chagang (IV): Mar 2000 (DUCK), Karimri (*IV-2): 25 Mar 1954, 30 Mar, 6 Apr, 7, 19 May 1958 (ZIP), Okasan (IV-3): 19 Mar, 20 Oct 1958 (HO), Rangnim (IV-5): 9 Sep 1897 (YANK), Huichon (IV-10): 16, 17 May 1987 (TOM);

Ryanggang (V): Hyesan (V-5): 19 Jul 1897 (YANK), Naegokri (V-7): 14-17 Oct 1986 (TOM), Samjiyon (V-10): 29 Sep 1963 (ZIP), Nongsari (*V-12): no date (HO), Yukok (*V-15): 27 Mar 1966 (ZIP), Paegam (V-16): 21 Jun 1897 (YANK);

Hamgyong North (VI): 29 Aug-25 Sep 1917, 27 Jul, 15 Sep-19 Nov 1929, no date (AUST), Manpo (VI-2): 9 Apr 1996 (EDW), Unggi (VI-7): 3 Mar-29 Apr 1959 (WON), Musan (VI-12): 6, 8 Jun 1897, Chayuryong (VI-13): 4 Jun 1897 (YANK), 7 Jul 1983, Dongsakol (*VI-14): 30 Jun, 2 Jul 1983, Mayang (VI-15): 29 Jun 1983 (TOM), Puryong (VI-16): Jun 1984 (ZIP), Chongjin (VI-19): 18-20 Aug 1991 (BALDI), Yonsa (VI-20): May 1959, Kwanmobong (VI-22): 4 Apr-25 May 1959 (WON), Jangyon-ho (VI-29): 7 Jul 1983 (TOM), Jungsanri (*VI-30): 20 Sep 1959 (WON);

Hamgyong South (VII): 21, 24, 26, 27 Apr 1903 (AUST), Kumdok-Tanchon (VII-2-8): 29 May 1987, Machonryong (VII-5): 26, 27 May 1987, Tongdokri (*VII-6): 28 May 1987, Hochon (VII-14): 25 May 1987 (TOM), Pujon (VII-22): 28 Jun 1958 (RIM Chun-Hun 1961), Jangjin (VII-26): 21 Oct 1956 (WON);

Kangwon (VIII): 8 Sep, 4 Oct 1914, 14, 15 Jun 1929 (AUST), Wonsan (VIII-3): 29 Oct 1897 (YANK), Kumgangsán (VIII-8): 1-4 Aug 1991 (BALDI), Onjongri (*VIII-8): no date (FIEB), Yonghung (VIII-14): 1-8 Nov 1897 (YANK), 3 Apr-27 May 1960 (WON), Masingryong (VIII-?): 25 May 1980 (MAUERS);

Hwanghae North (IX): Sohung (IX-9): 15, 17 May 1980 (MAUERS), 14 Aug 1984 (KOLBE), 3 May 1987 (GLOW), 22 May 1987 (TOM), Nuchonri (*IX-11): 17 Jul 1956 (WON), 22 Feb 1957, Taehungri (*IX-11): 20 Feb 1957 (ZIP), Kumchon (IX-13): 20 May 1953 (WON), no date, Wolamri (IX-15): 25 May 1964 (ZIP), Sariwon (IX-16): 11 May 1949 (WON), 2 May 1987 (GLOW), Yonsan (IX-17): 20 May 1987 (TOM);

Hwanghae South (X): Jedo (X-1): 5, 7 Apr 1956, Anak (X-3): 20 Apr 1957 (WON), Kumsanri (X-4): 15 Mar 1962 (ZIP), Kuwolsan (X-6): Apr 1999 (DUCK), Woljongri (X-8): 20 Apr 1957, Talchonri (X-9): 20 Apr, 17 May, 6 Nov, 23 Dec 1957, Samchon (X-10): 1 Dec 1960, 29 Dec 1961, Kohyonri (*X-10): 16 Mar, 13, 14, 15, 18, 19, 21, 22 Apr, 13, 19, 22, 30, 31 May, 4, 5, 7, 18 Jun, 4 Nov 1957, Ungyesan (*X-10): 3 Apr 1963 (ZIP), 28 Jun 1963 (WON), Kwaíl (X-13): 4 Feb 1990 (FIEB), Ryongyon (X-14): 23 Apr 1955 (ZIP), Changsu (X-25): 30 Apr 1987 (GLOW), sea-shore between 38°20'N and 38°30'N: Nov 1989 (STEP);

Kaesong (XI): Kaesong (XI-1): 28 Oct, 6, 21 Dec 1929, 25 Jan, 28 Apr, 15 Jul 1930 (WON), 26 Jan 1966, 1 Apr 1967 (ZIP), 24-25 Aug 1991 (BALDI), Pagon (XI-3): 31 Aug 1955, 3 Mar 1956, 16 Mar, 14 May 1957 (WON);

no locality: "half-openen areas" 1987-1990 (FIEB);

no data: 5 specimens (ZIP).

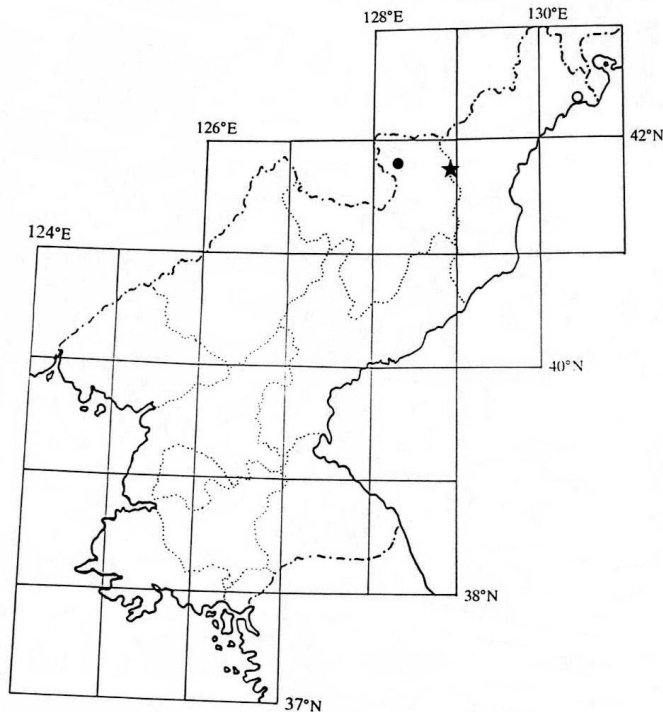
M e a s u r e m e n t s (75 specimens of the collection ZIP, 4 specimens of the collection ISEA, 2 specimens of the collection MZB):

	54♂♂	\bar{x}	17♀♀	\bar{x}	10 ?sex	\bar{x}
wing	71-87	77.7	69-83	74.5	74-83	78.3
tarsus	17-22	19.4	15.5-21.3	19.1	17-21	18.8
bill	8-12	10.7	9-12.2	10.8	9-11	10.1
tail	62-81	74.3	65-80	71.6	70-81	76.6

Common breeding species. Observed throughout the entire country. During migration and in winter they form flocks of up to a hundred individuals (FIEBIG 1995).

The Siberian Meadow Bunting is a common species year-round in all bordering areas (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, DISTRIB. 1981, MORIOKA 2000, NECHAEV 1998a, WON Pyong-Oh 2000). Further detailed research requires a determination of the occurrence of various subspecies. According to WON Hong-Koo (1965) *Emberiza cioides castaneiceps* (MOORE, 1955) nests on the Korean Peninsula, and a little larger than it, *Emberiza cioides weigoldi* (JAKOBI, 1923) winters. These opinions are not confirmed by the measurements of birds caught during breeding (May-Aug) and in winter (Nov-Feb). Wing length of birds in the ZIP collection taken during breeding range from 71 to 80 mm, (\bar{x} = 76.5), and wintering birds, 71-81 mm (\bar{x} = 76.4). These fall within the range presented by VAURIE (1959) for both subspecies: *E. c. castaneiceps* (72-79 mm) and *E. c. weigoldi* (77-82 mm).

320. *Emberiza jankowskii* TACZANOWSKI, 1888
Jankowski's Bunting



Data:

Ryanggang (V): Samjiyon (V-10):
no date (HO); Hamgyong North
(VI): Manpo (VI-2): 15-25 Oct
1929 (AUST, WON);
no data: 1 ♂ (collection of the
KIM II-Sung University).

Extremely rare and uncommon species living in the north of the country. Its occurrence in North Korea is indicated by 6 birds taken: 6 specimens in ZIP collected 1929 in Manpho, and 1 specimen exposed in 1980 in the Museum of KIM II-Sung University. Furthermore HO Hon & RIM Chu-Yon (1975) give only the place where this species was recorded in Samjiyon (it is too bad that there are no further observation details). All records in North Korea come from the thirties

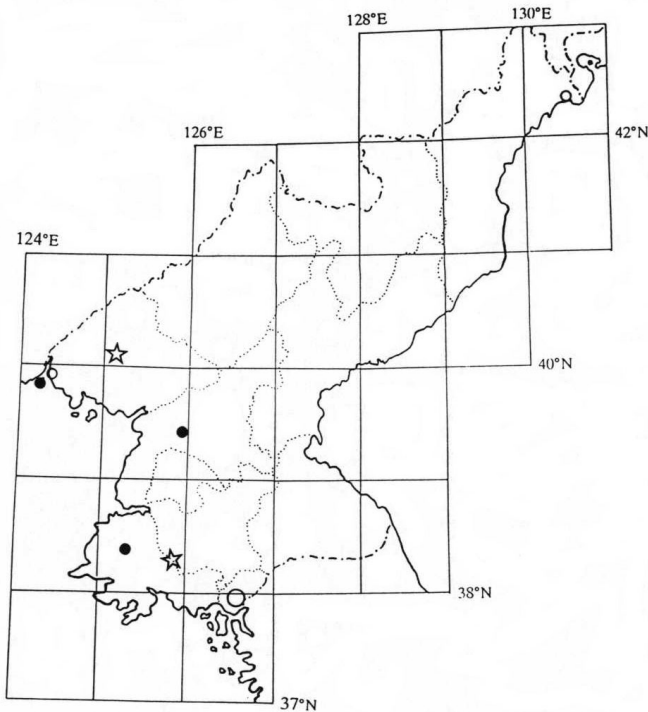
(NEUFELDT & WUNDERLICH 1980b) and at best 25 years ago when Jankowski's Bunting was still somewhat common („dovol'no obychnyi”) in neighboring South Primorye (LITVINENKO in LER 1989, MACKINNON & PHILLIPS 2000). During the seventies the numbers of Jankowski's Buntings fell in Primorye and China (LITVINENKO in LER 1989). Since this species is in general danger of extinction (in China, 330-340 pairs were estimated – ZHAO Zheng-Jie et al. 1994, BIRD LIFE INTERNATIONAL 2000) and there are no records of its presence during the last quarter of a century, its present status in North Korea is unknown.

321. *Emberiza yessoensis* (SWINHOE, 1874)
Japanese Reed Bunting

Data:

Pyongan South (II): Jehyonri (*II-11): 22 Sep 1954 (ZIP);
Pyongan North (III): May 1917 (WON), Mumyongpyong (*III-14): 1 Nov 1961 (ZIP), Ryonganpho (III-15): May-Jun 1917 (KUR);
Hamgyong North (VI): Manpo (VI-2): 15-26 Oct 1929 (AUST, WON);
Hwanghae South (X): Kumchonri (*X-10): 24 Dec 1958 (ZIP);
Hwanghae (IX-X): 20 Apr 1917 (AUST);
Kaesong (XI): Kaesong (XI-1): 27 Feb 1928 (WON 1956), 21 Jan 1929 (WON).

Measurements (3 specimens of the collection ZIP, sex unknown): wing 68, 66, 63; tarsus 19, 18, 18; bill 8, 9, 9; tail 58, 64, 56 mm.



Wintering species, passage migrant and perhaps breeding species. To date recorded in North Korea a mere 7 times. During breeding season it was observed only once at the beginning of the 20th century. However it is a species nesting in southern Primorye (GLUSCHENKO & SHIBNEV 1977, NAZAROV 1974, NAZAROV in LER 1989) and in a Chinese province Liaoning neighboring Korea, (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). The possibility of Japanese Reed Bunting nesting on the Korean side of the border can not be eliminated, however its inclusion in the breeding fauna requires documentation, or more up-to-date observations indicating breeding. Korean ornithologists included the Japanese Reed Bunting in the passage or wintering fauna (WON Hong-Koo 1965, GORE & WON Pyong-Oh 1971, O Hung-Dam 1988, WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000) and the opinion that it is a breeding species in the Korean Peninsula (DEMENTEV & GLADKOV 1951-54, ETCHECOPAR & HÜE 1983, NAZAROV in LER 1989, MORIOKA 2000) is not supported by observations indicating nesting.

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322. *Emberiza tristrami* SWINHOE, 1870

Tristram's Bunting

Data:

Pyongyang (I): Pyongyang (I-1): 3 Oct 1973 (ZIP), 18 May 1980 (MAUERS), 14 May 1988 (FIEB), Taesongsan (I-6): 8 Oct 1986 (TOM), Ryongaksan (I-10): 7 Nov 1989 (FIEB), Sadong (I-17): 7 May 1965 (ZIP);

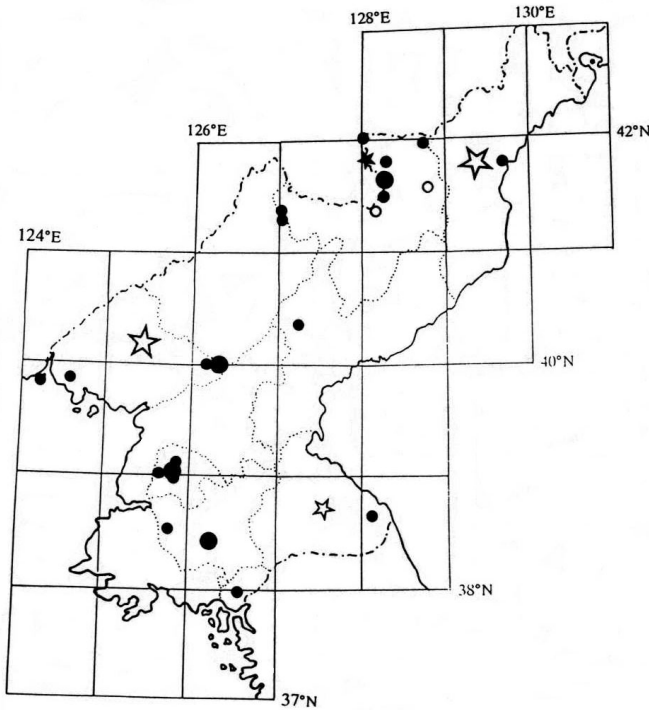
Pyongan North (III): 31 May, 31 May 1917, 20 Apr 1918, 24 Apr-6 May 1929 (AUST), Haksori (*III-10): 23 Apr 1958, Sindo (III-14): 23 Apr 1965 (ZIP), Hyangsan (III-23): 5 Oct 1986 (TOM), Myohyangsan (III-24): 15 May 1956, 30 May, 20 Jun 1957 (ZIP), 8 Oct 1988 (TOM), 6 May 1990 (FIEB);

Chagang (IV): Karimri (*IV-2): 14 Apr, 7, 17 May, 16 Jul, 20 Sep, 5 Oct, 1 Nov 1958 (ZIP), Okasan (IV-3): 7 May, 1 Nov 1958 (HO; see footnote 2, page 20);

Rygang (V): Ryongjori (V-2): 13, 17 May 1958 (ZIP), Hyesan (V-5): 11 Jul 1897 (YANK), Jongbong (*V-6): 17, 18 Jun 1958, Photae (V-8): 23 Sep 1967, 29 Jun 1969, Samjiyon (V-10): 16 Jun, 4, 5 Jul, 29 Sep 1958, Kansambong (*V-12): 12 May 1965 (ZIP), no date, 5 hohongjang (*V-15): no date (HO), Paegam (V-16): 30 Jun, 1, 3 Jul 1897 (YANK), Amnok riv. (V-?): 15 Aug 1989 (FIEB);

Hamgyong North (VI): 29 May, 1 Oct 1912, 28 Sep 1927 (AUST), near Chongjin (VI-19): 29 Sep 1989 (FIEB);

Hamgyong South (VII): Jangjin (VII-26): 14 Jun 1957 (WON);



Kangwon (VIII): 13 Sep 1914 (AUST), Onjongri (*VIII-8): 23 May 1980 (MAUERS);

Hwanghae North (IX): Sohung (IX-9): 15 May 1980 (MAUERS), 3 May 1987, Sariwon (IX-16): 2 May 1987 (GŁOW);

Kaesong (XI): Kaesong (XI-1): 8 Jun 1957 (WON);

no data: 2 specimens (ZIP).

Measurements (26 specimens of the collection ZIP, 17 specimens of the collection and card-index ISEA):

	17♂♂	\bar{x}	9♀♀	\bar{x}	17 ?sex	\bar{x}
wing	69-77	72.5	61.5-72	67.8	66-75	70.1
tarsus	18-23	19.5	18.8-22	20.2	18-21	19.2
bill	9-12	10.5	9-12.5	10.7	9-11	10.0
tail	54-67.5	59.6	48.5-60	56.1	52-65.5	58.3

Breeding species and common passage migrant. Observed from 14 Apr till 7 Nov. In areas north of the Korean Peninsula Tristram's Buntings start for breeding during the last 10 days of May, during the first 10 days of Jun they have complete clutches and autumn migration begins in Sep (PANOV 1973). Therefore birds recorded in Korea in Jun and Jul are probably part of the breeding fauna. The numbers of records from the breeding period (14 records, of these 8 are skins in the ZIP collection) indicate that the appearance of Tristram's Buntings during the breeding period is not accidental. One can even talk about their regular occurrence in North Korea, most often in the mountainous regions of the Ryanggang Province.

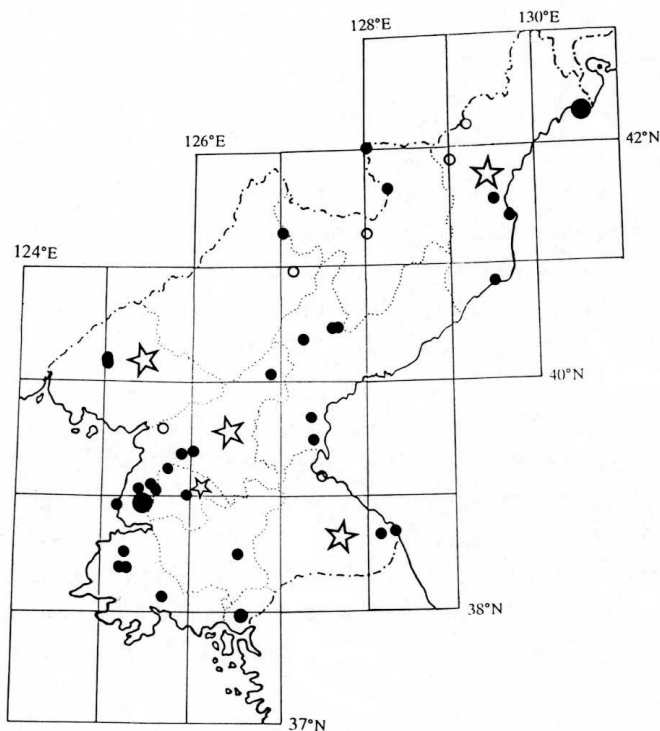
The Tristram's Bunting is a breeding species in areas bordering Korea: the Chinese Province Jilin and southeast Russia (breeding sites given include the Chinese part of the Paekdusan Mt. – MEYER DE SCHAUSENSEE 1984, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, ZHAO Zhengje 1984, ZHAO Zhengje et al. 1984, FU et al. 1984 cited by WON Pyong-Oh 1990, NAZARENKO 1971a, 1974, PANOV 1973, MIKHAILOV et al. 1998, NECHAEV 1998a, VOLOSHINA et al. 1999). The northern part of the Korean Peninsula is therefore the breeding area of this species (according to WON Hong-Koo 1965, it reaches as far as the Kaesong Province). At the same time in South Korea and Japan Tristram's Bunting is present only during passage (GORE & WON Pyong-Oh 1971, WON

Pyong-Oh 2000, MORIOKA 2000). Thus, the southeastern border of its breeding area crosses North Korea²³.

323. *Emberiza fucata* PALLAS, 1776

[*Emberiza fuscata*]

Grey-hooded Bunting



Data:

Pyongyang (I): Sidok (*I-2): 23 May 1955 (ZIP), Ryongaksan (I-10): 21 May 1989 (FIEB), Sogam (I-15): 24 Jun 1983 (TOM), Juamsan (I-?): 27 Apr 1949 (WON);

Pyongan South (II): 14 May 1917, 11 May 1932 (AUST), Sopaekri (*II-3): 16 Jun 1960 (WON), Unsan (II-10): 26 Jun 1954, Jasan (II-12): 29 Apr, 5 May, 8 Jun 1954 (ZIP), Anju (II-16): 28 Apr-26 Oct 1932 (WON), Sajonri (II-20): 20 Feb 1969, Tochon (*II-21): 5 May 1957, Ansokri (II-24): 24 Apr 1958 (ZIP), Taesong-ho (II-28): 24 May, 8 Jun 1980, 15 Jul 1983 (TOM), 26 Apr 1987 (GLOW);

Pyongan North (III): 12 Jun 1912, 9 Jun 1917, 17 Apr-6 May 1929 (AUST), Chonmasan (III-20): 16 May 1961, Unrimri (*III-20): 23 May 1961 (ZIP);

Chagang (IV): Okasan (IV-3):

13 Mar 1958 (HO), Rangnim (IV-5): 9 Sep 1897 (YANK);

Ryongyang (V): Samsu (V-4): 30 Jul 1897 (YANK), Photae (V-8): 1 Jul, 19 Oct 1967 (ZIP), Nongsari (*V-12): no date (HO);

Hamgyong North (VI): 17, 29 Aug 1917, 18 Apr 1918 (AUST), Kulphori (VI-4): 29 Apr 1958 (WON), 21 Sep 1959 (ZIP), 14 May 1961 (WON), Musan (VI-12): 6 Jun 1897 (YANK), Nongsadong (*V-20): 28, 29, 30 Jun 1929 (AUST, WON), Kwanmori (VI-26): 22 May 1959 (ZIP), Jangyon-ho (VI-29): 4 Jul 1983 (TOM), Hwadae (VI-30): 14 Sep 1959 (WON);

Hamgyong South (VII): Pujon (VII-22): 26 Jun 1958 (RIM Chun-Hun 1961), Hopanri (*VII-22): 27 Jun 1958, Jangjin (VII-26): 18 May-7 Jun 1956 (WON), Chowonri (VII-34): 27 May 1960, Inhung (VII-37): 23 May 1960 (ZIP);

Kangwon (VIII): 6-24 Sep 1914, 13 Jun 1929 (AUST), Wonsan (VIII-3): 23, 27-29 Sep, 26 Oct 1897 (YANK), Samil-pho (VIII-7): 13 Jun 1980 (TOM), Kumgangsang (VIII-8): 1-4 Aug 1991 (BÁLDI);

23

Nesting in Hong Islet, Kyongsang South Prov. is noted by PÆK Woon-Kee et al. (1996) however with no details, and at the same time, they give it the status of "passage migrant".

Hwanghae North (IX): Singye (IX-10): 26 May 1962 (ZIP);

Hwanghae South (X): Kuwolsan (X-6): 20 Jun 1957, Talchonri (X-9): 12, 29 Jun, 5 Jul 1957, Kohyonri (*X-10): 14 Sep 1959 (ZIP), Suyangsan (X-24): 31 May 1980 (TOM);

Kaesong (XI): Kaesong (XI-1): 6 Apr 1962 (ZIP);

no locality: 18 Jul 1954 (VLAD);

no data: 4 specimens (ZIP).

M e a s u r e m e n t s (19 specimens of the collection ZIP):

	9♂♂	\bar{x}	♀	♀	♀	7 ?sex	\bar{x}
wing	70-76	72.5	74	71	71	68-75	72.9
tarsus	21-24	21.7	19.5	20	20	18-22	20.6
bill	11-14	12.4	10	12	12	11-12	11.3
tail	61-65	63.9	65	64	64	60-68	65.0

Breeding, passage migrant and rare wintering species. Observed from 6 Apr till 26 Oct. All observations between mid-Jun and the end of Aug indicate nesting since this is the time when this species breeds (PANOV 1973, SOKOLOV & SOKOLOV 1987). It was also recorded on 20 Feb (Pyongan South Province) and 13 Mar (Chagang Province), indicating that this species very rarely winters. Wintering of single individuals on the Korean Peninsula is also indicated by records from the 1st half of the 20th century (see: AUSTIN 1948).

The Grey-hooded Bunting is a common breeding species in all bordering areas i.e. in China, Russia and South Korea (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, PANOV 1973, MIKHAILOV et al. 1998, NECHAEV 1998a, WON Pyong-Oh 2000, DISTRIB. 1981, MORIOKA 2000). Till now the wintering area was given as the southern Japanese Islands (KANOUCI et al. 1998, MORIOKA 2000), southern China and areas farther south (VAURIE 1959, MEYER DE SCHAUENSEE 1984, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). Perhaps the wintering area should be increased to cover the Korean Peninsula as indicated by birds wintering here.

324. *Emberiza pusilla* PALLAS, 1776

Little Bunting

Data:

Pyongyang (I): Taesongsan (I-6): 7 May 1959 (WON);

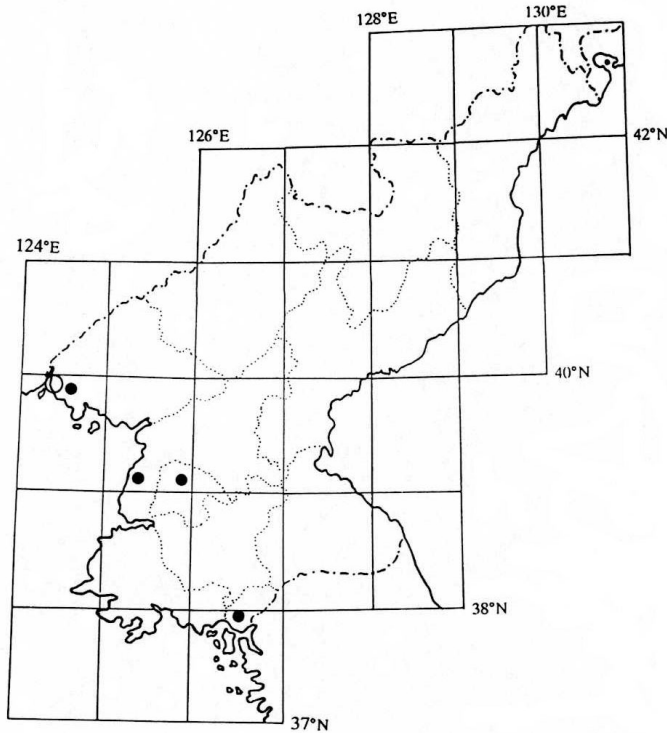
Pyongan South (II): Janganri (*II-19): 27, 29 Apr 1958 (ZIP);

Pyongan North (III): Haksori (*III-10): 26, 27 Apr 1958 (ZIP), Ryongampho (III-15): 28 Apr-6 May 1929 (AUST, WON), 8 May 1949 (WON);

Kaesong (XI): Kaesong (XI-1): 20 Oct 1965 (ZIP).

M e a s u r e m e n t s (5 specimens of the collection ZIP):

	♂	♂	♂	♂	?sex
wing	65	71.5	74	74	74.5
tarsus	17.4	17	18	19	19
bill	10	10	10	8.5	9
tail	57	57	68	60	59



325. *Emberiza chrysophrys* PALLAS, 1776
Yellow-browed Bunting

Data:

Pyongan South (II): 14 May 1917 (AUST);

Pyongan North (III): 2 May 1929 (AUST), Jangmori (III-6): 2 Apr 1958 (ZIP);

Hamgyong North (VI): 10 May 1928 (AUST).

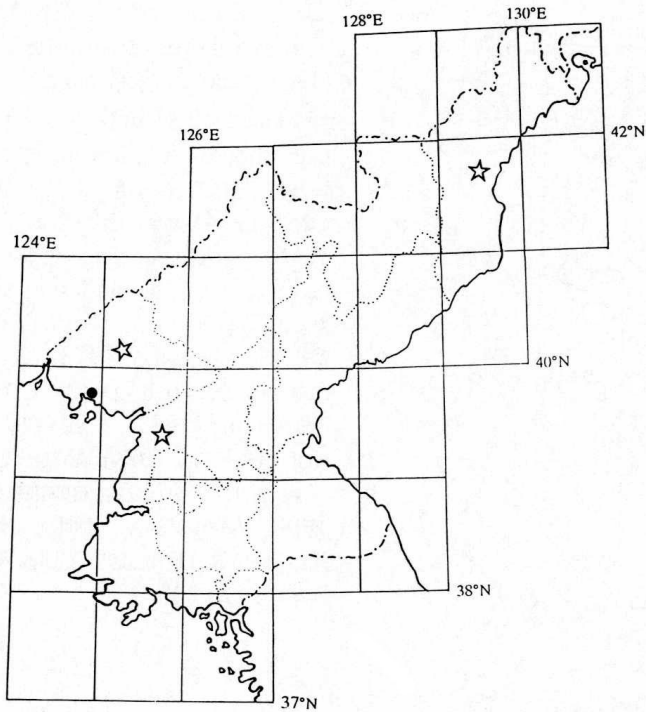
M e a s u r e m e n t s (1♂ of the collection ZIP): wing 76, tarsus 19, bill 12, tail 62 mm.

Rare passage migrant. To date observed only during spring passage (2 Apr-14 May, 4 records). Probably it appears more often than the existing records. This is indicated by data from the southern part of the peninsula: this species was not recorded during the 1st half of the 20th century (AUSTIN 1948), while during more intensive avifauna research done at the end of the sixties several dozen records of its presence were made (GORE & WON Pyong-Oh 1971). The Yellow-browed Bunting appears so often in the south of the peninsula that it indicates that probably its migration route from the Lena River basin in east central Siberia (DEMENTEV & GLADKOV 1951-1954, FLINT et al. 1968)

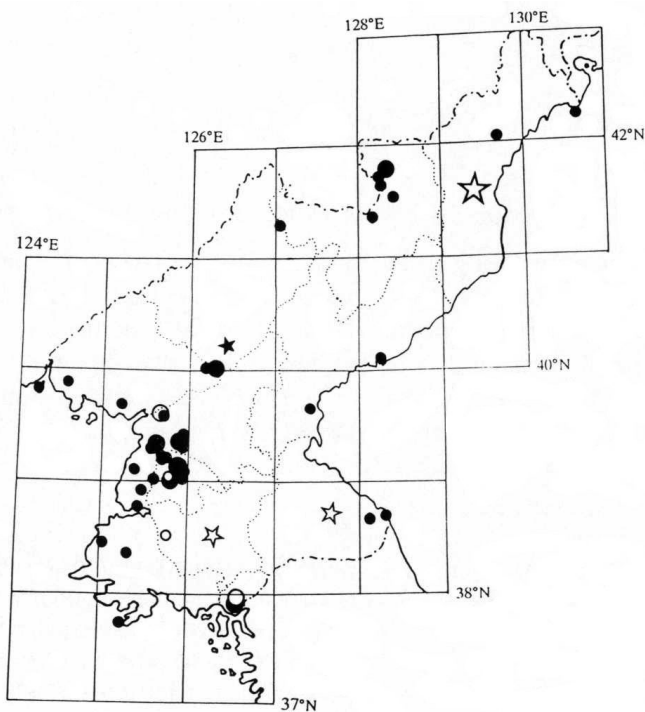
Rare passage migrant. Observed during spring (26 Apr-8 May, 7 records) and autumn (20 Oct, 1 record)²⁴ passage.

The Little Bunting is a nesting species of northern Asia (DEMENTEV & GLADKOV 1951-1954) and in areas adjacent to North Korea it is known only as passage and wintering species (GORE & WON Pyong-Oh 1971, PANOVA 1973, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MEYER DE SCHAUSENSEE 1984, WOO Yong-Tae et al. 1997, KANOUCI et al. 1998, MORIOKA 2000, MAC-KINNON & PHILLIPS 2000, WON Pyong-Oh 2000).

It is difficult to support WON Hong-Koo's (1965) statement, repeated by O Hung-Dam (1988), which seems to make Little Bunting a breeding species in North Korea. WON Hong-Koo supports his opinion on the basis of a record of MORI from 7 Aug 1929 in Chailbong, Hamgyong South Prov. The record referred to however is omitted by AUSTIN (1948). During the 1st 10 days of Aug Little Bunting is still in the breeding area and it would be difficult to explain its presence so far from its nesting area. Probably there is some mistake although who made it and when is unknown (e.g. mistaken identification, wrong date, rewritten incorrectly etc.)



326. *Emberiza rustica* PALLAS, 1776
Rustic Bunting



also crosses the Korean Peninsula (AUSTIN 1948, ETCHECO-PAR & HÜE 1983 and CHENG Tso-Hsin 1987 felt that the Yellow-browed Bunting migrates south by-passing the Korean Peninsula).

Data:

Pyongyang (I): Pyongyang (I-1): 25 Apr 1949 (WON), 15 Oct 1955, 27 Apr 1957 (ZIP, but: 20 Oct 1955, 28 Jan 1956, 14 Mar 1957 – ZIP cited by WON), Apr 1999, Nov 2000 (DUCK), Songmunri (*I-2): 23 Oct 1956, Samsok (I-5): 28 Jan, 3 Oct 1963, Taesongsan (I-6): 20 Oct 1955, 19, 28 Jan 1956, 14 Mar 1957 (ZIP), 25 Oct 1986 (TOM), Sunan (I-8): 20 Mar 1957 (WON), Hari (*I-8): 26 Oct 1956, Masanri (*I-8): 25 Oct 1956 (ZIP), Ryongaksan (I-10): 2 Apr 1989 (FIEB);

Pyongan South (II): Othanri (*II-11): 22 Nov 1954, Jasan (II-12): 5, 12 Nov 1953, 12, 17, 18, 20, 22 Feb, 2, 3, 5, 9, 13, 15, 26 Mar, 1, 7, 10, 13, 15 Apr, 10 Oct 1954, 1 Mar 1957 (ZIP), 12 Mar 1954 (MAUERS), Paeksongri (II-13): 12 Feb 1955

(ZIP), Anju (II-16): 20 Apr 1931, 25 Jan, 5 Feb, 10 Mar 1932, 10 May 1933 (WON), 25, 26 Nov 1989 (STEP), Pyongwon (II-17): 5 Mar 1951 (WON), Sori (*II-17): 14 Mar 1955, 20 Mar 1957 (ZIP), Chungsan (II-19): 19, 22 Mar 1958 (WON), Nampho (II-26): 31 Jan 1995 (PERT), Taesong-ho (II-28): 17 Oct 1978 (TOM);

Pyongan North (III): Jongju (III-3): 21 Sep 1951 (WON), Haksori (*III-10): 20 Mar 1958, Sindo (III-14): 12 Oct 1961 (ZIP), Hyangsan (III-23): Oct-Dec 2000 (DUCK), Myohyangsan (III-24): 10 Feb 1956 (WON), 11 Apr, 15 Jun 1956, 1979 (ZIP);

Chagang (IV): Nov 2000 (DUCK), Karimri (*IV-2): 19, 27, 30 Mar, 17 Oct 1958 (ZIP), Okasan (IV-3): 19 Mar, 28 Oct 1958 (HO, or: 17, 28 Oct 1958 – HO Hon cited by WON; see footnote 2, page 20);

Ryanggang (V): Hyesan (V-5): 20 Oct 1978 (TOM), Naegokri (V-7): 18, 19 Oct 1986 (TOM), Photae (V-8): 22, 23 Oct 1958, Rimyongsu (V-9): 15 Oct 1958, Samjiyon (V-10): 6 Apr, 12 Oct 1964, 2 Apr 1966 (ZIP), 22 Oct 1978 (TOM), no date (HO);

Hamgyong North (VI): 17 Dec 1915, 2-27 Oct 1929 (AUST), Sosura (VI-5): 3 Mar 1959 (WON), Puryong (VI-16): Jul 1984 (ZIP);

Hamgyong South (VII): Sinpho (VII-16): 17 Oct 1969, Sinsang (VII-33): 19 Mar 1958 (ZIP);

Kangwon (VIII): 25, 26 Nov 1929 (AUST), Samil-pho (VIII-7): 9 Oct 1978 (TOM), Onjongri (*VIII-8): Apr (FIEB);

Hwanghae North (IX): Sariwon (IX-16): 25 Jan 1949, Kaedong (IX-?): 18 Apr 1949 (WON);

Hwanghae South (X): Paekhyonri (*X-10): 7 Nov 1957 (ZIP), Kwail (X-13): 4 Feb 1990 (FIEB), Sunwiri (X-16): 29 Oct 1962 (ZIP);

Kaesong (XI): Kaesong (XI-1): 6 Feb 1928, 15 Feb, 2, 5 Sep 1929, 20 Feb, 4 Apr 1930 (WON), 30 Jan, 7 Apr 1962, 26 Jan 1966 (ZIP);

no locality: 7 Apr 1957 (VLAD), 9 Oct 1964 (ZIP).

M e a s u r e m e n t s (41 specimens of the collection ZIP, 8 specimens of the collection and card-index ISEA, 1 specimen of the collection MZB):

	20♂♂	\bar{x}	13♀♀	\bar{x}	17 ?sex	\bar{x}
wing	68-81	76.1	71-79	75.8	71-83	76.0
tarsus	17-21	18.6	17-20	18.5	17.5-22	18.8
bill	9.5-12	10.6	9-11	10.3	9-11	10.3
tail	54-67	58.6	55-61	57.9	48-64	56.8

Common passage migrant and wintering species. Observed outside the breeding period (the earliest 21 Sep, the latest 10 May) i.e. during spring and autumn migration as well as in winter²⁵. At least 19 records in Jan and Feb as well as the observations of FIEBIG (1995) and DUCKWORTH

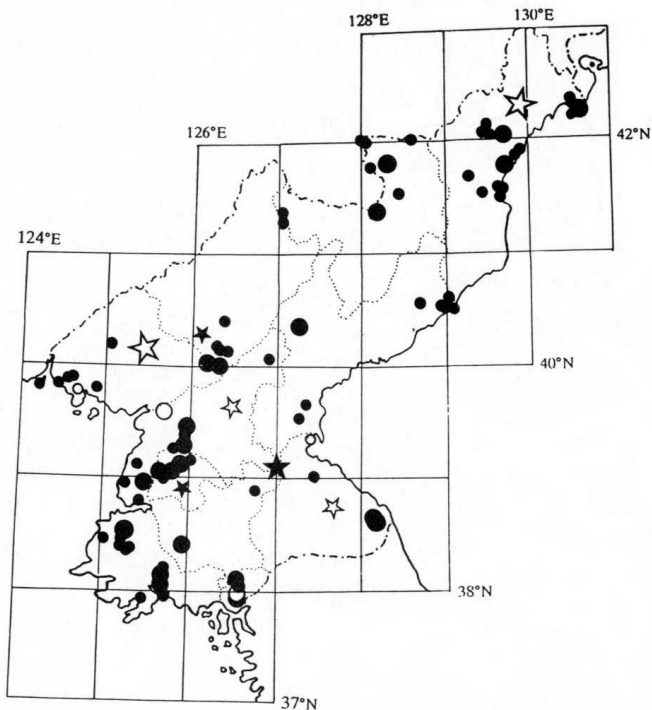
25

According to WON Hong-Koo (1965) Rustic Bunting was also recorded in Jun and Jul in Ryanggang Prov where there was reportedly nesting. Furthermore in the ZIP collection are 3 skins with Jun and Jul dates on the labels: 2 of them were taken in Puryong (prov. Hamgyong North) and 1 in Myohyangsan Mts. It is difficult to support WON Hong-Koo's (1965) opinion of nesting in the Samjiyon region because the skins in the ZIP collection collected in Samjiyon during breeding period are labeled incorrectly (in reality they were specimens of *Emberiza tristrami*). However it is difficult to explain the presence of the Rustic Bunting in Myohyangsan and Puryong. Although one can not eliminate the insular nesting of this species, due to the great distance from known nesting sites (see: PORTENKO & STÜBS 1971b, NECHAEV 1991) and the practice of rewriting specimen labels in the ZIP collection (and at the same time throwing away the originals), resulting in mistakes, the data from the breeding period needs to be treated with cautiously. Therefore without certain evidence of nesting one can not include the Rustic Bunting in the breeding fauna of North Korea.

(pers. comm.) indicate that it is a regular wintering species (probably more numerous in western provinces than in the northeast).

The Rustic Bunting is also a common passage migrant in all bordering countries (GORE & WON Pyong-Oh 1971, PANOV 1973, NECHAEV 1998a, ETCHECOPAR & HÜE 1983, MEYER DE SCHAUENSEE 1984, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, MORIOKA 2000, WON Pyong-Oh 2000). It also belongs to the wintering species with differences concerning its numbers: in Primorye the Rustic Bunting is an uncommon and not regular winter visitor (PANOV 1973, NECHAEV 1998a), while in South Korea it is a numerous species encountered in winter (GORE & WON Pyong-Oh 1973, HAM Kyu-Hwang & HA Kyung-Sam 1991, WON Pyong-Oh 2000). Therefore the northeast border of wintering grounds of the Rustic Bunting crosses probably North Korea (in areas adjacent to North Korea, the Chinese Provinces of Liaoning, Jilin and Heilongjiang, this species is known only as passage migrant – ETCHECOPAR & HÜE 1983, MEYER DE SCHAUENSEE 1984, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000).

327. *Emberiza elegans* TEMMINCK, 1835
Yellow-headed Bunting



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): 11 May 1980 (MAUERS), winters 1986-1988 (CHON Gil-Pyo 1988), 11, 25 Apr (FIEB), May 1999, Aug-Dec 2000 (DUCK), Ponghwari (I-4): 5 Jun 1987 (TOM), Taesongsan (I-6): 15 Mar 1955, 11 Jan 1979 (ZIP), 25 Oct 1986 (TOM), no date (FIEB), Ryongaksan (I-10): 7 May 1980 (MAUERS), 6 Oct 1984 (TOM), Mankyongdae (I-11): 3 Jun 1963 (ZIP), Sogam (I-15): 24 Oct 1984 (TOM);

Pyongan South (II): Sopaekri (*II-3) 16 Jun 1960, Ankukri (*II-11): 20, 29 Oct 1955, 17 Apr 1956 (WON), Jasan (II-12): 9, 26 Mar, 2 Apr 1954 (ZIP), Paeksongri (II-13): 22 Apr 1953, 12 Feb-9 Jun 1954 (WON), 15 Mar 1956 (ZIP), Anju (II-16): 7 Jul 1929, 27 Oct, 14 1932, 22 Mar 1939, Phungjongri (*II-19): 23 Mar 1958 (WON), Ansokri (II-23): 24 Mar 1958 (ZIP), Nampho (II-26): 2 Apr 1990, no date (FIEB), Taesong-ho (II-28): 16, 17, 27 Oct 1978, 13-15 Jul 1983, 16 Oct 1984 (TOM), 23 May 1989 (FIEB), Yangdok (II-?): 3 Feb 1949 (WON);

Pyongan North (III): 8 Jun 1917, 3-13 Apr 1929 (AUST), Jongkongri (*III-6): 2 May 1958, Cholsan (III-9): 23 Jan 1949, Pankungri (*III-10): 8 Apr 1958, Chongpalri (*III-10): 5 Jun 1959 (WON), Tasari (III-11): 21 Mar 1958, Mumyongpyong (*III-14): 29 Mar 1961, Chonmasan (III-20): 15 Jun 1961 (ZIP), Hyangsan (III-23): 3-5 Oct 1986, 13 May 1987 (TOM), Sep 2000 (DUCK), Myohyangsan (III-24): 23 Apr 1951, 7 Mar, 21 Apr, 2, 17, 24 May, 14 Jun, 19 Sep, 14 Oct 1956, 20 Mar, 1, 25 Jun 1957, 10 May, 10 Sep 1979 (ZIP), 25 May 1980,

6-18 Jun 1983, 6 Oct 1986 (TOM), 10 Apr 1987 (GLOW), 16 Jun 1990, 6 May (FIEB), 8-12 Aug 1991 (BÁLDI), 28, 30 May 1997 (PERT), Apr 1999, Oct-Dec 2000 (DUCK);

Chagang (IV): Nov 2000 (DUCK), Karimri (*IV-2): 11, 18 Sep 1958 (ZIP), Okasan (IV-3): 21 Mar 1958 (HO or: 11 Sep-11 Oct 1958 – HO Hon cited by WON; also see footnote 2, page 20), Myongmun (IV-6): 17 May 1987, Masonri (IV-9): 13 May 1987, Huichon (IV-10): 16-18 May 1987, Chongsan (*IV-10): 14 May 1987 (TOM);

Ryanggang (V): Ryongjori (V-2): 24 Mar 1958 (ZIP), Hyesan (V-5): 12 Oct 1986, 24 Sep 1991, Naegokri (V-7): 12-18 Oct 1986 (TOM), Samjiyon (V-10): 16 Oct 1958, 6 Apr 1965 (ZIP), 23, 24 Oct 1978, 13 Oct 1986, 25-30 Sep 1991 (TOM), no date (HO), Paekdusan (V-12): 13 Oct 1986 (TOM), Nongsari (*V-12): no date (HO), Mupo (V-20): 28 Sep 1991, Homultang (V-21): 27 Sep 1991 (TOM);

Hamgyong North (VI): 28 Jun, 18 Oct 1917, 27 Jul-21 Aug, 27 Aug, 15-21 Oct 1929 (AUST), Manpo (VI-2): 9 Apr 1996 (EDW), Kulphori (VI-4): Apr 1961, Sosura (VI-5): Apr 1959, 28 Mar-1 Jun 1959 (WON), Pipa (*VI-6): 9 Apr 1996 (EDW), Chayuryong (VI-13): 7 Jul 1983, Dongsakol (*VI-14): 30 Jun-2 Jul 1983, Mayang (VI-15): 29 Jun 1983 (TOM), Puryong (VI-16): 14 Sep 1956, 6 Jun 1984 (ZIP), Koanjuryong (VI-18): 28 Jun, 6 Jul 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), 2-6 Oct 1991 (TOM), Kwanmobong (VI-22): 8 Jun 1959, Honphori (*VI-25): 27 Sep 1955 (ZIP), Osangri (*VI-25): 4 Oct 1991, Mehyangri (VI-27): 27 Jun 1983, Ryongchonri (VI-35): 6 Oct 1991 (TOM), Ryonghyonri (VI-36): 5 Oct 1991 (TOM);

Hamgyong South (VII): Machonryong (VII-5): 26, 27 May 1987, Kwangchon (VII-6): 1 Jun 1987, Tongdokri (*VII-6): 28 May 1987, Sangryong (VII-7): 30 May 1987, Yomsongdok (VII-13): 24 May 1987 (TOM), Jangjin (VII-26): 5 Apr 1953, 26 Oct 1956, Chowonri (VII-34): 29 May 1960, Haejungri (*VII-38): 3 Apr 1960 (WON);

Kangwon (VIII): 30 Jun 1929 (AUST), Sokwangsa (VIII-4): 12 Oct 1978 (TOM), Kungangsan (VIII-8): 10-13 Jun 1980 (TOM), 20-23 Apr 1987 (GLOW), 1-4 Aug 1991 (BÁLDI), 12 Oct 1991 (TOM), Onjongri (*VIII-8): 21 May 1980 (MAUERS), 10 Jun 1980 (TOM), 19 Aug 1984 (KOLBE), 10-14 Oct 1991 (TOM), Yonghung (VIII-14): 12 Nov 1897 (YANK);

Hwanghae North (IX): Sinpyong (IX-1): 13 Oct 1978, Sohungho (IX-7): 26 Sep 1978, 25 May 1987 (TOM);

Hwanghae South (X): Kuwolsan (X-6): 30 May 1957 (ZIP), Apr 1999 (DUCK), Woljongri (X-8): 27 May 1957 (WON), Talchonri (X-9): 29 May, 26 Jun 1957, Tonghyongri (*X-10): 9 Nov 1957, Ungyesan (*X-10): 2 Apr 1963 (ZIP), Kwait (X-13): 4 Feb 1990 (FIEB), Kangryong (X-19): 1962 (ZIP), Hyongchesom (X-20): 13 Oct 1984 (TOM), Haeju (X-22): Apr 1987 (GLOW), 1 Mar 1990 (FIEB), Suyangsan (X-24): 30, 31 May 1980, 14 Oct 1984, Changsu (X-25): 14 Oct 1984 (TOM);

Kaesong (XI): Kaesong (XI-1): 8 Oct 1928, 25 Jan, 18 Feb 30 Mar, 7 Jun, 29 Dec 1929 (WON), 21 Oct 1984 (TOM), 24-25 Aug 1991 (BÁLDI), Pagyon (XI-3): 19 Jun 1963 (ZIP), 15 Aug 1984 (KOLBE), 21-22 Oct 1984 (TOM), 22 May 1997 (PERT), Kongminghang (XI-7): 20 Oct 1984 (TOM);

no locality: 19 May 1956 (VLAD), “mix forests” 1987-1990 (FIEB), “common and most numerous of buntings” Apr-May 1987 (GLOW);

no data: 8 specimens (ZIP).

M e a s u r e m e n t s (39 specimens of the collection ZIP, 86 specimens of the collection and card-index ISEA):

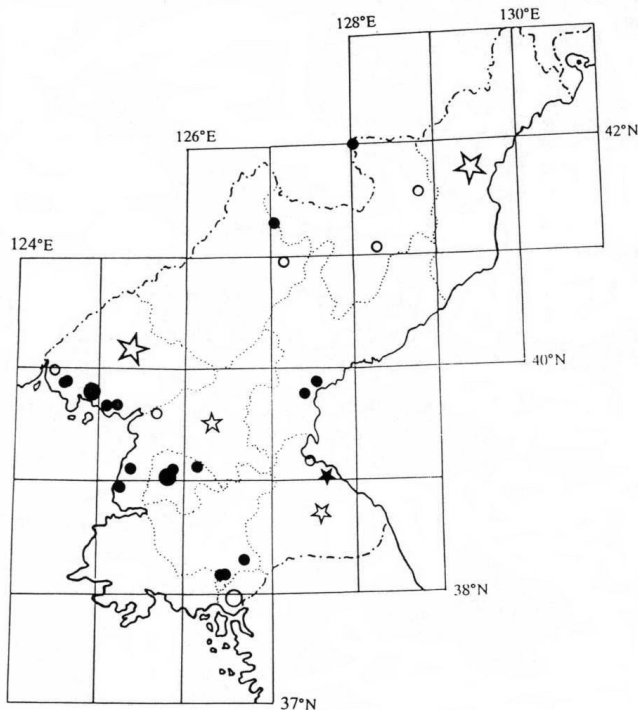
	65♂♂	\bar{x}	37♀♀	\bar{x}	23♀ or ♂ subad	\bar{x}
wing	66-82	73.6	69-78	73.8	66-78	71.6
tarsus	18-22	20.0	18-21	19.6	18-22	19.5
bill	8.5-12	9.8	9.5-11.5	10.2	8.5-12	9.8
tail	60-78	69.6	55-71	62.1	63-74	67.9

Common breeding, passage migrant and wintering species. It is one of the most frequently encountered and numerous buntings in North Korea. It nests throughout the whole country and during the winter it lives in flocks, often mixed with other species (FIEBIG 1995).

The Yellow-headed Bunting is a species northern population of which migrates for wintering (some systematics including VAURIE 1959, HOWARD & MOORE 1991, consider it a separate subspecies *Emberiza elegans ticehursti* SUSHKIN, 1925), however the resident southern population (counted as subspecies *Emberiza elegans elegans* TEMMINCK, 1835) inhabits among others Japan and the Korean Peninsula (WON Hong-Koo 1965, PANOV 1973, PORTENKO & VIETINGHOFF-SCHEEL 1978, TOMEK 1984, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, VOLOSHINA et al. 1999, MORIOKA 2000, WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000). Taking into consideration nomadizing flocks outside nesting areas and data of TOMEK (1984) and FIEBIG (1995) concerning the changes in plumage color of birds caught in North Korea, it is not possible at the moment to determine to which subspecies belong birds recorded in postbreeding season: migrant, resident, or both. The relatively small numbers of records in the winter suggest that part of the nesting birds leave the breeding grounds for the winter, therefore belonging to the form *Emberiza e. elegans* also partially migrate. Therefore more detailed research (e.g. DNA) is required for subspecies division because: measurements, plumage color, breeding area or finally "migrant" or "resident" do not clearly divide them into two separate forms (FIEBIG 1995) and perhaps these do not need to be divided into two subspecies (see: SIBLEY 1996, CLEMENTS 2000).

328. *Emberiza aureola* PALLAS, 1773

Yellow-breasted Bunting



Data:

Pyongyang (I): Pyongyang (I-1): Oct 1984 (TOM), 21 May 1990 (FIEB), Ryongammyon (*I-3): 11 May 1950 (WON), Taesongsan (I-6): 8 Oct 1986 (TOM);

Pyongan South (II): 13-20 May 1917, 20 May 1917 (AUST), Anju (II-16): 25 May 1933 (WON), Pansokri (*II-19): 4 May 1958, Ansokri (II-23): 5 May 1958 (ZIP);

Pyongan North (III): 31 May, 8 Jun 1914, 30 Apr-31 May 1929 (AUST), Jongju (III-3): 24 May 1955, Kwaksan (III-4): 14 May 1955, Sonchon (III-6): 14, 22 May 1955, 3 May 1958, Haksori (*III-10): 8 May 1958, Pankungri (*III-10): 5 May 1958 (ZIP), Yangsi (*III-13): 28 May 1949 (WON);

Chagang (IV): Okasan (IV-3): 19 Sep 1958 (WON), Rangnim (IV-5): 9 Sep 1897 (YANK);

Ryanggang (V): Nongsari (*V-12): no date (HO), Paegam (V-16): 23 Jun 1897, Kapsan (V-19): 10 Aug 1897 (YANK);

Hamgyong North (VI): 15-24 May 1912, 4, 17, 25 Sep 1917, 2 Aug 1929 (AUST);

Hamgyong South (VII): Hamhung (VII-30): 14 Sep 1989, Kwangpo (*VII-31): 15 Sep 1989 (FIEB);
 Kangwon (VIII): 6 Sep-9 Oct 1914 (AUST), Wonsan (VIII-3): 19 Sep, 8 Oct 1897 (YANK),
 Wonsan-Anbyon (VIII-3-17): 19 Apr 1987 (GLOW);

Hwanghae North (IX): Thosan (IX-12): 19 May 1962, Kumchon (IX-13): 19 May 1962, Kumkyo
 (*IX-13): 19 May 1962 (ZIP);

Kaesong (XI): Kaesong (XI-1): 27 May 1927, 8 May 1929 (WON);
 no data: 2 pairs (GLOW).

M e a s u r e m e n t s (12 specimens of the collection ZIP, 3 specimens of the collection ISEA):

	8♂♂	\bar{x}	♀	♀	♀	?sex	?sex	imm	imm
wing	75-79	77.1	73	71	73	68	70	73	71
tarsus	20-21.5	20.6	20	20	18.5	19	19	22	19
bill	11.5-13	11.9	10.5	10	12	10	12	10	10.5
tail	57-64	59.9	58	57	62	55	–	60	57

Passage migrant and probable breeding species in northern provinces. Species observed from 19 Apr to 9 Oct. In areas north of the Korean Peninsula flocks of migrating birds were encountered in spring from Apr up till mid-May, and in North Korea FIEBIG (1995) as late as 21 May observed a flock of migrating Yellow-breasted Buntings. Thus most records include the migration period of this species. Only records from Jun and the beginning of Aug could deal with breeding birds. All such records come from the 1st half of the 20th century (see: AUSTIN 1948). Furthermore, with the exception of the presence of young birds in Hamgyong North Province there is no direct evidence of nesting. Nesting of the Yellow-breasted Bunting in northern provinces is very probable since it is a common breeding species in areas bordering North Korea i.e. in China (PORTENKO & STÜBS 1971c, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000) and southeast Russia (PANOV 1973, NASAROV & LABZYUK 1975, GLUSCHENKO 1979, ELSUKOV 1984, KNYSTAUTAS & SHIBNEV 1986, WON Pyong-Oh et al. 1993, 1997, NECHAEV 1998a). It is not probable that the rivers Amnok and Tuman create both a national border as well as a distribution border for this species. However to include the Yellow-breasted Bunting in the breeding fauna requires confirmation (in consideration of the archaic data from the breeding period).

In the southern part of the Korean Peninsula the Yellow-breasted Bunting to date was registered only during migration (WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000) and also in winter (KIM Hyun-Tae et al. 1996). It is therefore very probable that the southeast border of nesting grounds of this species crosses North Korea.

329. *Emberiza rutila* PALLAS, 1776

[*Euspiza rutila*, *Hypocentor rutilus*]

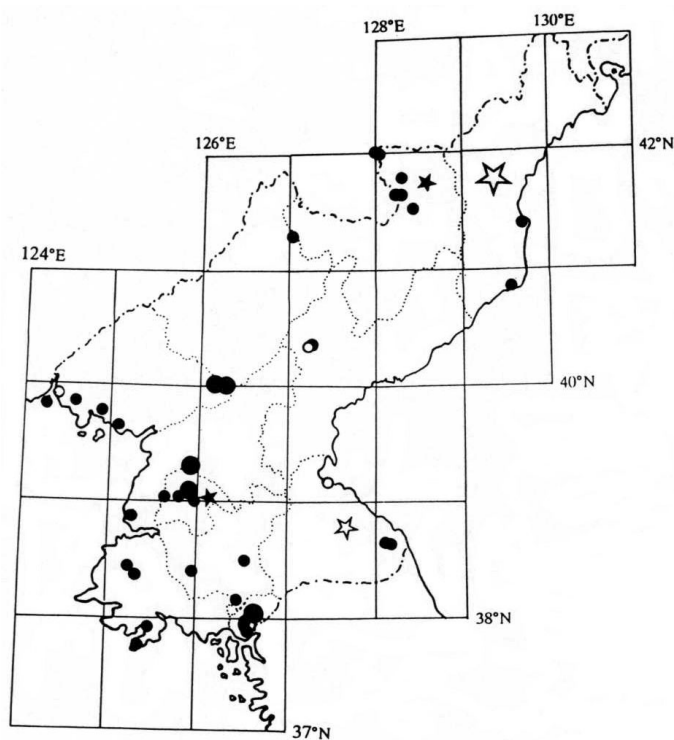
Chestnut Bunting

Data:

Pyongyang (I): Aug 1991 (BALDI), Pyongyang (I-1): 21 May 1988 (FIEB), Sungho (I-2): 4 May 1956, Taesongsan (I-6): 21 May 1955 (WON), 3 Oct 1968 (ZIP), Ryongaksan (I-10): 6 Oct 1984 (TOM);

Pyongan South (II): Paeksongri (II-13): 10 Oct 1952, 10 Apr 1953, Ryonggang (*II-24): 21-28 Sep 1954 (WON);

Pyongan North (III): Kwaksan (III-4): 18, 19, 20 May 1955, Sonchon (III-6): 17, 28 May 1955, Haksori (*III-10): 10 May 1958, Sindori (*III-14): ?Dec 1961 (ZIP – see footnote 26), Ryongampho (III-15): 10 May-4



Jun (AUST, WON), Hyangsan (III-23): 5 Oct 1986 (TOM), 12 May 1990 (FIEB), Myohyangsan (III-24): 14, 16 May 1957 (ZIP), 8-12 Aug 1991 (BÁLDI);

Chagang (IV): Karimri (*IV-2): 19, 20 Sep 1958 (ZIP), Okasan (IV-3): 9, 20 Sep 1958 (HO; see footnote 2, page 20);

Ryanggang (V): Naegokri (V-7): 16, 17 Oct 1986 (TOM), Photae (V-8): 10 Aug 1965 (ZIP), Namphotae (*V-8): no date (HO), Samjiyon (V-10): 12 May 1965 (ZIP), no date (HO), Paekdusan (V-12): 6 Aug 1987 (JIN Dok-Jun & O Hung-Dam 1990), Nongsari (*V-12): no date, Jungamsan (V-?): no date (HO);

Hamgyong North (VI): 23 Aug-14 Sep 1914, 16 May 1918 (AUST), ?Musan (VI-12): no date (WON cited by AUST, but WON does not mention this observation in his later publications), Mayonho (*VI-29): 26 Sep 1989 (FIEB), Hapyongri (VI-31): 16 Sep 1959

(ZIP);

Hamgyong South (VII): Jangjin (VII-26): Aug 1916, 29 Sep 1957 (WON);

Kangwon (VIII): 3 Oct 1914 (AUST), Wonsan (VIII-3): 23 Sep 1897 (YANK), Kumgangsán (VIII-8): 8 Oct 1978 (TOM), Onjongri (*VIII-8): 20, 23 May 1980 (MAUERS);

Hwanghae North (IX): Sohungho (IX-7): 22 May 1987 (TOM), Singye (IX-10): 20 May 1962, Kumkyo (*IX-13): 17 May 1962 (ZIP);

Hwanghae South (X): Woljongri (X-8): 13 Sep 1957, Kohyonri (*X-10): 16 May 1957, Tongamri (X-17): 25 Jul 1962 (ZIP), Kangryong (X-19): 25 Oct 1962 (WON);

Kaesong (XI): Kaesong (XI-1): Apr 1929, 16 May, 18 Oct 1930 (WON), 21 Oct 1984 (TOM), Pagyon (XI-3): 13 May 1957 (WON), 23, 24, 25 May 1997 (PERT), Kongminghang (XI-7): 16 May 1980 (MAUERS); no data: 1 specimen (ZIP).

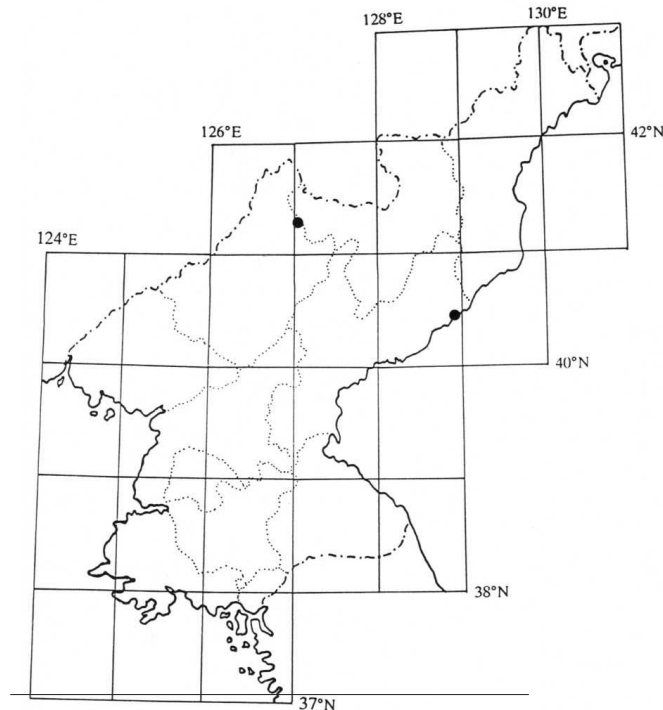
M e a s u r e m e n t s (24 specimens of the collection ZIP, 3 specimens of the collection ISEA):

	16♂♂	\bar{x}	11♀♀	\bar{x}
wing	70-77	73.8	65-72	68.9
tarsus	17-21	19.2	17-19	18.2
bill	9-12	10.4	8-12	10.7
tail	50-64	56.5	51-62.2	54.5

Passage migrant. Dates of observation in North Korea are: from 10 Apr to 4 Jun and from 6 Aug to 25 Oct²⁶. This species flies very late for breeding grounds: in Primorye passage birds were seen till the end of May (PANOV 1973). Thus all records from North Korea deal rather with migrating birds. Even though WON Hong-Koo (1965) felt that the Chestnut Bunting nested in northern provinces of the Korean Peninsula he did not give any evidence except observations in May and the beginning of Jun. Therefore without reliable documentation one can not include this species in the breeding fauna of North Korea.

The Chestnut Bunting nests in northeastern Asia, among other areas north of the Ussuri river region (KNYSTAUTAS & SHIBNEV 1986), the Sikhote-Alin Mountains (KOBLIK & MIKHAILOV 1994, MIKHAILOV et al. 1997a, VOLOSHINA et al. 1999) and irregularly in small number in South Primorye (NAZARENKO 1971c). In China and South Korea this species is known only as a passage migrant (GORE & WON Pyong-Oh 1971, ETCHECOPAR & HÜE 1983, MEYER DE SCHAUSENSEE 1984, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, WON Pyong-Oh 2000)²⁷.

330. *Emberiza sulphurata* TEMMINCK et SCHLEGEL, 1848
Japanese Yellow Bunting



Data:

Chagang (IV): Okasan (IV-3):
?19 Sep 1958 (HO);

Hamgyong South (VII): Tanchon
(VII-8): 24 May 1987 (TOM).

M e a s u r e m e n t s
(1 specimens of the collection
ISEA): wing 69, tarsus 18.5, bill
10 mm.

V a g r a n t. Probably to
date seen only twice. Apart from
a dead bird found in Tanchon
(died mid-May, found a few
days after died), there exists
only one problematic record in
Okasan (HO Hon 1960). The
author's notes give only the spe-
cies name and date of record

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In the ZIP collection is a skin dated Dec 1961. This date can be ignored because WON Hong-Koo, who wrote his monograph about Korean birds (1963-65) based on his and his colleagues' own collection, did not mention a winter record. Probably there was a mistake in rewriting the label. Furthermore wintering of this species, which winter in southern China, is not probable (DEMENTEV & GLADKOV 1951-54, VAURIE 1959, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000)

27

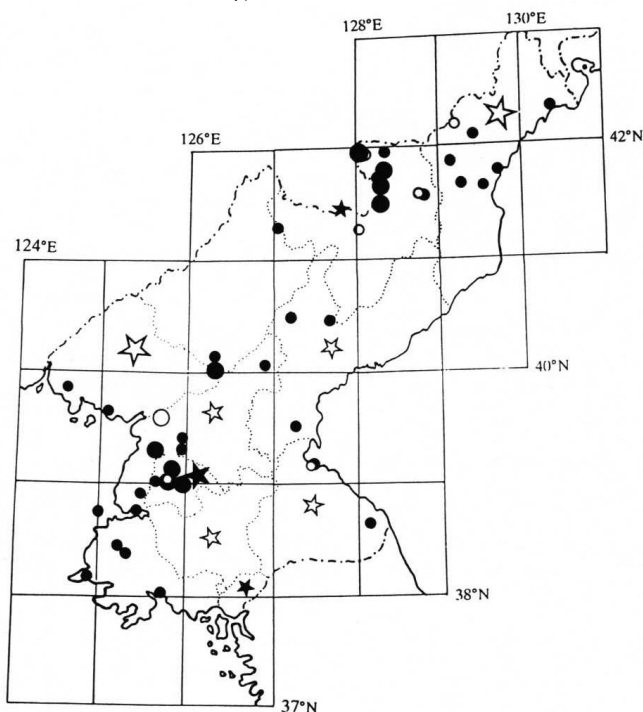
Perhaps there is insular nesting on the islands of South Korea. PAEK Woon-Kee et al. (1996) write that birds built nests on Hong Is., Kyongsang South Prov., yet at the same time gave this species "passage migrant" status.

(with no diagnostic details) and WON Hong-Koo in his monograph (1965) does not mention it.

The Japanese Yellow Bunting nests on the Japanese Islands (DISTRIB. 1981, MORIOKA 2000). On the continent it is not mentioned in Primorye (NECHAEV 1998a) and is known only as a migrant or wintering in southeast China (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987) or uncommon passage migrant in the southern part of the Korean Peninsula (KIM Hyun-Tae et al. 1996, WON Pyong-Oh 2000). Japanese Yellow Bunting nests south of 41°N (DISTRIB. 1981) thus North Korea, which lays west of the breeding grounds lies outside the migration route and clearly in the northern part of the Korean Peninsula the appearance of this species is an exception. The Japanese Yellow Bunting is in global danger of extinction, its total population is not more than 10,000 pairs (with a tendency to fall – BIRD LIFE INTERNATIONAL 2000). Thus it is improbable that this species will appear more frequently in North Korea.

331. *Emberiza spodocephala* PALLAS, 1776

Black-faced Bunting



Data:

Pyongyang (I): 1 Oct 1954 (WON), Sep 1978 (TOM), Pyongyang (I-1): 25 Apr 1949, 15 Oct 1955 (WON), 27 Sep 1957 (ZIP), 17 May 1980 (MAUERS), 22, 23 Jun 83 (TOM), 2 May 1987 (GLOW), 24 Apr-May 1999, Sep 2000 (DUCK), 11, 25, 27 Apr, 1 May (FIEB), Songmunri (*I-2): 7 Oct 1955, 5 Apr 1957, Taesongsan (I-6): 30 Apr 1950 (WON), 15, 16 Sep 1979 (ZIP), 8 Oct 1986 (TOM), Ryongaksan (I-10): 29 Sep 1988 (FIEB);

Pyongan South (II): 18 May 1917 (AUST), Taehung (II-3): 16 Jun 1960 (WON), Jehyonri (*II-11): 28 Apr 1957 (ZIP), Paeksongri (II-13): 31 Apr 1953, Anju (II-16): 11 Apr, 4 May 1931, 11 May 1933, Pyongwon (II-17): 29 Apr, 1 May 1951, 26 Apr 1957 (WON), Tokto (II-25): breeding season 1995 (CHONG

Jong-Ryol et al. 1996), Nampho (II-26): 11, 13 May 1980 (MAUERS), Taesong-ho (II-28): 17 Oct 1978 (TOM);

Pyongan North (III): 12 Jun 1912, 13 Apr-6 May 1929 (AUST), Kwaksan (III-4): 16 May 1955, Yomju (III-10): 23 Apr, 2 May 1958 (WON), Myohyangsan (III-24): 13 May 1989, 3, 4, 18 Jun, 1 Jul 1990, Apr, May (FIEB), Apr 1999 (DUCK);

Chagang (IV): Karimri (*IV-2): 17 Apr, 8 May 1958 (ZIP), Okasan (IV-3): 17 Apr, 8 May 1958 (HO; see footnote 2, page 20), Huichon (IV-10): 18 May 1987 (TOM);

Ryanggang (V): Samsu (V-4): 20, 29 Jul 1897 (YANK), Jongbong (*V-6): 17 Jun 1958 (WON), 1 Jun 1980 (TOM), Photae (V-8): 5 Aug 1960 (WON), 20, 30 Sep 1967 (ZIP), Konjang (*V-9): 1 Jun 1980 (TOM), Samjiyon (V-10): 21 Jul 1958, 9, 16 Apr, 9 Jun, 20 Jul 1962, 12, 25, 28, 30 Apr 1965, 4 Apr 1966, 3, 24 Jun 1967 (ZIP), 1-6 Jun 1980, 29 Sep 1991 (TOM), no date (HO), Paekdusan (V-12): 4 Jun 1980 (TOM), 16 Sep

1983, 4, 5 Mar, 8 May 1984 (JIN Dok-Jun & O Hung-Dam 1990), Nongsari (*V-12): no date (HO), Sinmusong (V-14): 19 Jul 1958 (ZIP), Paegam (V-16): 24 Jun 1897 (YANK), Taethaekhosu (*V-16): 13 Sep 1958 (WON), Amnok riv. (V-?): 16 Aug 1989 (FIEB);

Hamgyong North (VI): 26 Apr-31 May 1912, 16-28 Sep 1917, 2 Aug, 7 Aug, 19 Sep-18 Oct 1929 (AUST), Unggi (VI-7): 12 Apr 1959 (WON), Musan (VI-12): 12 Jun 1897 (YANK), Dongsakol (*VI-14): 1-2 Jul 1983 (TOM), Chongjin (VI-19): 29 Sep 1989 (FIEB), Samphori (VI-21): 24 Jul 1959, Kwanmobong (VI-22): 7 Apr 1959 (WON), Onphori (VI-23): 27 Jun 1983 (TOM);

Hamgyong South (VII): 2-15 May 1903 (AUST), Pujon (VII-22): 26, 27 Jun, 6 Jul 1958 (RIM Chun-Hun 1961), Jangjinho (VII-25): Jun 1956 (WON), Togkumari (*VII-38): 20 Apr-24 May 1960 (WON);

Kangwon (VIII): 8 Oct 1914 (AUST), Wonsan (VIII-3): 8 Oct 1897 (YANK), 24 May 1980 (MAUERS), Onjongri (*VIII-8): 22 Apr 1987 (GLOW);

Hwanghae North (IX): Kaedong (IX-?): 14, 18 Apr 1949 (WON);

Hwanghae South (X): Woljongri (X-8): 12, 14 Sep 1958, Kohyonri (*X-10): 16 May 1955, Ryongyon (X-14): 23 Oct 1965 (ZIP), Haeju (X-22): 29 Apr 1987 (GLOW);

Kaesong (XI): 24-25 Aug 1991 (BALDI);

no data: 5 specimens (ZIP).

M e a s u r e m e n t s (28 specimens of the collection ZIP, 10 specimens of the collection and card-index ISEA):

	12♂♂	\bar{x}	8♀♀	\bar{x}	18 ?sex	\bar{x}
wing	68-74	70.5	65-70.5	66.2	66-72	68.9
tarsus	20-26.7	21.6	19-22	20.2	18-21	18.9
bill	9-14	10.8	10-12	10.8	9.5-11.5	10.5
tail	54.5-65	60.2	53-60	58.0	59-69	63.1

Breeding species and passage migrant. Observed from 4 Apr till 23 Oct. Nesting was recorded not only in northern provinces but also in the central part of the country including Pyongyang (TOMEK 1985), Pujon (RIM Chun-Hun 1961) and probably in Wonsan (MAUERSBERGER 1981).

The Black-faced Bunting is a common species nesting in areas north of the area under discussion i.e. China (ETCHECOPAR & HÜE 1983, MEYER DE SCHAUENSEE 1984, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000), southeast Russia (PANOV 1973, NECHAEV 1998a, VOLOSHINA et al. 1999, TIUNOV 1999) and northern Japan (DISTRIBUT. 1981, MORIOKA 2000). At the same time in the southern part of the Korean Peninsula it is a common species during migration (WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000). In the past it was also noted in southern provinces in the winter (GORE & WON Pyong-Oh 1971). Therefore the southern border of the breeding grounds and perhaps the northern wintering border goes across the Korean Peninsula.

Emberiza variabilis TEMMINCK, 1835

[*Schoenicola passerina*]

Japanese Grey Bunting

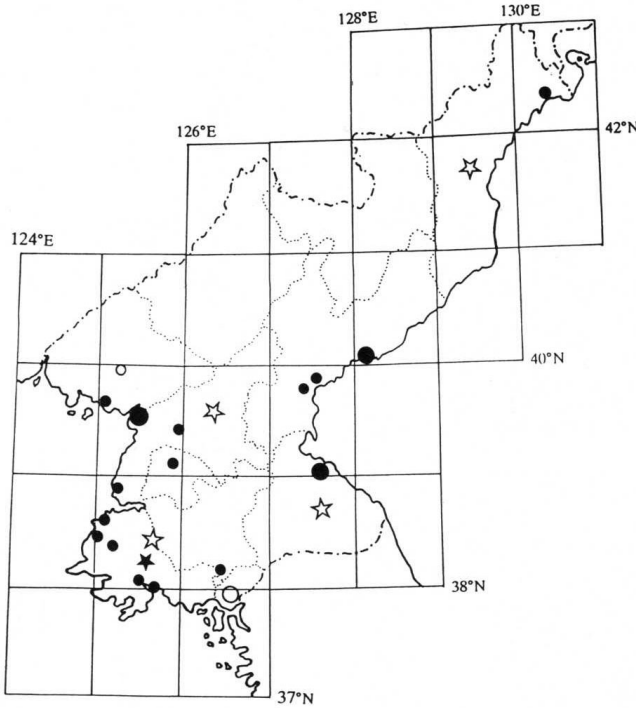
Has not been recorded from North Korea so far (vagrant in the southern part of the peninsula – GORE & WON Pyong-Oh 1971, WON Pyong-Oh 1993, 2000).

332. *Emberiza pallasi* (CABANIS, 1851)

Pallas' Reed Bunting

Data:

Pyongyang (I): Taesongsan (I-6): 23 Jan 1973 (ZIP);



Kumchon (IX-13): 30 Nov 1963 (ZIP);

Hwanghae South (X): Kumsanri (X-4): 16 Mar 1962, Talchonri (X-9): 11 Feb 1958 (ZIP), Kwail (X-13): 4 Feb 1990 (FIEB), Jangkongri (*X-21): 18 Feb 1957 (ZIP), Haeju (X-22): 1 Mar 1990, Dongpori (X-?): 16 Dec 1989 (FIEB);

Hwanghae (IX-X): 20 Mar 1914 (AUST);

Kaesong (XI): Kaesong (XI-1): 27 Feb 1928, 3, 5, 9 Dec 1929, 20 Jan 1931 (WON);
no data: 4 specimens (ZIP).

M e a s u r e m e n t s (10 specimens of the collection ZIP):

	♂	♂	♂	♂	♀	♀	♀	?sex	?sex	?sex
wing	72	69	68	70	70	—	64	69	66	69
tarsus	18	17	19	18	15.5	18	—	19	18	18
bill	10	8	8	10	9	10	9	8	8	8
tail	60	64	63	63	64.5	63	62	65	58	60

Rare winter visitor and passage migrant. Observed from 9 Oct till 20 Mar, primarily along the coast. It was also observed 29 May when this species is occupying its breeding grounds (DEMENTEV & GLADKOV 1951-1954, LOSKOT 1986, KOBLIK et al. 1997b) but in a “habitat unsuitable for breeding” (EDWARDS, PERTWEE & GARLAND, manuscript); probably it was a nomadizing bird or migrating very late, but not breeding. The Pallas’ Reed Bunting migrates in small flocks of a few individuals. Flocks formed in winter even number up to 100 birds (FIEBIG 1995).

The Pallas’ Reed Bunting nests in northeast Asia (DEMENTEV & GLADKOV 1951-1954, LOSKOT 1986), the Bikin River valley is its most southern nesting area (KOBLIK et al. 1997b). Its wintering area runs along the eastern coast of Asia or the Sikhote-Alin Mountains (VOLOSHINA et al. 1999), southern Primorye (PANOVA 1973), and the entire Korean Peninsula (GORE & WON Pyong-Oh 1971,

Pyongan South (II): 10 Feb 1936 (WON cited by AUST, but WON does not mention this observation in his later publications), Ponghakri (*II-11): 15 Mar 1956 (ZIP), Onchon (II-24): 22 Nov 1989, mouth of Chongchon (*II-29): 11 Nov 1989, 10 Mar 1990 (FIEB);

Pyongan North (III): Kwaksan (III-4): 26 Jan 1968 (ZIP), Kusong (III-27): 7 Nov, 24 Dec 1927 (WON);

Hamgyong North (VI): 8 Nov 1919 (AUST), Sonbong (VI-7): 29 May 1997 (EDW);

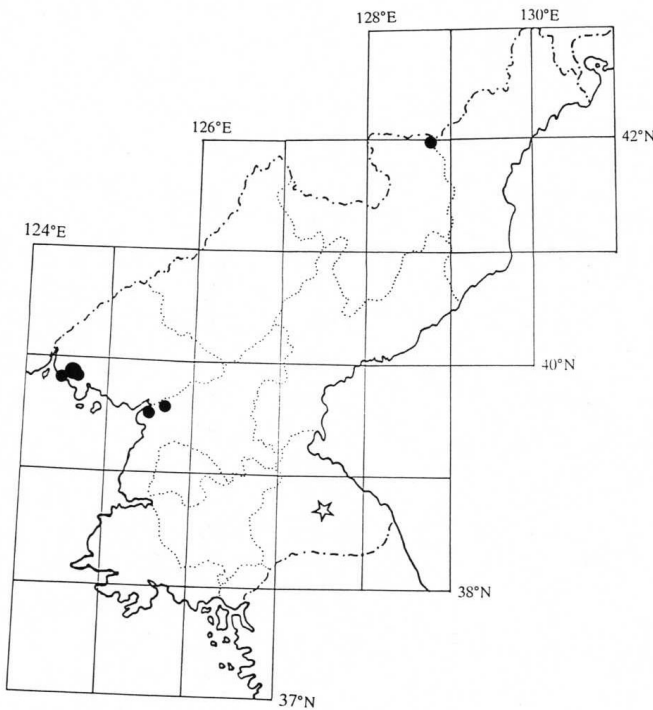
Hamgyong South (VII): Sinpho (VII-16): 9 Oct 1969, 11 Mar 1972 (ZIP), Songchon riv. near Hungnam (*VII-30): 30 Jan 1990, Kwangpo (*VII-31): 29 Jan 1990 (FIEB);

Kangwon (VIII): 26 Nov-1 Dec 1929 (AUST), Anbyon (VIII-17): 15 Dec 1988, 11 Dec 1989 (FIEB);

Hwanghae North (IX):

WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000) as far as southern China; although in Chinese provinces bordering North Korea it is not given as a wintering species but only as a passage migrant (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000).

333. *Emberiza schoeniclus* (LINNAEUS, 1758)
 Reed Bunting



Data:

Pyongan South (II): Anju (II-16): 26 Nov 1989 (STEP), mouth of Chongchon (*II-29): 10 Mar 1990 (FIEB);

Pyongan North (III): Yomju (III-10): 22 Mar 1958, Haksori (*III-10): 15, 16, 17 Oct 1955, 19 Mar 1958, Tasari (III-11): 21 Mar 1958 (ZIP);

Ryganggang (V): Yukok (*V-15): 24 Mar 1966 (ZIP);

Kangwon (VIII): 30 Mar 1914 (AUST).

Measurements (7 specimens of the collection ZIP):

	♂	♂	♂	♀	♀	♀	♀
wing	79	79	80	65	76	77	75
tarsus	21	21	—	17	21	21	20
bill	9	7.5	—	8.5	10	7.5	10
tail	64	68	66	58	64	69	70

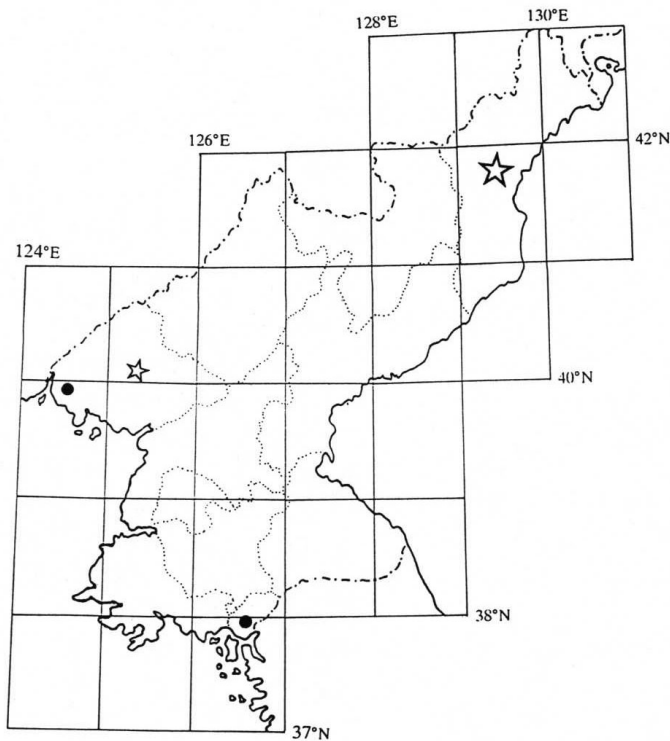
Rare passage migrant. Observed during spring (Mar, 6 records) and autumn (Oct, 3 records) passage. In winter it was seen only once in 1989 by STEPANYAN (1998).

The Reed Bunting nests in northeastern Asia, the nearest nesting grounds are near Khanka Lake (GLUSCHENKO 1979), Khasan region (NASAROV & LABZYUK 1975) and the Sikhote-Alin Mountains (VOLOSHINA et al. 1999). They winter in areas south of the Korean Peninsula i.e. southern China (MEYER DE SCHAUENSEE 1984, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000) and in Japan (MORIOKA 2000). In South Korea until the seventies it was observed only a few times (AUSTIN 1948, GORE & WON Pyong-Oh 1971) and today it is considered to be an uncommon winter visitor (WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000). The small number of winter records on the entire Korean Peninsula indicates that it lies outside the main winter grounds of the Reed Bunting, and that only its migration route crosses the peninsula. Only

single individuals remain for the winter. The opinion of NAZAROV (in LER 1989) and FIEBIG (1995), that this species seems to winter in Korea is not supported by existing data.

334. *Calcarius lapponicus* (LINNAEUS, 1758)

Lapland Bunting



Data:

Pyongan North (III): 4 Apr 1929 (AUST), Haksori (III-10): 19 Mar 1958 (ZIP);

Hamgyong North (VI): 31 Nov(!) 1917, 11 May, 6, 10 Nov 1918 (AUST);

Kaesong (XI): Kaesong (XI-1): Feb 1972 (ZIP).

M e a s u r e m e n t s
(♀ of the collection ZIP): wing 85, tarsus 20, bill 10, tail 57.

Occasional rare winter visitor and passage migrant. To date it has been recorded only 6 times during migration and winter i.e. between 6 Nov and 11 May. During the last 50 years there have been only 2 records.

The Lapland Bunting nests in northern Asia, and winters, among other areas, along the eastern coast of China south of about 40°N (CHENG Tso-Hsin

1987, MACKINNON & PHILLIPS 2000), flying along the eastern coast of Russia (VOLOSHINA et al. 1999). On the entire Korean Peninsula it tends to appear sporadically (AUSTIN 1948, WON Hong-Koo 1965, GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000), indicating that Korea lies outside the main migration route and wintering grounds. Therefore WON Pyong-Oh gives (1996, 2000) the Lapland Bunting “occasional rare winter visitor” status.

Plectrophenax nivalis (LINNAEUS, 1758)

[*Plectrophanes nivalis*]

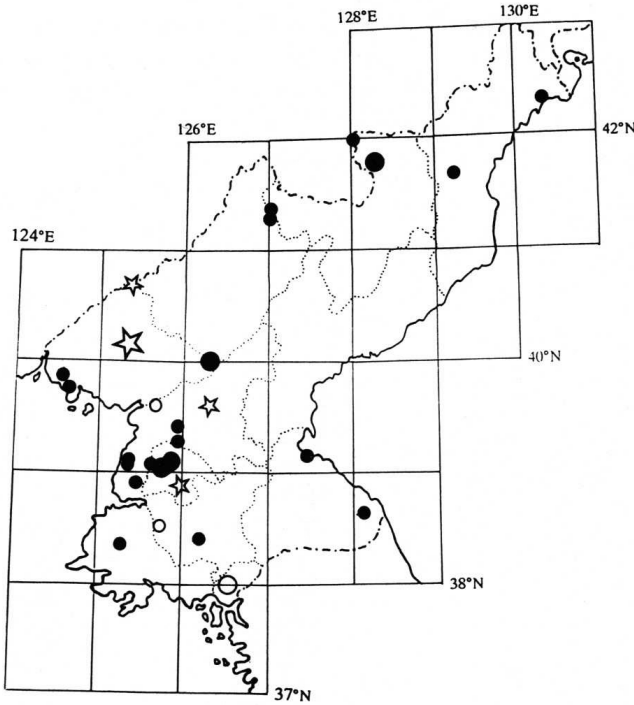
Snow Bunting

In North Korea there is only one uncertain observation by KALINOWSKI from Sep 1887 (TACZANOWSKI 1888). TACZANOWSKI in his monograph about Birds of Eastern Siberia (TACZANOWSKI 1891) did not mention it and so it should not be taken into consideration. Thus AUSTIN (1948) was right in stating that to the end of the forties there was no reliable data from the Korean Peninsula. In South Korea until the seventies this species was not recorded (GORE & WON Pyong-Oh 1971), and during the following years, WON Pyong-Oh (1993, 1996, 2000) put it in the vagrant category or uncommon winter visitor.

Fringillidae

335. *Fringilla montifringilla* LINNAEUS, 1758

Brambling



Data:

Pyongyang (I): Pyongyang (I-1): 14 Oct 1954 (WON), 23 Oct 1984, (TOM), winters 1986-1988 (CHON Gil-Pyo 1988), 6, 9, 17 Apr (FIEB), Nov-Dec 2000 (DUCK), Taesongsan (I-6): 17 Oct 1958 (ZIP), 25 Oct 1986 (TOM), 26 Oct 1987, 12 Apr, Ryongaksan (I-10): 3 Jun (FIEB), Amisan (I-?): 28 Apr 1949 (WON);

Pyongan South (II): 30 Apr 1917 (AUST), Jehyonri (*II-11): 23 Nov 1954, Paeksongri (II-13): 24 Apr, 14 Oct 1953, Anju (II-16): 17 Oct 1932, Chungsan (II-19): 13, 15 Apr 1958 (WON), Hamjongri (*II-19): 23 Oct 1958 (ZIP), Taesong-ho (II-28): 16, 17 Oct 1978 (TOM);

Pyongan North (III): 9 Jan 1917, 4-17 Apr 1929 (AUST), Wondo (*III-9): 26 Oct 1958,

Yomju (III-10): 16 Apr, 11 May 1950 (WON), Myohyangsan (III-24): 27 Apr 1989 (FIEB), Dec 2000 (DUCK);

Pyongan North-Chagang (III-IV): Amnok riv.(III-IV-?): before 1923 (SOWERBY);

Chagang (IV): Karimri (*IV-2): 29 Apr, 16 Oct 1958 (ZIP), Okasan (IV-3): 17 Apr, 29 Oct 1958 (HO, or 15-29 Oct 1958 – HO Hon cited by WON; see footnote 2, page 20);

Ryanggang (V): Ryongjori (V-2): 19 May 1958, Samjiyon (V-10): 11 Oct 1964 (ZIP), 21-24 Oct 1978, 27 Sep 1991 (TOM), no date, Kansambong (*V-12): no date (HO);

Hamgyong North (VI): Josanri (*VI-7): 24 Apr 1959, Kwanmobong (VI-22): 24 Apr 1958 (WON);

Kangwon (VIII): Wonsan (VIII-3): 24 Apr 1987, Onjongri (*VIII-8): 19, 22 Apr 1987 (GLOW);

Hwanghae North (IX): Sohung (IX-9): 17 May 1980 (MAUERS), Sariwon (IX-16): 16 Apr 1949 (WON);

Hwanghae South (X): Samchon (X-10): 21 Nov 1969 (ZIP);

Kaesong (XI): Kaesong (XI-1): 17 Jan, 21, 23 Feb 1928, 29, 30 Nov 1929 (WON);

no data: 4 specimens (ZIP), 10 specimens in shops (GLOW).

M e a s u r e m e n t s (7 specimens of the collection ZIP, 5 specimens of the collection and card-index ISEA):

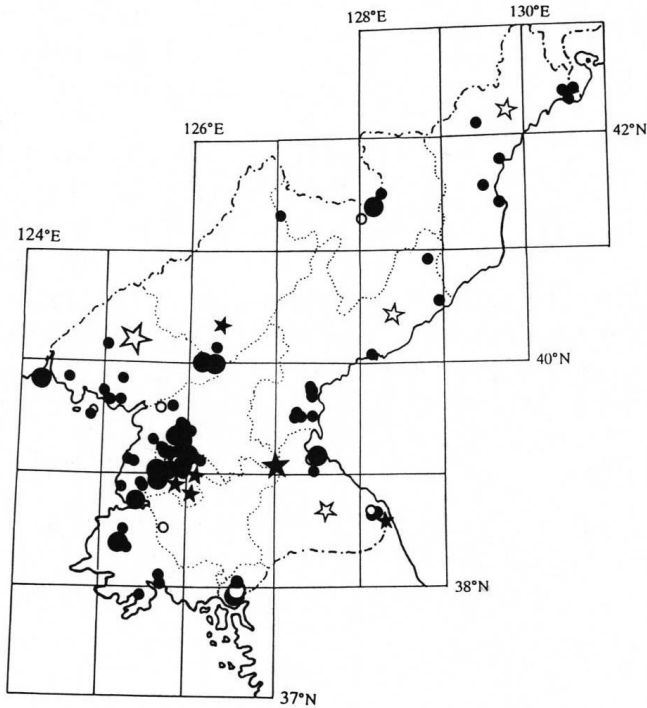
	8♂♂	\bar{x}	♀	♀	♀	?sex
wing	84-94	89.7	88	86	85	87
tarsus	19-21	19.6	20	20	18	19
bill	11.5-14.0	12.8	13	12	12	13
tail	56-64	61.4	66	62	58	56

Wintering species and passage migrant. Observed from 27 Sep till 19 May, primarily in flocks of several dozen individuals. The breeding grounds of Brambling reach from northeast Asia to central Sakhalin (NECHAEV 1991). Nesting was also seen in the Bikin River basin (MIKHAILOV et al. 1998). Spring passage to breeding in some years was even seen during the 2nd half of May (LABZYUK et al. 1971, NECHAEV 1991). Certainly birds seen in North Korea in May were migrating. In areas bordering North Korea Brambling is a species present during migration and in the winter. It seems that more numerous birds winter in the southern part of the peninsula since flocks were seen there that had several hundred or even thousand individuals (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 1977, LEE Woo-Shin et al. 2000), while in North Korea such large flocks were not recorded (WON Hong-Koo 1965, FIEBIG 1995, the largest flock had about 70 birds – DUCKWORTH pers comm.). Also in areas north of North Korea this species is an uncommon winter visitor (PANOV 1971, CHENG Tso-Hsin 1987, NECHAEV 1998, BURKOVSKIY 1998, VOLOSHINA et al. 1999, MACKINNON & PHILLIPS 2000).

336. *Carduelis sinica* (LINNAEUS, 1766)

[*Chloris sinica ussuriensis*, *Fringilla kawarahiba*]

Oriental Greenfinch



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): 1 Oct 1954, 17 Mar 1955, 18 Mar 1957 (ZIP), ◆, winters 1986-1988 (CHON Gil-Pyo 1988), Songmunri (*I-2): 7 Oct 1955, Ransanri (*I-3): 17, 18 Feb 1957 (ZIP), Ponghwari (I-4): 28 Sep 1978, 5 Jun 1987 (TOM), Samsok (I-5): 29 Nov, 29 Dec 1965, 6, 28 Jan 1966 (ZIP), Taesongsan (I-6): 19 Dec 1948, 2 Apr, 13 Sep 1949 (WON), 12 Dec 1954, 15 Mar 1956, 20 Nov 1979 (ZIP), 22 May 1980, 8 Oct 1986 (TOM), Ryongsong (I-7): 1 Feb 1954, Hari (*I-8): 26 Oct 1956 (ZIP), Ryongaksan (I-10): 19 Sep 1979 (MAUERS), 2 May 1990 (FIEB), Mankyongdae (I-11): ◆, Samsin (I-?): 6 Jan 1966 (ZIP), Ryonghungri (I-?): 1 Apr 1950 (WON);

Pyongan South (II): Unsan (II-10): 9, 19 Aug 1954, Sunchon (II-11): 17 May, 20, 26 Jun, 20 Jul, 20 Nov 1954, Jehyonri (*II-11): 10 May, 11, 15, 22 Sep 1954, Nohari (*II-11): 21 May 1955, Jasan (II-12): 4 Jan, 4 Jun, 16, 19, 31 Oct, 5, 17, 22 Nov 1953, 23, 25 Feb, 13, 28, 29 Mar, 3, 20 Apr 1954 (ZIP), 24 Dec 1953, 23 Mar 1954 (MAUERS), Paeksongri (II-13): 14 Jun 1953 (WON), 17, 24 Feb, 12 May, 8, 13, 14, 15, 16, 17 Sep, 14 Oct 1954 (ZIP), Anju (II-16): 20 Feb 1939, Pyongwon (II-17): 21 Apr 1951 (WON), Raksaengri (II-18): 19 Mar 1958, Joksongri (*II-19): 6 Sep 1955, Kuryong (*II-24): 2 Feb 1959 (ZIP), Nampho (II-26): 13 May 1980 (MAUERS), Aug 1991 (BÁLDI), 26 May 1997 (PERT), Apr 1999 (DUCK), Taesong-ho (II-28): 15 Jul 1983 (TOM), Taeposan (*II-28): 29 May 1954 (ZIP), Yonpung-ho (II-30): 7 Jun 1987 (TOM);

Pyongan North (III): 6 Jun 1917, 4 Apr-29 May 1929 (AUST), Jongju (III-3): 5 Jul 1951 (WON), Kwaksan (III-4): 13, 18 May 1955 (ZIP), Rohari (III-5): 21 May 1955, Sinmido (III-7): 10 Dec 1958 (WON), Pankungri (*III-10): 18 Apr 1958, Sindo (III-14): 20 Apr 1956 (ZISP), 30 Jan 1961, Chonmasan (III-20): 19 Jun 1961 (ZIP), Hyangsan (III-23): 3 Oct 1986 (TOM), Apr 1999, Oct 2000 (DUCK), Myohyangsan (III-24): 14 Jun 1957 (ZIP), 18 Jun 1983 (TOM), 8-12 Aug 1991 (BÁLDI), Apr 1999 (DUCK), Panghyondong (III-26): 25 Dec 1951 (WON);

Chagang (IV): Nov 2000 (DUCK), Okasan (IV-3): 21 Dec 1953 (ZIP), Huichon (IV-10): 15, 18 Jun 1987 (TOM);

Rygang (V): Samsu (V-4): 14-16 Jul 1897 (YANK), Hyesan (V-5): 20 Oct 1978, 1 Jun 1980, Pochon (V-6): 21 Oct 1978 (TOM);

Hamgyong North (VI): 17 Sep 1917 (AUST), Manpo (VI-2): 9 Apr 1996, Tongbonpho (*VI-3): 9 Apr 1996 (EDW), Kulphori (VI-4): 12, 17 Apr 1959 (ZIP), Dongsakol (*VI-14): 29 Jun 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), Kwanmori (VI-26): 22 May 1959 (ZIP), Jangyon-ho (VI-29): 4 Jul 1983 (TOM);

Hamgyong South (VII): 27 Apr-10 May 1903 (AUST), Kumdok (VII-2): 29 May 1987, Tongdokri (*VII-6): 27 May 1987 (TOM), Sinpho (VII-16): 15 Oct 1969 (ZIP), Jonphyong (VII-31): 27 May 1960 (WON), Sinhungri (VII-32): 3 May 1960 (ZIP), Sinsang (VII-33): 3 Jul 1960 (WON), Pomphori (VII-36): 23 Apr 1960, Chonphyongri (*VII-38): 27 May 1955, Togkumari (*VII-38): 24 May 1960, Haejungri (*VII-38): 9, 21 Apr 1960 (ZIP);

Kangwon (VIII): 15 Jun-13 Jul, 23, 26 Nov 1929 (AUST), Wonsan (VIII-3): 19 Sep-2 Oct 1897 (YANK), ♦, Sokwangsa (VIII-4): 12 Oct 1978 (TOM), Samil-pho-Onjongri (VIII-7-8): 22 May 1980 (TOM), Kumgangsán (VIII-8): 10 Apr 1949 (WON), 1-4 Aug 1991 (BÁLDI), Onjongri (*VIII-8): 22 May 1980 (MAUERS), 11 Jun 1980 (TOM);

Hwanghae North (IX): Sariwon (IX-16): 18 Jan 1949 (WON);

Hwanghae South (X): Kuwolsan (X-6): 27 May 1957, Talchonri (X-9): 21 Jun 1951, 21 Jun 1957, Kohyonri (*X-10): 17, 18, 22 Apr 18 May, 4 Jun 1957, Kumsuri (*X-19): 17 Jan, 17 Feb 1959 (ZIP), Haeju (X-22): 29 Nov 1989 (STEP), Suyangsan (X-24): 23 Sep 1978 (TOM);

Kaesong (XI): Kaesong (XI-1): 20 Apr 1927, 12 May 1929 (WON), 15 May 1980 (MAUERS), 16 Aug 1984 (KOLBE), 24-25 Aug 1991 (BÁLDI), 23 May 1997 (PERT), Kongminghang (XI-7): 16 Aug 1984 (KOLBE);

road Pyongyang-Kaesong: 14 Aug 1984 (KOLBE), 21 May, 1997 (PERT);

no locality: 24 Dec 1953, 10 Mar 1956, 6, 9 16 Jan 1966 (ZIP), "all places in hummocky areas, lowlands and urban parks" 1987-1990 (FIEB), "frequently, fairly numerous": Apr 1987 (GŁOW);

no data: 1 specimens (ZIP), 40-45 specimens in shops (GŁOW).

M e a s u r e m e n t s (35 specimens of the collection ZIP, 3 specimens of the collection MZB, 1 specimen of the collection ISEA):

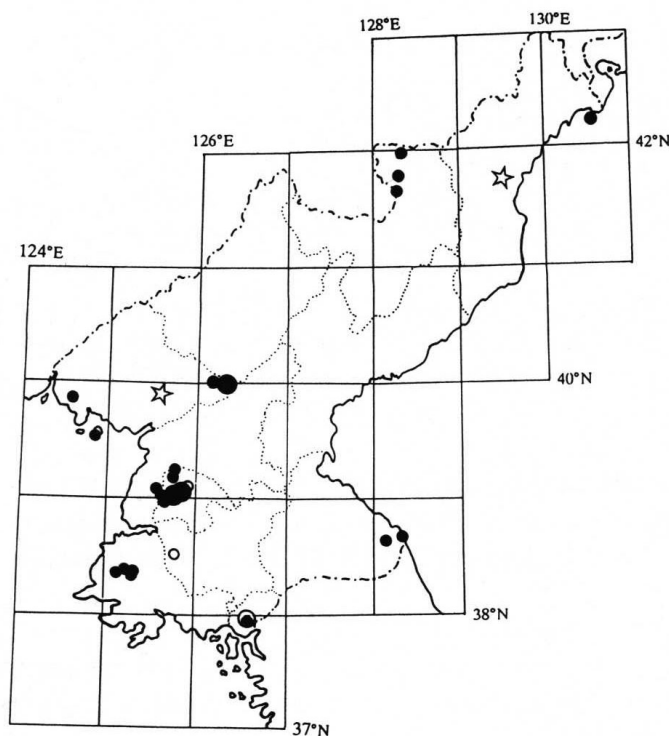
	22♂♂	\bar{x}	17♀♀	\bar{x}
wing	75-85	80.1	74-83	78.8
tarsus	15-18	16.3	14-19.4	16.6
bill	9-11.9	10.5	10-11	10.5
tail	46-58	50.5	43-64.6	49.5

Common resident species. Seen throughout the whole country, especially frequent in city parks and near settlements. It was not noted only in tree stands and higher parts of mountains. (GŁOWACIŃSKI et al. 1989). During the winter flocks can consist of up to several dozen individuals (FIEBIG 1995).

The Oriental Greenfinch is also a common or abundant breeding species in all adjacent areas (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, DISTRIB. 1981, MORIOKA 2000, NECHAEV 1998a, WON Pyong-Oh 2000).

337. *Carduelis spinus* (LINNAEUS, 1758)[*Spinus spinus*, *Carduelis pinus*]

Spruce Siskin



Data:

Pyongyang (I): Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), 1-26 Apr (FIEB), Oct-Nov 2000 (DUCK), Taesongsan (I-6): 13 Nov 1949, 3 Apr 1950 (WON), Apr (FIEB), Hari (*I-8): 17 Feb 1957 (ZIP), Mankyongdae (I-11): 18 Apr 1987 (GLOW), Sogam (I-15): 24 Oct 1984 (TOM);

Pyongan South (II): Kumjongri (*II-21): 11 Nov 1954 (ZIP);

Pyongan North (III): Apr 1917 (AUST), Sinmido (III-7): 10 Nov 1958, Pankungri (*III-10): 2 May 1958 (ZIP), Hyangsan (III-23): Oct-Nov 2000 (DUCK), Myohyangsan (III-24): 11, 12 Apr 1987 (GLOW), Nov-Dec 2000 (DUCK);

Ryanggang (V): Photae (V-8): 24 Sep 1967, Kanpaegsan (*V-10): 1 Oct 1965 (ZIP), no date, Sinmusong (V-14): no date (HO);

Hamgyong North (VI): 22 Oct-

11 Nov 1929 (AUST), Pipa (*VI-6): 30 May 1997 (EDW);

Kangwon (VIII): Samil-pho (VIII-7): 23 Apr 1987, Onjongri (*VIII-8): 19, 24 Apr 1987 (GLOW);

Hwanghae North (IX): Sariwon (IX-16): 13 Jan 1949 (WON);

Hwanghae South (X): Talchonri (X-9): 30 Nov 1961, Samchon (X-10): 3 Feb, 20 Mar 1962, Ungyesan (*X-10): 29 Mar 1962, Songhwa (X-12): 13 Feb 1971 (ZIP);

Kaesong (XI): Kaesong (XI-1): 20 Mar 1929, 19 Apr 1930, 25 Dec 1955 (WON);

no locality: 12 Nov 1953 (ZIP);

no data: 2 specimens (ZIP).

M e a s u r e m e n t s (14 specimens of the collection ZIP):

	7♂♂	\bar{x}	♀	6 ?sex	\bar{x}
wing	70-74	72.4	68.6	69-86	73.9
tarsus	13-14	13.7	15.8	13-15	13.8
bill	9-10.5	9.8	11.5	9-11	9.9
tail	42-47	43.7	41	39-45	43.0

Wintering species and passage migrant. Observed from 24 Sep till 2 May. The relatively small number of records during the winter indicates that significantly fewer Spruce Siskins winter in North Korea than in the southern part of the peninsula, where there it is an abundant winter visitor

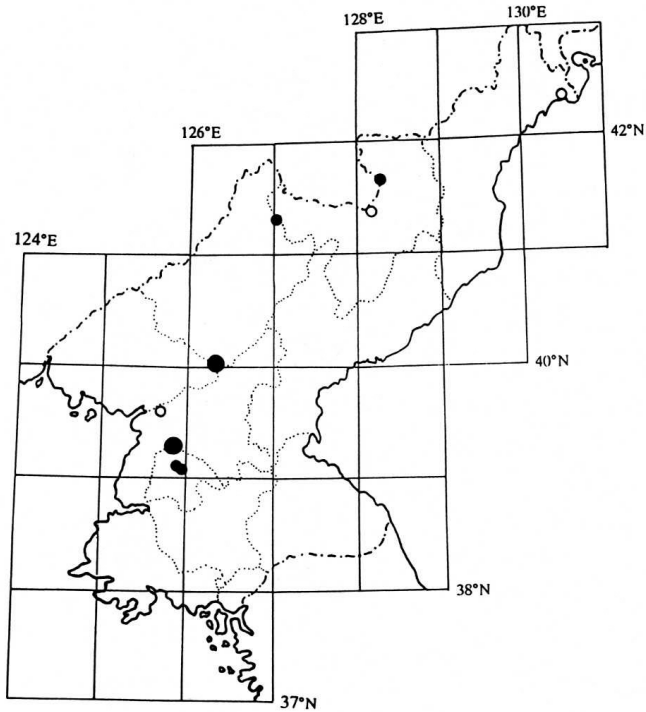
(GORE & WON Pyong-Oh 1971, WON Pyong-Oh 1977, 2000²⁸). Also in China and southern Japan this species is present in winter and during migration.

The record of Spruce Siskins (♂ and ♀) on 30 May in Hamgyong North (EDWARDS, PERTWEE & GARLAND, manuscript) needs discussion. The migration of Spruce Siskins during the last days of May was also seen in southern Primorye, thus not far from this province. It was also recorded in the extreme southern part of Primorye in the middle of breeding season (PANOV 1973). The nearest known nesting grounds of the Spruce Siskin are the Sikhote-Alin Mountains (VOLOSHINA et al. 1999), the Bikin River basin (KOBLIK & MIKHAILOV 1994), Kuril Islands (NECHAEV & FUJIMAKI 1994), Hokkaido and northern Honshu (MORIOKA 2000). The possibility of shifting the breeding ground border can not be eliminated, however to date there are not data indicating breeding, both in southern Primorye and North Korea. In my opinion the mentioned observations in the middle of breeding season are more evidence more of nomadizing and nonbreeding individuals, than of those breeding outside their nesting grounds.

338. *Acanthis flammea* (LINNAEUS, 1758)

[*Carduelis hornemanni exilipes*]

Redpoll



Data:

Pyongyang (I): Samsok (I-5): 20, 28 Jan 1966, Taesongsan (I-6): 30 Jan 1973 (ZIP);

Pyongan South (II): Jamosan (II-15): 17 Feb 1955, 15 Feb 1957 (WON), Anju (II-16): 20, 22 Feb 1938 (WON, AUST);

Pyongan North (III): Myohyangsan (III-24): 7 Nov 1956 (ZIP), 16 Feb 1957 (WON);

Chagang (IV): Okasan (IV-3): 14, 15 Nov 1958 (WON), 28 Nov 1958 (HO);

Ryanggang (V): Hyesan (V-5): 1 Feb 1931 (WON), Namphothae (*V-8): no date (HO);

Hamgyong North (VI): Manpo (VI-2): 17 Nov 1929 (AUST, WON); no data: 1 specimen (ZIP).

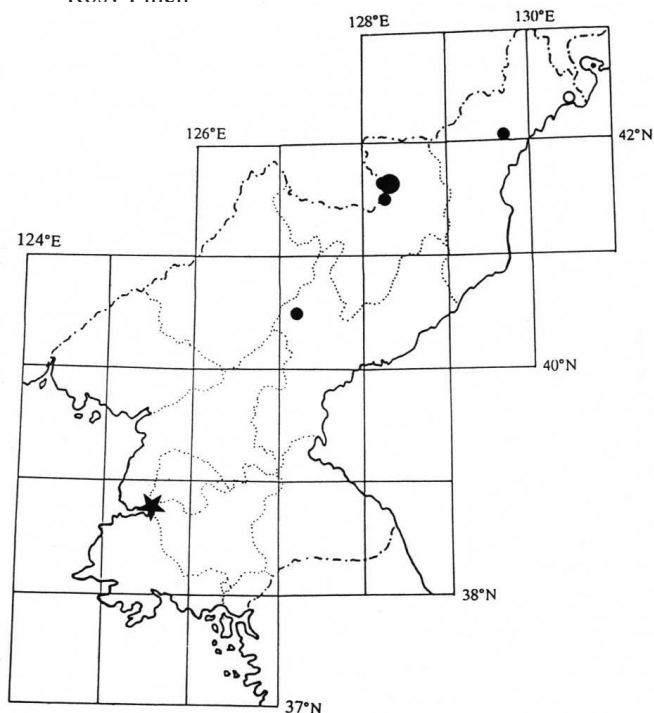
M e a s u r e m e n t s (5 specimens of the collection ZIP):

	♂	♂	♂	♀	?sex
wing	75	78	78	70	74
tarsus	16	14	17	16	19
bill	8	10	9	11	9
tail	60	61	62	—	41.5

Wintering species. Observed between 7 Nov and 22 Feb (15 records)²⁹. According to authors describing neighboring areas the Redpoll is an irregular common winter visitor in this part of East Asia (GORE & WON Pyong-Oh 1971, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, NECHAEV 1998a, VOLOSHINA et al. 1999, MACKINNON & PHILLIPS 2000, MORIOKA 2000, WON Pyong-Oh 1987, 1996, 2000³⁰).

339. *Leucosticte arctoa* (PALLAS, 1811)[*Leucosticte pustulata brunneonuchla*]

Rosv Finch



Data:

Ryanggang (V): Pochon (V-6): 15 Feb 1962, Photae (V-8): 9 Mar, 1 Apr, 4 Nov 1964, 29 Dec 1965 (ZIP), Namphotae (*V-8): no date (HO);

Hamgyong North (VI): Manpo (VI-2): 15 Nov 1929 (AUST, WON) Puryong (VI-16): 24 May 1985 (ZIP);

Hamgyong South (VII): Jangjinho (VII-25): Mar 1957 (WON);

no locality: 6 Jan 1964, 29 Dec 1965 (ZIP), "shallow and marsh of the western coast" 1987-1990 (FIEB), 6 indiv in shops (GLOW);

no data: 2 specimens (ZIP).

29

Perhaps there are more records since FIEBIG (1995) mentions 4 skins in the ZIP collection, taken from Nov to Mar in Pyongan South, Chagang i Ryanggang Provinces. It is difficult here to consider them since FIEBIG does not give more exact data (date or collection site) and in the eighties I did not see these specimens while studying that collection. There were however 5 skins from localities that Fiebig does not mention. It is possible that unknown to me these skins were added to the collection at the end of the eighties, but that is unlikely since the collection is increased only occasionally.

30

WON Pyong-Oh (1996, 2000) states that in South Korea it is an irregular common winter visitor and common resident in the north of the peninsula. The opinion the Redpoll is resident in North Korea is incorrect since the closest known breeding grounds are in Sakhalin (NECHAEV 1991), and in North Korea there is no data about nesting.

M e a s u r e m e n t s (12 specimens of the collection ZIP):

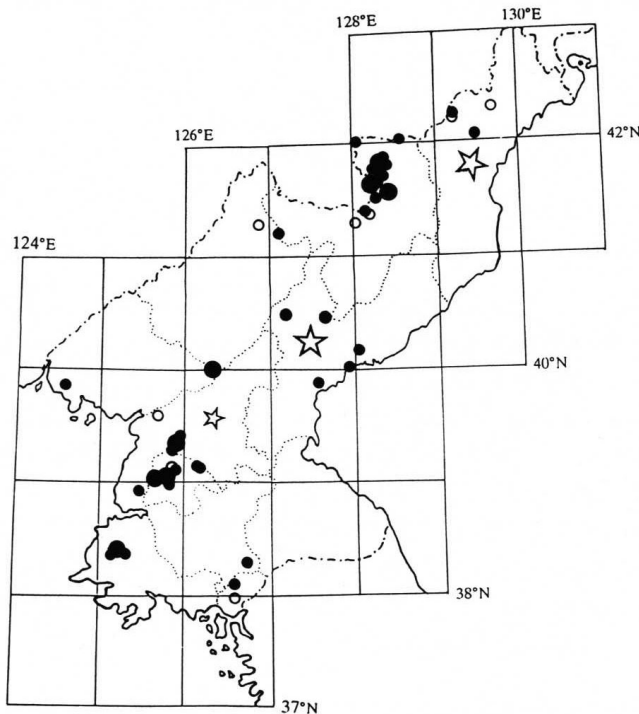
	4♂♂	\bar{x}	♀	7 ?sex	\bar{x}
wing	104-109	106.2	109	99-111	104.1
tarsus	20.7-22	21.4	22	18-22	19.9
bill	10.7-12	11.1	11	10-13	10.0
tail	70.2-81	74.3	75	64-76	69.0

Wintering species. Observed from 4 Nov till 1 Apr in the northern part of the country. In the ZIP collection there are 12 skins, 8 of which were taken between 1962-65 in the Ryanggang Province. Thus one can assume that it is not a species that appears very rarely. Apart from winter records there is still one more (skin in the ZIP collection) with a date of 24 May from the Hamgyong North Prov. In May Rosy Finch should already be in breeding areas (at the beginning of Apr they leave wintering grounds – PANOV 1973) and this date is difficult to explain. On one hand it may be an individual that did not fly to breeding while on the other hand there may be a mistake in the written date. In any case there is not data of an individual exceptional breeding, especially since the closest nesting grounds are on the Amur River (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000) and perhaps northern Hokkaido (MORIOKA 2000) and Sakhalin (NECHAEV 1991). In areas bordering North Korea it is a species appearing in the winter (GORE & WON Pyong-Oh 1971, CHENG Tso-Hsin 1987, NECHAEV & FUJIMAKI 1994, NECHAEV 1998a, VOLOSHINA et al. 1999, MACKINNON & PHILLIPS 2000, WON Pyong-Oh 1993, 2000), and today North Korean ornithologists consider it to be a wintering species (KIM Ri-Thae & O Hung-Dam 1982, O Hung-Dam 1988).

340. *Uragus sibiricus* (PALLAS, 1773)

[*Uragus sanquinolentus*]

Long-tailed Rosefinch



Data:

Pyongyang (I): Pyongyang (I-1): 22 Jun 1983 (TOM), winters 1986-1988 (CHON Gil-Pyo 1988), 25, 27 Dec 1988, 14, 15 Jan, 6 Nov 1989, 5 Mar 1990 (FIEB), no date, Kuponri (*I-3): 10 Feb 1957, Ransanri (*I-3): 17 Feb 1957 (ZIP), Taesongsan (I-6): 19 May 1949 (WON 1956), 7 Jan 1981 (ZIP), Ryongaksan (I-10): 7, 14, 15 Jan 1989, 1 Apr 1990 (FIEB), Sadong (I-17): 8 May 1965 (ZIP);

Pyongan South (II): Othanri (*II-11): 22 Feb, 25 Nov 1954, Jasan (II-12): 20 Nov 1953, 15 Jan, 10 Feb 1954, Jamosan (II-15): 12 Feb 1957 (ZIP), Anju (II-16): 14 Nov 1932 (WON), ?1 May 1938 (WON cited by AUST, but WON does not mention this observation in his later

publications), Taesong-ho (II-28): 27 Oct 1978 (TOM), Yangdok (II-?): 11 Feb 1949 (WON);

Pyongan North (III): Namsi (*III-10): 29 Jul 1954, Myohyangsan (III-24): 14 Jan, 11 Jun, 15, 20 Nov 1956, 10 Apr 1979 (ZIP), Oct (FIEB), Dec 2000 (DUCK);

Chagang (IV): Hwapyong (IV-2): 28 Aug 1897 (YANK), Karimri (*IV-2): 13 Jan, 4, 8 Feb, 20 Oct, 11 Nov 1958 (ZIP), Okasan (IV-3): 2 Feb, 13 Nov 1958 (HO; see footnote 2, page 20);

Ryaggang (V): Samsu (V-4): 2, 12, 22, 28 Jul 1897, Hyesan (V-5): 4, 8 Aug 1897 (YANK), 19 Oct 1986 (TOM), Sinhungri (*V-6): 31 Oct 1958, Naegokri (V-7): 30 Oct 1958 (ZIP), 12-18 Oct 1986 (TOM), Photae (V-8): 23, 24 Oct 1958, 21 Jan 1962, 11, 20 Apr 1963, 15 Mar, 26 Apr 1966, 30 Apr, 28 Sep 1967 (ZIP), no date (HO), Namphothae (*V-8): 29 Mar 1965 (ZIP), no date (HO), Photaesan (*V-8): 5 Oct 1958, 13 Mar 1963 (ZIP), Rimyongsu (V-9): no date (HO), Samjiyon (V-10): 16, 19 Apr 1962, 19 Mar 1963, 24 Apr 1965 (ZIP), 21-23 Oct 1978, 27, 28 Sep 1991 (TOM), no date (HO), Hongnamri (*V-10): 16 May 1963 (ZIP), Pekebong (*V-10): 15 Aug 1989 (FIEB), Nongsari (*V-12): no date (HO), Mupo (V-20): 28 Sep 1991 (TOM);

Hamgyong North (VI): 29 May, 2 Jun 1912, 7 Nov 1916, 12 Aug, 27 Oct 1929 (AUST), Obongsan (VI-11): 14 Jun 1897, Musan (VI-12): 7 Jun 1897 (YANK), Jolkol (*VI-12): 13 Jul 1959 (ZIP), Mayang (VI-15): 20 Sep 1989 (FIEB), ?Nongsadong (*VI-20): no date (WON cited by AUST, but WON does not mention this observation in his later publications);

Hamgyong South (VII): 25 Jul 1916, Aug (AUST), 1 Feb 1931 (WON), Ryongsinri (VII-18): 15, 17 Mar 1972, Hongwon (VII-20): 15 Mar 1972 (ZIP), Pujon (VII-22): 26 Jun 1958 (RIM Chun-Hun 1961), Jangjinho (VII-25): Jun, Jul 1955, Jun 1956 (WON), Hamhung (VII-30): 31 Jan 1990 (FIEB);

Hwanghae North (IX): Thosan (IX-12): 20 Feb 1972 (ZIP);

Hwanghae South (X): Talchonri (X-9): 5 Nov, 23 Dec 1957, 11 Feb 1958 (ZIP), Samchon (X-10): 3 Jul 1957 (WON), Songhwa (X-12): 14 Feb 1971 (ZIP);

Kaesong (XI): Kaesong (XI-1): 10 Dec 1924 (WON), Pagyon (XI-3): 22 Oct 1984 (TOM);

no data: 5 specimens (ZIP).

M e a s u r e m e n t s (49 specimens of the collection ZIP, 9 specimens of the collection and card-index ISEA):

	27♂♂	\bar{x}	31♀♀	\bar{x}
wing	60-73	68.5	57-70	65.2
tarsus	14-18	16.1	15-20	16.7
bill	7-10	8.3	7-10	8.3
tail	71-82	77.1	67-80	73.2

Breeding and wintering species. Observed year-round, more frequently and numerous in northern provinces than southern. The large number of records in these regions, where intensive avifauna research was carried out (e.g. around Pyongyang, Paekdusan) indicates that it is a species occurring much more frequently in North Korea than the number of records to date show. Nesting of the Long-tailed Rosefinch was recorded³¹ in Jangjin (WON Hong-Koo 1965), Pujon (RIM Chun-Hun 1961) and around Pyongyang (TOMEK 1985). The observation of birds during breeding season (at least 8 records) indicate farther nesting grounds, also in Hwanghae South (31 Jul in Samchon).

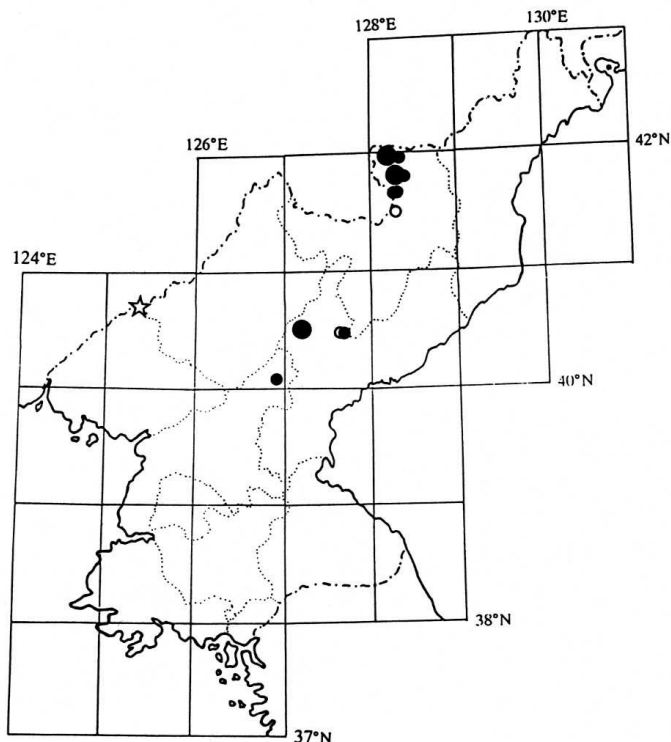
The Long-tailed Rosefinches nest in northern Japan (DISTRIB. 1981, MORIOKA 2000), Primorye (KNYSTAUTAS & SHIBNEV 1986, KOBLIK et al. 1997a, MIKHAILOV et al. 1998, NECHAEV 1998a,

31

One must treat the nest from Anju with reservation and the reports from Kyonggi-do Province in South Korea which AUSTIN (1948) mentions. Although he had "specimens of proof" it is not really known where they came from, because WON Hong-Koo (1956, 1965) did not mention them as proof of nesting.

VOLOSHINA et al. 1999) and in northeast China (ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). Breeding grounds also cover the northern part of the Korean Peninsula (PORTENKO & STÜBS 1976, present materials) however in South Korea it occurs only in winter (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000)³². Thus the southern breeding ground border of the Long-tailed Rosefinch crosses North Korea.

341. *Carpodacus erythrinus* (PALLAS, 1770)
 [*Erythrina erythrina*, *Carpodacus rubicilla*]
 Common Rosefinch, Scarlet Finch



Data:

Pyongan South (II): Phyonghwari (*II-3): 15 Jun 1960 (WON);

Pyongan North-Chagang (III-IV): Amnok riv.(III-IV-?): before 1923 (SOWERBY);

Ryanggang (V): Pochon (V-6): 3 Jul 1897 (YANK), Photae (V-8): 2 Jun 1962, Namphothae (*V-8): 7 Jun 1965 (ZIP), no date (HO), Samjiyon (V-10): 19 Jun, 1 Jul 1958, 8, 27 Jul 1965, 26 Jul 1967 (ZIP), no date (HO), Kanpaegsan (*V-10): 13 Jul 1963, Mutubong (V-13): 29 Jul 1958, 20 Jun 1964, 8 Jul 1966 (ZIP), no date (HO), Simmusong (V-14): 5 Jul 1967 (ZIP);

Hamgyong South (VII): Pujon (VII-22): 8 Aug 1939 (WON), 27 Jun 1958 (RIM Chun-Hun 1961), Jangjinho (VII-25): 19, 23 Jun 1955 (ZIP), May, Jun 1956 (WON);

no locality: 18 Nov 1956 (VLAD).

M e a s u r e m e n t s (14 specimens of the collection ZIP):

	9♂♂	\bar{x}	4♀♀	\bar{x}	?sex
wing	80-85	83.7	78-80.7	79.6	85
tarsus	16-21	18.7	18-19	18.2	17
bill	10-12	11.0	10-13	11.6	12
tail	54.5-60	58.1	51-55	53.4	58

32

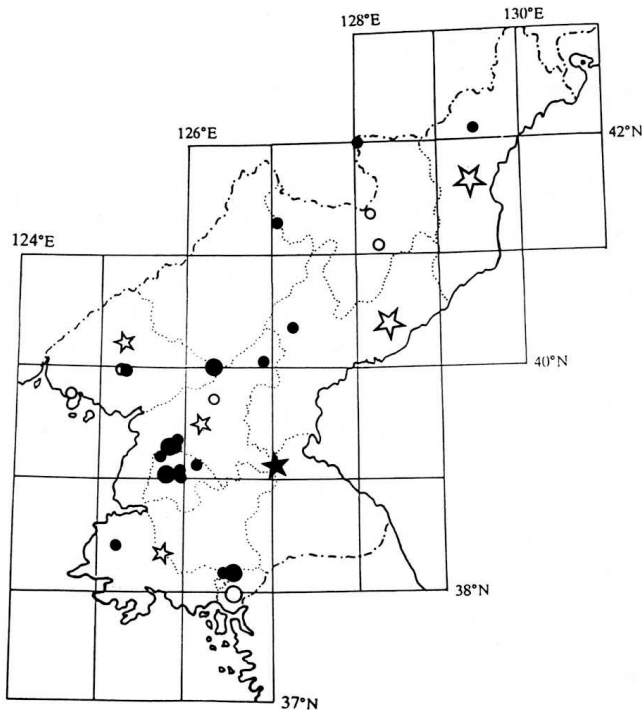
See Footnote 31

Breeding species. Observed only during breeding season i.e. in Jun and Jul³³. Nesting was recorded in Jangjinhŏ (photo of nest – WON Hong-Koo 1965) and Pujon (RIM Chun-Hun 1961) in Hamgyong South Province. The most records of the Common Rosefinch come from Ryanggang Province (including the ZIP collection with 13 skins taken during the years 1958-67) and it probably they also nests there. The many records and nest description indicate insular nesting of this species in the mountainous regions of North Korea. The nearest nesting place of the Common Rosefinch is the northern coast of Primorye (ELSUKOV 1984), the Sikhote-Alin Mountains (VOLOSHINA et al. 1999), the Bikin River basin (MIKHAILOV et al. 1998), the Khor River valley (TIUNOV 1999) and source of the Ussuri River (NAZARENKO 1971d). In Chinese provinces bordering Korea it is known only as a migrant (MEYER DE SCHAUSENSEE 1984, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). It very rarely winters in South Korea (WON Pyong-Oh 2000), and is not at all noted on the Japanese Islands (DISTRIB. 1981, MORIOKA 2000).

342. *Carpodacus roseus* (PALLAS, 1776)

[*Erythrura rosea*]

Pallas's Rosefinch



Data:

Pyongyang (I): Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), Songmunri (*I-2): 14 Feb 1957 (WON), Ransanri (*I-3): 20 Feb 1957, Samsok (I-5): 28 Jan 1966 (ZIP), Sunan (I-8): 19 Mar 1957 (WON);

Pyongan South (II): 23 Dec 1932 (WON 1956 or: 21 Dec 1932 – WON cited by AUST), Sopaekri (*II-3): 15 Jun 1960 (WON), Jasan (II-12): 4 Jan, 3 Feb, 4 Nov, 6, 23, 28 Dec 1953 (ZIP), Paeksongri (II-13): 20 Feb 1955 (MAUERS), no date (ZISP), Jamosan (II-15): 4 Nov-29 Dec 1953, 3 Feb 1954 (WON), 11 Feb 1957 (ZIP), Tokchon (II-33): 11 Nov 1949, Yangdok (II-?): 11 Feb 1949 (WON);

Pyongan North (III): 2 Jan 1928 (AUST), Cholsan (III-9): 23 Jan 1949 (WON 1956), Myohyangsan (III-24): 5 Jan, 4, 16 Nov 1956, 15 Mar 1957 (ZIP), Kusong (III-27): 23 Jan 1949, 23 Feb 1952 (WON);

33

FIEBIG's (1995) description as rare migrant ("Seltener Durchzugler") is unfounded. It is a quotation of GORE & WON Pyong-Oh's (1971) status of the Common Rosefinch in the southern part of the peninsula during the 1960's. Furthermore FIEBIG himself in further texts writes about skins collected in Jun and Jul, therefore certainly not during migration.

Chagang (IV): Karimri (*IV-2): 10 Dec 1958 (ZIP), Okasan (IV-3): 10 Feb, 25 Nov 1958 (HO, or: 4-7 Nov 1958 – HO Hon cited by WON; see footnote 2, page 20);

Ryanggang (V): Hyesan (V-5): 1 Feb 1931 (WON), Paekdusan (V-12): 5 Jun 1980 (TOM), Kapsan (V-19): 15 Feb 1928 (WON 1956);

Hamgyong North (VI): 11 May 1918, 27 Oct 1929 (AUST), Dongsakol (*VI-14): 29 Jun, 1 Jul 1983 (TOM);

Hamgyong South (VII): ?15 Feb 1928, ?1 Feb 1931 (WON cited by AUST, but WON does not mention this observation in his later publications), Jangjin (VII-26): 4 Nov 1956 (WON);

Hwanghae North (IX): Kumchon (IX-13): 3 Feb 1972 (ZIP), Sansongri (IX-14): 5 Jan, 28 Mar 1957, 20 Jan 1958 (WON), 29 Jan 1962 (ZIP);

Hwanghae South (X): Talchonri (X-9): 1 Jan 1958 (ZIP);

Hwanghae (IX-X): 11 Jan 1914 (AUST);

Kaesong (XI): Kaesong (XI-1): 23 Feb 1928, 9 Mar 1929, 12 Feb 1930 (WON);

no locality: 4 Jan 1954, 7 Mar 1963, 30 Dec 1974 (ZIP), 21 Oct 1977 (ISEA);

no data: 3 specimens (ZIP), several specimens in shops (GŁOW).

M e a s u r e m e n t s (20 specimens of the collection ZIP, 1 specimen of the collection MZB, 1 specimen of the collection ISEA):

	8♂♂	\bar{x}	9♀♀	\bar{x}	5 ?sex	\bar{x}
wing	89-92	90.5	85-91	88.3	85-96	88.6
tarsus	20-22	20.6	18.5-22	19.8	18-19.5	18.9
bill	10-11.5	10.6	10-12.8	10.8	9-12	10.6
tail	60.2-69	63.5	61-67	63.9	56-69	64.7

Wintering species. Observed primarily during winter i.e. between 27 Oct and 28 Mar. Outside the winter period it is also seen in May, Jun and Jul (AUSTIN 1948, WON Hong-Koo 1965, TOMEK 1984). Observations in Jun and Jul could indicate nesting, but that is rather not probable³⁴ because the nearest known nesting grounds are in the Sikhote-Alin Mountains (VOLOSHINA et al. 1999). On the Korean Peninsula and areas immediately bordering it Pallas's Rosefinch was known till now only as a winter visitor or passage migrant and winter visitor (WON Hong-Koo 1965, GORE & WON Pyong-Oh 1971, PANOV 1973, MEYER DE SCHAUENSEE 1984, CHENG Tso-Hsin 1987, O Hung-Dam 1988, MACKINNON & PHILLIPS 2000, WON Pyong-Oh 2000, MORIOKA 2000).

343. *Pinicola enucleator* LINNAEUS, 1758

Pine Grosbeak

Data:

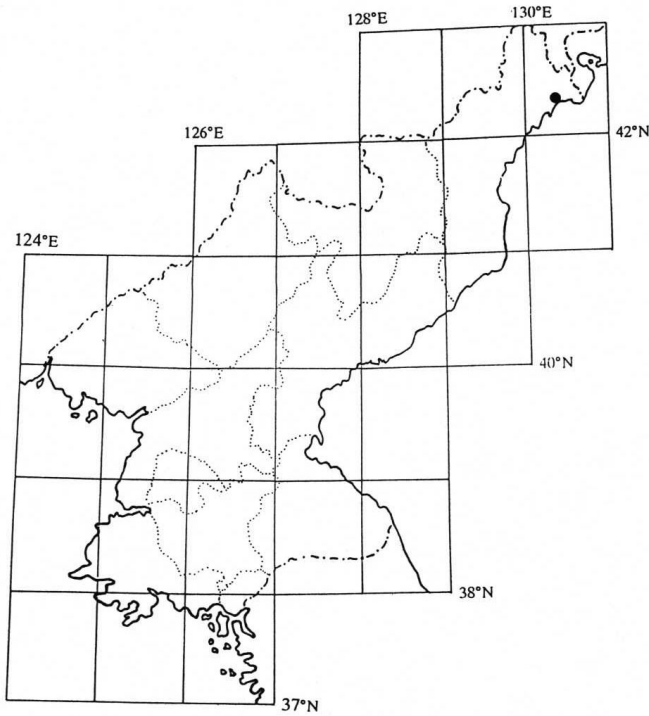
Hamgyong North (VI): Unggi (VI-7): 12 Nov 1959 (WON Hong-Koo 1960).

M e a s u r e m e n t s (1 specimen cited by WON Hong-Koo 1960): wing 110, tarsus 21, bill 15.5 tail 90.

Vagrant. Only one record. Pine Grosbeak is a resident bird and nomadizes to a limited extent after breeding season. The closest nesting grounds are found in the Sakhalin Island (NECHAEV 1991), the Kuril Islands (NECHAEV & FUJIMAKI 1994) and on Hokkaido Island (DISTRIBUTION 1981, MORIOKA 2000). In winter they nomadizing reaches the Sikhote-Alin Mountains (VOLOSHINA et al. 1999), southern Primorye (LITVINENKO & SHIBAEV 1971, NECHAEV 1971, PANOV 1973) and northeastern

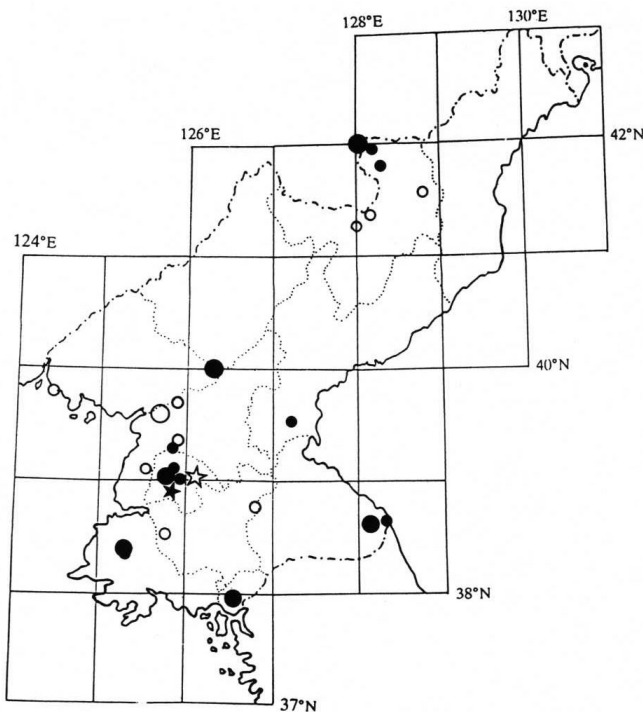
34

My suggestion (TOMEK 1985) concerning the possibility of nesting in the Hamgyong North Province is probably wrong since apart from a report of its presence there is no further evidence of nesting.



China (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). The Korean Peninsula is outside nomadizing grounds because there has been only one record (WON Hong-Koo 1965, WON Pyong-Oh 2000, LEE Woo-Shin et al. 2000) so far from the entire peninsula.

344. *Loxia curvirostra* LINNAEUS, 1758
Red Crossbill



Data:

Pyongyang (I): Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), Taechonri (*I-2): 17 Feb 1975 (ZIP), Taesongsan (I-6): 26 Apr 1989 (FIEB), Amisan (I-?): 2 May 1949, Ryongnamdong (I-?): 9 May 1957 (WON);

Pyongan South (II): Jamosan (II-15): 12 Feb 1957 (ZIP), Anju (II-16): 12 Dec 1928, 12 Feb 1930 (WON 1956), or: 30 Oct, 12 Dec 1932 (WON cited by AUST), Pusanri (*II-21): 8 May 1949 (WON), Kaechon (II-31): 9 Mar 1929 (WON 1956);

Pyongan North (III): Tasado (III-12): 7 May 1949 (WON 1956), Myohyangsan (III-24): May, Jun 1987-1990 (FIEB), Apr 1999 (DUCK);

Ryanggang (V): Samsu (V-4): 5-7 Aug 1897, Hyesan (V-5): 11 Jul 1897 (YANK), Samjiyon (V-10): no date (HO), Paekdusan (V-12): 5 Jun 1980 (TOM), Aug 1989 (FIEB), Mutubong (V-13): no date (HO), Paegam (V-16): 24 Jun, 1 Jul 1897 (YANK);

Hamgyong South (VII): Togkumari (*VII-38): 18 Apr 1960 (ZIP);

Kangwon (VIII): Samil-pho (VIII-7): 21, 26 Apr 1987, Kumgangsán (VIII-8): 22 Apr 1987 (GLOW), spring, summer 1997-1990 (FIEB), 1-4 Aug 1991 (BÁLDÍ);

Hwanghae North (IX): Kaedong (IX-2): 7 May 1949, Sariwon (IX-16): 16 May 1949 (WON 1956);

Hwanghae South (X): Kohyonri (*X-10): 16 Apr 1957, Ungyesan (*X-10): 23 Apr 1957, 3 Apr 1963 (ZIP);

Kaesong (XI): Kaesong (XI-1): 24 Oct, 15 Nov 1956, 10 Jan 1957 (WON).

M e a s u r e m e n t s (11 specimens of the collection ZIP):

	5♂♂	\bar{x}	6♀♀	\bar{x}
wing	90-92	91	89-93	91.8
tarsus	16-18	17.4	16-19	17.7
bill	14-19	16.7	15-18	16.8
tail	53-64	57.4	53-61	56.3

Migrating and probably breeding species. Observed year-round in small groups (FIEBIG 1995). Most records come from Apr and May (about 13 records).

The breeding period of the Red Crossbill is very extended in time, young leave the nest usually in Mar, but nesting or fledglings were seen also at other times i.e. from Dec to May, and even in Aug and Sep (DEMENTEV & GLADKOV 1951-1954, NEWTON 1972, GLUTZ & BAUER 1997, CRAMP & PERRINS 1994). Furthermore, it is emphasized by all authors that the place of nesting varies and depends on the abundance of spruce seed. Therefore only by finding a nest one can speak about nesting (and that only in a given season or year). In spite of that the relatively numerous records of Red Crossbills in North Korea indicate the probability of nesting, especially since it is a species with recorded nesting in bordering areas of China (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000) and in Primorye (NECHAEV 1998a); in South Korea it is an irregular common winter visitor.

Wing and bill length of birds caught in Feb and Apr (ZIP collection) are the closest to those given by CRAMP & PERRINS (1994) for *Loxia curvirostra japonica* RIDGWAY, 1885 (according to WON Hong-Koo 1965 it is this subspecies that occurs on the Korean Peninsula).

Loxia leucoptera J.F.GMELIN, 1789

White-winged Crossbill

Has not been recorded from North Korea so far; breeding in China (MACKINNON & PHILLIPS 2000) and Primorye (NECHAEV 1998a), vagrant in the southern part of the peninsula (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 1987, 1993, 2000, LEE Woo-Shin et al. 2000).

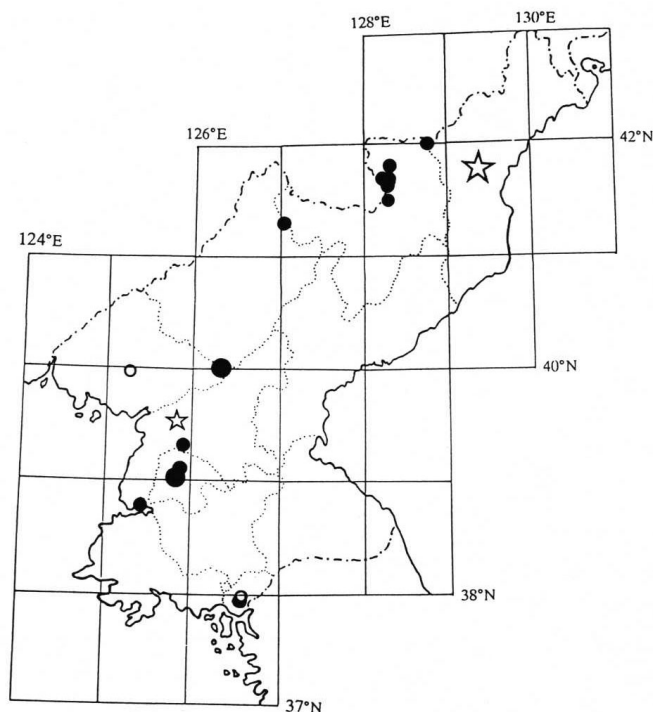
345. *Pyrrhula pyrrhula* (LINNAEUS, 1758)³⁵

[*Pyrrhula cassini*, *Pyrrhula griseiventris*, *Pyrrhula cineracea*]

Northern (Eurasian) Bullfinch

Data:

Pyongyang (I): Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), Taesongsan (I-6): 23 Dec 1988 (FIEB);



Hamgyong North (VI): 6 Nov 1915, 28 Oct-9 Nov, 6, 12, Nov 1929 (AUST);

Kaesong (XI): Kaesong (XI-1): 18, 28 Jan 1928, Jan 1957 (WON);

no data: 2 specimens (ZIP).

M e a s u r e m e n t s (9 specimens of the collection ZIP):

	5♂♂	\bar{x}	♀	♀	♀	?sex
wing	84-89	87.0	87.7	88	89	87
tarsus	16-19.5	17.7	18.5	19	18	19
bill	9-11	10.2	9.5	11	10	10
tail	64-73	68.6	75	70	69	71

Wintering species and perhaps very rarely nesting. Observed from 28 Oct to 14 Mar. In addition to winter records there are observations from the breeding period i.e. 4 Jul in Myohyangsan – and on the basis of this WON Hong-Koo (1965) maintained that it is a breeding species in North Korea; the other record on 1 Jun 1980 in Jongbong [Chong-pong] is not sure (TOMEK 1984).

The Northern Bullfinch nests in northeastern China (however not as far as the Korean Peninsula – CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000), southeast Russia (KOBLIK et al. 1997a, KOBLIK & MIKHAILOV 1994, MIKHAILOV et al. 1998), and also on the Japanese Islands of Hokkaido and Honshu (MORIOKA 2000), reaching to 35°N (DISTRIB. 1981). The possibility of nesting also in northeastern provinces of North Korea can not be eliminated; but to include it in the breeding fauna requires documentation (and not only records of its presence during breeding season). In South Korea it is a species present only during winter (HAHM Kyu-Hwang & YOO Jae-Pyoung 1992, HAHM Kyu-Hwang & SON Sung-Won 1998, WON Pyong-Oh 2000).

Pyongan South (II): Paeksongri (II-13): 14 Mar 1954 (WON), Nampho (II-26): 31 Jan 1995 (PERT), Yangdok (II-?): 11 Feb 1949 (WON 1956);

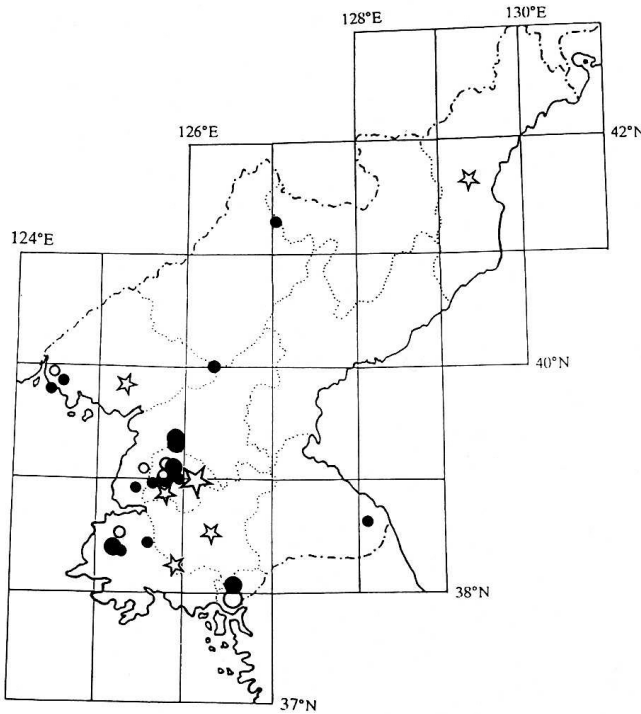
Pyongan North (III): Myohyangsan (III-24): 4 Jul 1956 (WON) 10, 15 Nov 1956 (ZIP), 23 Dec 2000, 16, 17 Jan 2001 (DUCK), Kusong (III-27): no date (WON 1956);

Chagang (IV): Karimri (*IV-2): 2, 7 Feb 1958 (ZIP), Okasan (IV-3): 2, 8, 18 Feb 1958 (HO; see footnote 2, page 20);

Rygang (V): Jongbong (*V-6) 1 Jun 1980 (TOM), Phothae (V-8): 17, 22 Feb 1963, Phothaesang (*V-8): 3 Mar 1963 (ZIP), Namphothae (*V-8): no date (HO), Samjiyon (V-10): 21 Jan, 25 Feb 1966 (ZIP), no date, 5 hohongjang (*V-15): no date (HO);

According to WON Hong-Koo (1965) there are three forms on the Korean Peninsula: wintering *Pyrrhula pyrrhula griseiventris* LAFRESNAYE, 1841, and *Pyrrhula pyrrhula cassini* BAIRD, 1869, as well as *Pyrrhula pyrrhula cineracea* CABANIS, 1872 recorded during breeding season.

346. *Coccothraustes coccothraustes* (LINNAEUS, 1758)
Hawfinch



Data:

Pyongyang (I): Apr, Oct, Dec 1987-1990 (FIEB), Pyongyang (I-1): 4 May 1949 (WON), 15, 26 Apr 1987 (GLOW), winters 1986-1988 (CHON Gil-Pyo 1988), 16 May 1988 (FIEB), Apr - 2 May 1999 (DUCK), Songmunri (*I-2): 5 Jun 1955 (ZIP) or: 6 May 1955 (ZIP cited by WON), Taesongsan (I-6): 1949 (WON 1956), 13 Feb 1973, 12 Jan 1979 (ZIP), Mankyongdae (I-11): 8 Apr 1987 (GLOW), Juamsan (I-?): 4 May 1949 (WON 1956);

Pyongan South (II): Jasan (II-12): 23 Dec 1953 (MAUERS), 8, 30 Apr 1954 (ZIP), Paeksongri (II-13): 17-30 Oct, Dec 1953, 3 Jan, 5 Mar, 8 Apr 1954, Pusanri (*II-21): 18 May 1949 (WON), Taesong-ho (II-28): 17 Oct 1978 (TOM);

Pyongan North (III): 26 Nov 1926 (AUST), Namsi (*III-10): 18 May 1958, Tasado (III-12): 23 May 1959, Yangsi (*III-13): 30 Apr 1949 (WON), Myohyangsan (III-24):

Apr 1999 (DUCK);

Chagang (IV): Karimri (*IV-2): 7 Feb 1958 (ZIP), Okasan (IV-3): 7 Feb 1958 (Ho; see footnote 2, page 20);

Hamgyong North (VI): 28 Jul, 27 Oct-12 Nov 1929 (AUST);

Kangwon (VIII): Onjongri (*VIII-8): 19 Apr 1987 (GLOW);

Hwanghae North (IX): Kaedong (IX-?): 16 Apr 1949 (WON);

Hwanghae South (X): Talchonri (X-9): 3 Dec 1957 (WON), 10 Feb 1958, Kohyonri (*X-10): 3 Nov 1957 (ZIP), Chaeryong (X-28): 30 Apr 1987 (GLOW);

Hwanghae (IX-X): no date, 24 Mar (AUST);

Kaesong (XI): Kaesong (XI-1): Dec 1925, 21 Jan 1930 (AUST), 5 Jan, 11, 26 Nov, 21 Dec 1929, Pagyon (XI-3): 19 Sep 1956, 8 Jan, 29-30 Jan 1958 (WON);

no data: 1 specimen (ZIP), ca 10 specimens in shops (GLOW).

M e a s u r e m e n t s (9 specimens of the collection ZIP):

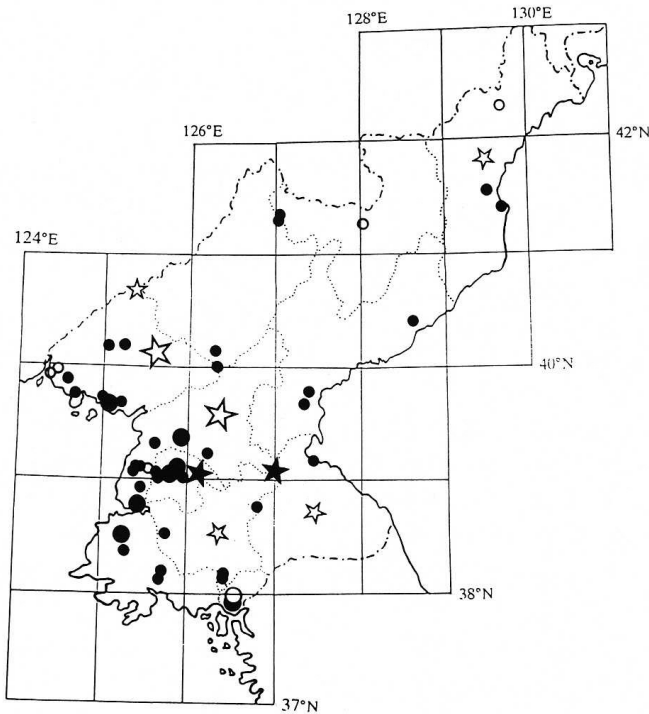
	5♂♂	\bar{x}	♀	♀	♀	?sex
wing	103-123	110.4	104	101	106	99
tarsus	20-22	21.4	22	23	22	20
bill	20-22	21.1	20	19.5	20	19
tail	50-60	56.6	55	54	58	49

Wintering, passage migrant and possibly breeding species. Observed from 19 Sep to 23 May. There are 2 records from the 1st half of the 20th century referring to nesting (see: AUSTIN 1948) in the Hamgyong North (a bird in juvenile plumage) and Hwanghae (nest with neither date nor collection site). In northern area i.e. in Primorye, in mid-May the Hawfinch starts to breed, but it is also seen in flocks of passage birds (PANOV 1973). Thus all records in May from North Korea may be of birds still migrating. On the other hand one can not eliminate the possibility that birds seen in the second half of May in Pyongan North could already be preparing for breeding, since this species nests not too far away, on the northern side of the frontier rivers Amnok and Tuman (PANOV 1973, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). It was also seen during the 1st 10 days of Aug on the northern slopes of the Paekdusan mountain (WON Pyong-Oh 1990). However including the Hawfinch into the breeding fauna of North Korea requires confirmation because to date the very archaic evidence of nesting is not complete and nesting has not been confirmed during later years (among others, a long-time and well-known researcher in bird fauna, WON Hong-Koo felt that it is only a winter and passage species; this opinion was repeated in later years by KIM Ri-Thae & O Hung-Dam 1982 and O Hung-Dam 1988). In South Korea the Hawfinch is present only during winter (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000).

347. *Coccothraustes migratorius* (HARTERT, 1903)

[*Eophona migratoria*, *Coccothraustes japonicus*]

Black-tailed Hawfinch, Chinese Grosbeak



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): 5-17, 18, 19, 25 May 1980 (MAUERS), 19, 20 May 1980, 5, 25 Jun 1983, 12, 22 May 1987 (TOM), 2 May 1987 (GŁOW), 25 Jul, 22 Dec 1988 (FIEB), Sep, 19 Nov, 2 Dec 2000, 25 Feb, 4, 7, 10, 18 Mar 2001 (DUCK), Songmunri (*I-2): 6 May 1955 (ZIP), 6, 27 May 1955 (MAUERS), Taesongsan (I-6): 10 May 1950, 30 Jul 1955 (WON), no date (FIEB), Ryongaksan (I-10): 15 May 1950 (WON), Mankyongdae (I-11): 7 May 1980 (MAUERS), 21 May 1980 (TOM), Sokmunri (I-?): 13 May 1950 (WON);

Pyongan South (II): 8 May 1931, 22 Sep 1932, 24 May 1934, May 1935 (WON), Tohari (*II-9): 21 May 1955, Jasan (II-12): 9 May 1953, 7, 8 Jun, 9 Oct 1954 (ZIP), Pyongwon (II-17): 7 May 1951,

Chungsan (II-19): 29 Apr 1959 (WON), Ochonri (*II-19): 4 Sep 1955, Joksongri (*II-19): 5, 6 Sep 1955 (ZIP); Pusanri (*II-21): 8 Oct 1949 (WON), Nampho (II-26): 13 May 1980 (MAUERS), Aug 1991 (BÁLDI), Taesong-ho (II-28): 24 May, 8 Jun 1980 (TOM);

Pyongan North (III): 26 May-19 Jun 1917, 9-20 May 1929 (AUST), Jongju (III-3): 30 Jun 1951 (WON), Kwaksan (III-4): 12 May 1955 (MAUERS), 18 May 1955 (ZIP), 11 May 1959, Rohari (III-5): 21 May 1955,

Cholsan (III-9): 25 Jun 1959 (WON), Namsi (*III-10): 18 Jul 1958 (ZIP), Yangsi (*III-13): 18 May 1949, Ryongampho (III-15): 11 May 1949 (WON), Unrimri (*III-20): 25 Apr, 25 Jun 1961, Unchangri (*III-21): 7 Jul 1961, Myohyangsan (III-24): 24 Jun 1954 (ZIP);

Pyongan North-Chagang (III-IV): Amnok riv.(III-IV-?): before 1923 (SOWERBY);

Chagang (IV): Okasan (IV-3): 28 May 1958 (HO), Huichon (IV-10): 18 May 1987 (TOM);

Ryongyang (V): Ryongjori (V-2): 28 May 1958 (ZIP), Samsu (V-4): 13 Jul, 16 Aug 1897 (YANK);

Hamgyong North (VI): 23, 24 Aug 1917 (AUST), Obongsan (VI-11): 14 Jun 1897 (YANK), Kwanmori (VI-26): 21 May 1959 (ZIP), Jangyon-ho (VI-29): 4 Jul 1983 (TOM);

Hamgyong South (VII): Jongdongri (VII-12): 15 Jul 1960, Hungsanri (*VII-31): 2 Jun 1960, Chowonri (VII-34): 30 May 1960 (ZIP);

Kangwon (VIII): 8 Sep 1914 (AUST), Wonsan (VIII-3): 24 May 1980 (MAUERS);

Hwanghae North (IX): Tongsanri (IX-2): 13 Jun 1962, Kumchon (IX-13): 17 May 1962, Yangham (*IX-13): 12 Jun 1962 (ZIP), Sariwon (IX-16): 2 May 1987 (GLOW), Chodo (IX-?): 23 May 1949 (WON);

Hwanghae South (X): Kuwolsan (X-6): 18 May 1955, 12, 26 Jun 1957, Kohyonri (*X-10): 14 Feb, 12, 17, 23 May 1957 (ZIP), Suyangsan (X-24): 30 May 1980 (TOM), Changsu (X-25): 30 Apr 1987 (GLOW);

Kaesong (XI): Kaesong (XI-1): 2 Jul 1927, 16 May 1928 (WON), 16 May 1980 (MAUERS), 14, 16 Aug 1984 (KOLBE), 24-25 Aug 1991 (BÁLDI), 23, 25 May 1997 (PERT);

no locality: all landscapes except mountains 1987-1990 (FIEB), 18 specimens in shops (GLOW);

no data: 5 specimens (ZIP).

M e a s u r e m e n t s (25 specimens of the collection ZIP, 3 specimens of the collection MZB):

	14♂♂	\bar{x}	10♀♀	\bar{x}	4 ?sex	\bar{x}
wing	87-102	97.1	93-96.5	95.1	94.5-95	94.8
tarsus	19-25	22.3	20-23	21.1	21-24	22.3
bill	17.5-21	19.2	18-21	19.2	17-19	18.4
tail	65.5-81	74.5	67-74	69.3	69-70	69.6

Common breeding and rare wintering species. Observed from 25 Apr till 9 Oct; also observed during winter: in Pyongyang (Dec 1988 and several times during the winter of 2000/2001) as well as in Kohyonri (14 Feb 1957). During breeding season the Black-tailed Hawfinch is present throughout the whole country, particularly frequent and numerous in city parks (FIEBIG 1995). The relatively few points on the map results from either lack of research in some regions of the country or not all record sites have been given (among other by WON Hong-Koo 1965 and FIEBIG 1995).

The Black-tailed Hawfinch is also a breeding species in all bordering areas (GORE & WON Pyong-Oh 1971, LITVINENKO & SHIBAEV 1971, PANOV 1973, ETCHECOPAR & HÜE 1983, NEUFELDT & VIETINGHOFF-SCHEEL 1982a, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, WON Pyong-Oh 2000) with the exception of Japan where it only winters (DISTRIBUTION 1981, MORIOKA 2000). In Primorye it winters very rarely (NECHAEV 1998a).

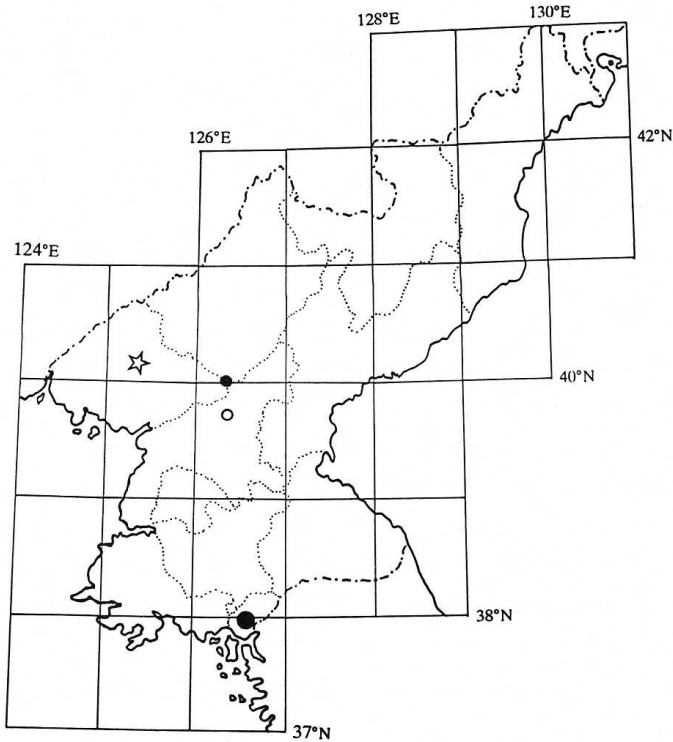
348. *Coccothraustes personatus* TEMMINCK et SCHLEGEL, 1848

[*Eophona personata*, *Eophona personata magnirostris*]

Masked Hawfinch, Japanese Grosbeak

Data:

Pyongan South (II): ?Anju (II-16): undated (WON cited by AUST, but WON does not mention this observation in his later publications), Tokchon (II-33): 20 Apr, 4 Jun 1945 (WON);



Pyongan North (III): 26 May
30 Apr 1989 (FIEB);

Kaesong (XI): Kaesong (XI-1):
30 May 1960 (WON), 10 Jun 1963
(ZIP), 20 Oct 1984 (TOM).

M e a s u r e m e n t s
(2 specimens of the collection
ZIP):

	♂	?sex
wing	118	118
tarsus	24	24
bill	25.5	25.5
tail	88	88

Scarce passage migrant and probable breeding species. To date recorded 7 or 8 times: between 20 Apr and 10 Jun (6 or 7 records) and in Oct (1 record).

In Primorye in mid-May the Masked Hawfinch commences to build nests, and the females lay eggs at the beginning of Jun

(PANOV 1973). Therefore the presence of birds in North Korea after the middle of May (4 records) indicates its nesting. Support of nesting in the northern part of the Korean Peninsula is found in the fact that this species nests in areas north of the frontier forming Tuman River (PANOV 1973, NEUFELDT & VIETINGHOFF-SCHEEL 1982b, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, MIKHAILOV et al. 1998, NECHAEV 1998a, TIUNOV 1999) and Japan (DISTRIB. 1981, MORIOKA 2000). Inclusion into the breeding fauna requires confirmation. In South Korea to date the Masked Hawfinch was recorded only on passage and in winter (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000, LEE Woo-Shin et al. 2000). Therefore the breeding border of the Masked Hawfinch probably crosses the northern part of the Korean Peninsula.

Ploceidae

349. *Passer rutilans* (TEMMINCK, 1835) Cinnamon Sparrow

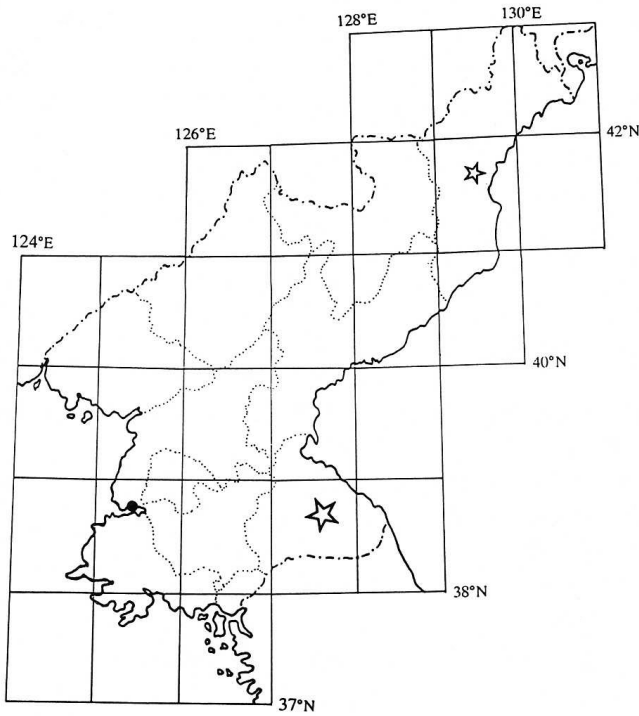
Data:

Pyongan South (II): Nampho (II-26): 10 Aug 1984 (KOLBE);

Hamgyong North (VI): no date (AUST);

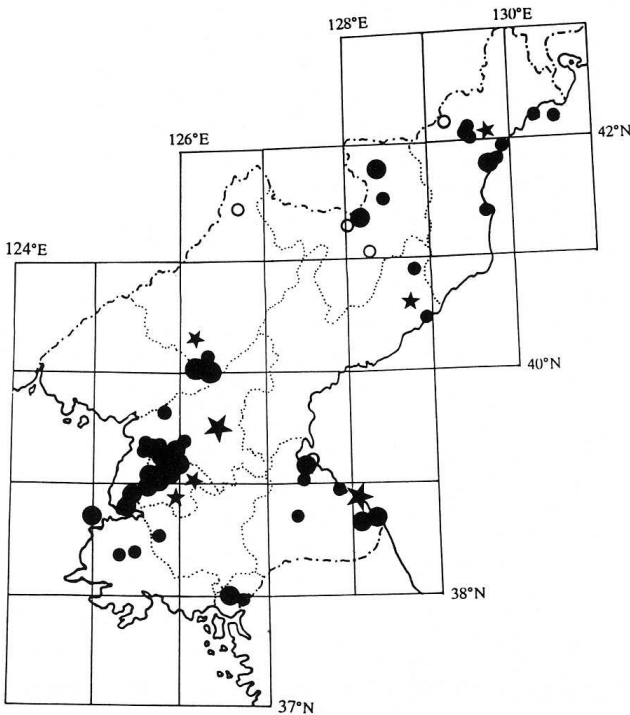
Kangwon (VIII): 8 Oct 1914, 13-27 Jun 1929 (AUST).

Straggler. Till now recorded only 4 times, only once during the last 20 years. The Cinnamon Sparrow nests in South Korea (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000), Japan (DISTRIB. 1981, MORIOKA 2000) and in southeastern China, going as far north as the Shandong Province



350. *Passer montanus* (LINNAEUS, 1758)
Eurasian Tree Sparrow

(CHENG Tso-Hsin 1987, MAC-KINNON & PHILLIPS 2000), i.e. to about 38°N. It also nests in Sakhalin (NECHAEV 1991) and the Kuril Islands (NECHAEV & FUJIMAKI 1994, NECHAEV 1997). Straggler birds were seen in southern Primorye (NECHAEV in LER. 1989). So, theoretically they should also appear in North Korea. However neither WON Hong-Koo (1965) up to the sixties nor FIEBIG (1995) during the years 1989-91 recorded its presence.



Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): ◆, winters 1986-1988 (CHON Gil-Pyo 1988), Ponghwari (I-4): ◆, Samsok (I-5): 28 Jan 1966 (ZIP), Taesongsan (I-6): ◆, Ryongaksan (I-10): ◆, Mankyongdae (I-11): ◆, Sogam (I-15): ◆, Paldongkyo (I-?): 3 Nov 1954 (ZIP);

Pyongan South (II): Unsan (II-10): 19, 20, 22 Aug 1954, Jasan (II-12): 29 Sep 1953, 14 Jan, 2, 3 Mar 1954, Paeksongri (II-13): 18, 19 Sep 1954, Pyongwon (II-17): 19, 20, 30 Sep 1963, Janghungri (*II-17): 16 Apr 1962, 24 specimens collected between 30 May-27 Aug 1963, 23 Feb, 25 Apr 1964, Namkyori (*II-17): 17 Jun 1963, Opha (*II-17): 24 Jun 1963 (ZIP), Tokto (II-25): breeding season 1995 (CHONG Jong-Ryol et al. 1996), 27 May 1997 (ERT),

Nampho (II-26): May 1980 (MAUERS), Aug 1984 (KOLBE), Aug 2000 (DUCK), Taesong-ho (II-28): ◆, Yonpung-ho (II-30): 7 Jun 1987 (TOM), roads (II-?): ◆;

Pyongan North (III): Hyangsan (III-23): Apr 1999, Jul-Dec 2000 (DUCK), Myohyangsan (III-24): ◆;

Chagang (IV): Nov 2000 (DUCK), Chasong (IV-1): 4 Sep 1897 (YANK), Huichon (IV-10): 13-18 May 1987 (TOM);

Ryanggang (V): Samsu (V-4): 16 Aug 1897 (YANK), Hyesan (V-5): ◆, Naegokri (V-7): 13-17 Oct 1986 (TOM), Samjiyon (V-10): 16 Apr 1962, 27 Feb 16 Mar 1965, 17 Jan 1966 (ZIP), no date (HO), ◆, Kapsan (V-19): 14-15 Aug 1897 (YANK);

Hamgyong North (VI): Alsom (VI-6): 11 Apr 1996 (EDW), Musan (VI-12): 6 Jun 1897 (YANK), Chayuryong (VI-13): 30 Jun, 10 Jul 1983, Dongsakol (*VI-14): 1. Jul 1983, Mayang (VI-15): 30 Jun 1983, Ryongje-ho (VI-17): 27 Jun 1983, Koanjuryong (VI-18): 28 Jun 1983 (TOM), Chongjin (VI-19): ◆, Jangyon-ho (VI-29): 4 Jul 1983 (TOM), Rajin (VI-39): 10 Apr 1996 (EDW), roads in Chongjin region (VI-?): 29 Jun-9 Jul 1987 (TOM);

Hamgyong South (VII): Kumdok (VII-2): 29 May 1987, Tanchon (VII-8): 24 May-3 Jun 1987, roads in Tanchon region (VII-?): 24 May-3 Jul 1987 (TOM);

Kangwon (VIII): Wonsan (VIII-3): 19 Sep 1897 (YANK), ◆, Sokwangsa (VIII-4): 12 Oct 1978 (TOM), Sijungho (VIII-5): May 1980, Samil-pho (VIII-7): ◆, Kumgangsán (VIII-8): ◆, Wonsan-Onjongri (*VIII-3-8): ◆, Sambang (VIII-10): 3 Sep 1962 (ZIP);

Hwanghae North (IX): Sariwon (IX-16): 3 May 1987 (GLOW);

Hwanghae South (X): Kohyonri (*X-10): 17 Oct 1957 (ZIP), Sinchon (X-11): 30 May 1980 (TOM);

Kaesong (XI): Kaesong (XI-1): 14 Sep 1965 (ZIP), ◆, Panmunjom (XI-6): Aug 1984 (KOLBE); no data: 10 specimens (ZIP).

M e a s u r e m e n t s (33 specimens of the collection ZIP, 3 specimens of the collection ISEA):

	17♂♂	\bar{x}	10♀♀	\bar{x}	9 ?sex	\bar{x}
wing	63-71	66.9	63.6-70.6	66.3	60.2-76	67.3
tarsus	16-19	17.1	15.8-17.7	17.0	16.3-19	17.2
bill	9-11.7	10.6	9.8-11.5	10.9	8.9-11.3	10.2
tail	45-60	52.5	46-56	50.1	47-61	52.6

Abundant resident species. All ornithologists researching the bird fauna of North Korea are of the opinion that it is the most numerous and common species particularly near built up areas. According to my data it does not occur only in forested areas and mountain valleys far from buildings. The relatively few points on the maps results from either lack of research or the fact that due to its great frequency authors do not give record sites (WON Hong-Koo 1965, GŁOWACIŃSKI et al. 1989, FIEBIG 1995, STEPANYAN 1998 and others).

In all bordering areas it also is an abundant resident species (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, DISTRIB. 1981, MORIOKA 2000, NECHAEV 1998a, WON Pyong-Oh 2000).

S t u r n i d a e

351. *Sturnus philippensis* (J. R. FORSTER, 1781)

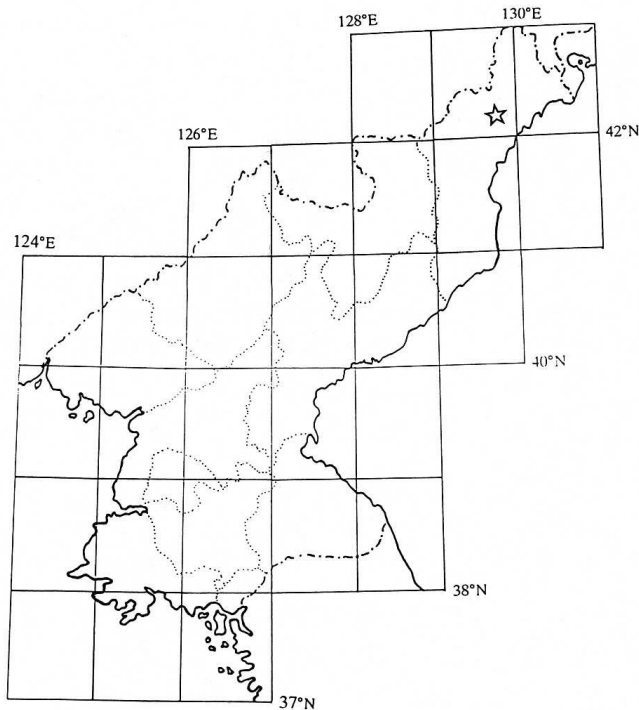
[*Sturnia philippensis*]

Violet-backed Starling

Data:

Pyongan North (III): ?17 May 1934 (WON cited by AUST), ?Pakchon (III-1): no date (WON 1956);

Hamgyong North (VI): 15 Oct 1927 (AUST).



1994, NECHAEV 1998b), Primorye (NAZAROV 1986, NECHAEV in LER 1989, NECHAEV 1998a) and also in South Korea (WON Pyong-Oh 2000). Theoretically it should also be found in North Korea but it has not been recorded here for the last 70 yrs.

352. *Sturnus sturninus* (PALLAS, 1776)

[*Sturnia sturnina*, *Sturnia sturnia*]

Daurian Starling

Data:

Pyongyang (I): Pyongyang (I-1): 5 Jun 1950 (WON), 19 May 1980 (MAUERS), 20 May 1980 (TOM), 24 May (FIEB), 2 May 1999, 13 May 2001 (DUCK);

Pyongan South (II): Anju (II-16): 4 Jun 1935, 21 May 1936, 2 Jun 1938, 5 Jun 1939 (WON);

Pyongan North (III): 18-27 May 1929 (AUST), Pakchon (III-1): 17 May 1934, Jongju (III-3): 5 Jun 1951 (WON), Wonhari (*III-3): no date (WON 1956), Yangsi (*III-13): Jul 1937, 14, 21 May 1950 (WON);

Hamgyong North (VI): no date, May 1928 (AUST), Orang (VI-28): 9 Jul 1983 (TOM);

Hamgyong South (VII): Tanchon (VII-8): 7 May 1960 (ZIP), 5 Jul 1960 (WON), Hamhung (VII-30): 30 May, 6 Jun 1940 (WON 1956 or: 30 May-6 Jun 1940 – WON cited by AUST);

Kangwon (VIII): Wonsan (VIII-3): 24 May 1980 (MAUERS);

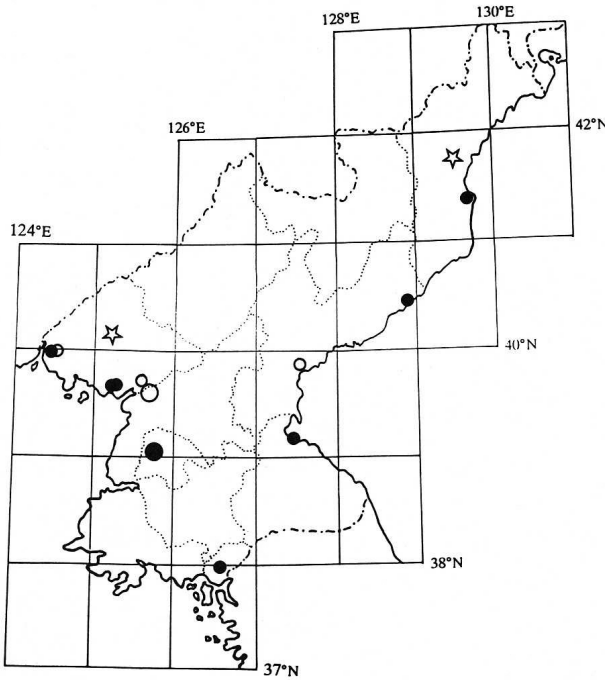
Kaesong (XI): Kaesong (XI-1): 10 Sep 1962 (ZIP).

M e a s u r e m e n t s (♂ and ♀ of the collection ZIP): wing 105, 95; tarsus 30, 24; bill 14, 13; tail 52, 48 mm successively.

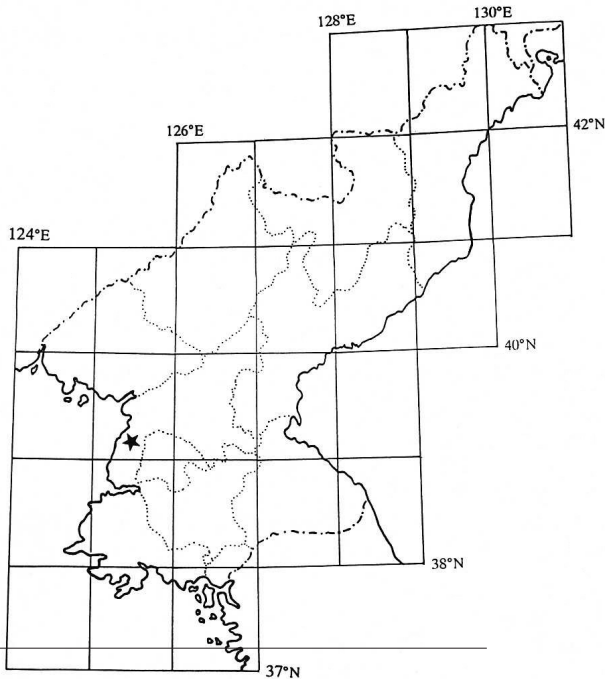
Breeding species. Observed from 2 May till 10 Sep. According to literature and the ZIP collection the Daurian Starling has been recorded only 12 times in North Korea. Most of these records come from the 1st half of the 20th century. It therefore seems that this species is neither encountered

Straggler. To date at the most 3 records. One of these is certain (AUSTIN 1948). The other 2 records are from WON Hong-Koo in Pyongan North Province, however he does not mention them in his monograph (WON Hong-Koo 1965). Further doubts are raised by their incompleteness: no date or record site nor circumstances around the record (see: AUSTIN 1948). Furthermore it is uncertain as to whether they were 2 unrelated records or only one (or also: if there was a record of this species at all).

The Violet-backed Starling nests on the Japanese Islands (DISTRIB. 1981, FUJIMAKI 1998b, MORIOKA 2000), Sakhalin (NECHAEV 1991) and Kuril Islands (NECHAEV & FUJIMAKI



353. *Sturnus vulgaris* LINNAEUS, 1758
Common Starling



36

It is therefore difficult to agree with FIEBIG's opinion (1995) that the Daurian Starling was a widely distributed, frequent breeding species ("Weitverbreiteter, häufiger Brutvogel"), especially since apart from Pyongyang no other siting places are given

often nor is it numerous³⁶. It has a similar status in neighboring areas: rare or scarce summer visitor in South Korea (WON Pyong-Oh 2000), uncommon breeding in Primorye (NECHAEV 1998a), in China fairly common (CHENG Tso-Hsin 1987) or uncommon (MACKINNON & PHILLIPS 2000), and accidental visitor in Japan (MORIOKA 2000).

Data:

Pyongan South (II): Ryongyang
(II-?): Feb 1977 (ZIP).

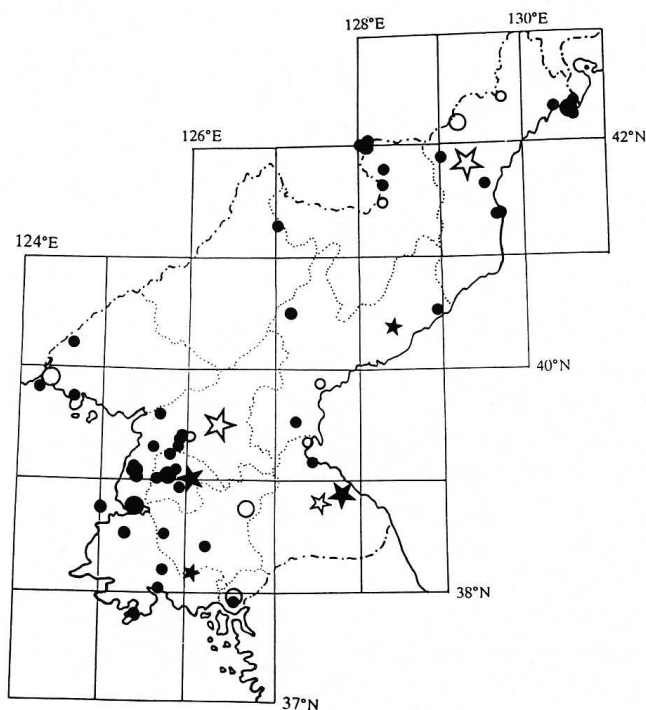
Straggler. Only one record. The closest nesting ground of the Common Starling is found in northwest China, although nomadizing individuals even appeared along the east coast of China near the Korean Peninsula (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000), in Primorye (GLUSCHENKO & SHIBNEV 1977, 1984, NECHAEV 1998a), and also on the Japanese Islands (MORIOKA 2000). In South Korea it was recorded

only several times (PARK Haeng-Shin & KIM Wan-Byung 1995, LEE Woo-Shin et al. 2000).

354. *Sturnus cineraceus* TEMMINCK, 1835

[*Spodiopsar cineracea*]

Grey Starling



Data:

Pyongyang (I): 7, 13 May 1980, Pyongyang (I-1): ◆, Taesongsan (I-6): 4, 10 Apr 1950 (WON), Mankyongdae (I-11): 8 Apr 1987, Sogam (I-15): 17 Apr 1987 (GLOW), Tongmyongwang (I-16): 9 May 1980 (MAUERS), Pyongyangchonri (I-?): 12 Jun 1955 (WON);

Pyongan South (II): 20 Apr 1931 (AUST), 20 Apr 1931 (WON, or: 23 Apr 1931, 15 Apr 1932, 31 Mar 1933 – WON cited by AUST), Unsan (II-10): 20 Aug, 22 Oct 1929 (WON), Jehyonri (*II-11): 28 Apr 1957, Jasan (II-12): 14 Nov 1955 (ZIP), Paeksongri (II-13): 14 Nov 1953 (WON), Anju (II-16): 26 Nov 1989 (STEP), Pyongyangon (II-17): 22 Apr 1951, Chungsan (II-19): Jul 1959 (WON), Hamjongri (*II-19): 23 Apr 1958, Mupongri (*II-19): 29 Mar 1966, Phungjongri (*II-19): 15 Apr 1958 (ZIP), Tokto (II-25):

breeding season 1995 (CHONG Jong-Ryol et al. 1996), Nampho (II-26): 10 Aug 1984 (KOLBE), 26 May 1997 (PERT), Apr 1999 (DUCK);

Pyongan North (III): Cholsan (III-9): 25 Sep 1959 (WON), Mumyongpyong (*III-14): 2 Apr 1965 (ZIP), Ryongampho (III-15): 11 Apr-28 May (AUST, WON), 30 May 1949 (WON), Sujinri (III-17): 6 Jun 1982 (ZIP);

Chagang (IV): Karimri (*IV-2): 5 Apr 1958 (ZIP), Okasan (IV-3): 5 Apr 1958 (HO); see footnote 2, page 20);

Ryanggang (V): Pochon (V-6): 7 Jul 1897 (YANK), Hongkyesu (*V-8): 19 Apr 1963 (ZIP), no date (HO), Samjiyon (V-10): 19 Apr 1963 (ZIP), Paekdusan (V-12): no date (HO), 6 Aug 1987 (JIN Dok-Jun & O Hung-Dam 1990), Nongsari (*V-12): no date (HO), Mutubong (V-13): 1 Aug 1960 (ZIP);

Hamgyong North (VI): 22 Apr 1912, 18 Aug 1917, 25 Apr 1918, 15 Mar, 28 Jul 1929 (AUST), Tongbonpho (*VI-3): 9 Apr 1996 (EDW), Kulphori (VI-4): 14 Jul 1958 (WON), 8, 12 Apr 1959, Sosura (VI-5): 28 Mar, 1 Apr 1959, Kumgangri (*VI-7): 6 Apr 1959 (ZIP), Hoeryong (VI-9): 28 May 1897, Musan (VI-12): 12 Jun 1897 (YANK), 15 Jul 1929 (WON), Nongsari (*VI-20): 14 Jul 1959 (ZIP), Onphori (VI-23): 27 Jun 1983, Jangyon-ho (VI-29): 4 Jul 1983, Ryongchaeho (*VI-29): 28 Jun 1983 (TOM);

Hamgyong South (VII): 24-30 May 1987 (TOM), Kwangchon (VII-6): 8 Jul 1960 (ZIP), Jangjinho (VII-25): 25 Jun 1956, Hamhung (VII-30): 3 May 1941 (WON), Haejungri (*VII-38): 29 Mar, 2, 11 Apr 1960 (ZIP), roads in Tanchon region (VI-?): 1987 (TOM);

Kangwon (VIII): Apr (AUST), Wonsan (VIII-3): 25 May 1980 (MAUERS), Wonsan-Kosong (VIII-3-6): 14 Jun 1980 (TOM), 24 Apr 1987 (GLOW), Yonghung (VIII-14): 15 Oct 1897 (YANK);

Hwanghae North (IX): Koksan (IX-3): 21 Mar 1914, 3 Apr 1934 (AUST, WON), Sohung (IX-9): 17 May 1980 (MAUERS), Sariwon (IX-16): 4 May 1987 (GLOW);

Hwanghae South (X): Kuwolsan (X-6): 13 Apr 1999 (DUCK), Sangkyori (X-18): 23 Oct 1962, Haeju (X-22): no date (ZIP), Changsu (X-25): 30 Apr 1987 (GLOW);

Kaesong (XI): Kaesong (XI-1): 23 Apr 1930, 15, 21 Mar 1931 (WON), 21 Apr 1962 (ZIP);

Roads Pyongyang-Haeju (I-1-X-22): 27 Apr 1987 (GLOW), Pyongyang-Sohung (I-1-IX-9): 22 May 1987 (TOM);

no data: specimens (ZIP), several specimens in shops (GLOW).

M e a s u r e m e n t s (25 specimens of the collection ZIP, 1 specimen of the collection ISEA):

	9♂♂	\bar{x}	11♀♀	\bar{x}	6 ?sex	\bar{x}
wing	124-134	127.8	120-133.5	126.4	121-133	126.0
tarsus	26-32	29.5	27-33	30.4	28-31	29.5
bill	24-27	25.7	21-31	25.1	22-29	25.3
tail	54-71	64.4	61-70	65.1	63-69	65.8

Common breeding, passage migrant and rare wintering species. Most records come from breeding periods and on migration. They are especially frequent and numerous in city parks. After breeding season they form night flocks of up to 250 individuals (FIEBIG 1995). Wintering birds were observed by DUCKWORTH (pers comm.) during the 2000/2001 winter in Pyongyang.

The Grey Starling is also a common breeding species in all bordering areas (PANOV 1973, GORE & WON Pyong-Oh 1971, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, DISTRIB. 1981, NECHAEV 1998a, MORIOKA 2000, WON Pyong-Oh 2000, MACKINNON & PHILLIPS 2000). Furthermore in the southern part of the peninsula and also in Primorye a few individuals winter (GORE & WON Pyong-Oh 1971, WON Pyong-Oh 1993, 1996, NECHAEV 1998a). One can thus expect that also in North Korea more birds wintered than were recorded (lack of data).

Sturnus sinensis (J. F. GMELIN, 1788)

Chinese Starling

Has not been recorded from North Korea so far (vagrant in the southern part of the peninsula – GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000, LEE Woo-Shin et al. 2000).

Oriolidae

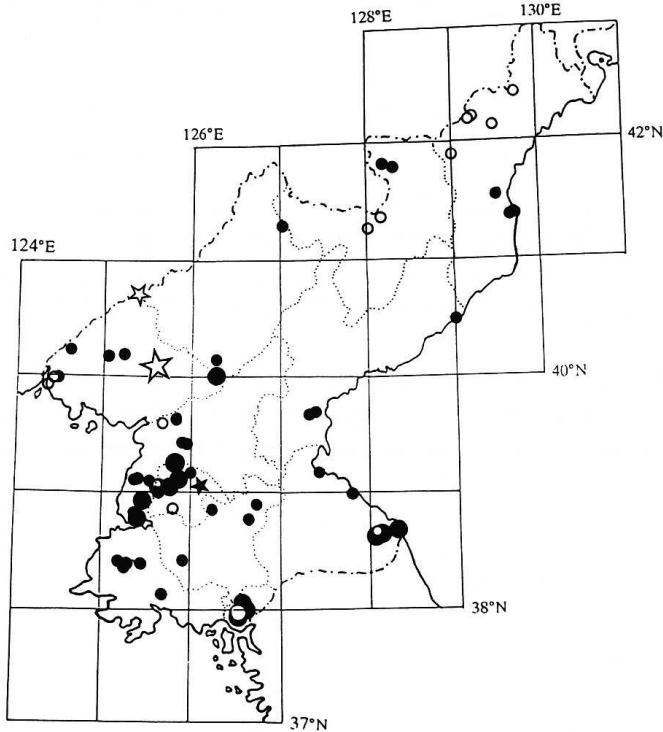
355. *Oriolus chinensis* LINNAEUS, 1766

Black-naped Oriole

Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): 31 Aug 1979, 20 May 1980, 5, 23 Jun 1983 (TOM), 14-26 May 1980 (MAUERS), 30 May 1984 (ZIP), 25 Aug 1984 (KOLBE), 12 May-8 Jun 1987 (TOM), 29 Aug 1988, 16, 26 May 1989 (FIEB), 21 May 1997 (PERT), Jul - 23 Sep 2000 (DUCK), Ponghwari (I-4): 5 Jun 1987 (TOM), Taesongsan (I-6): 14 Sep 1955 (ZIP), 22 May 1980 (TOM), Ryongaksan (I-10): 17 May 1949 (WON), 19 Sep 1978, 23 May 1980, Mankyongdae (I-11): 21 May 1980 (TOM), Chunghwa (I-13): 19 Jun 1919 (WON), Sogam (I-15): 6 Aug 1979, 24 Jun 1983 (TOM);

Pyongan South (II): Sunchon (II-11): 24 Aug 1954 (MAUERS), Jehyonri (*II-11): 2 Jul 1954, Anju (II-16): 10 Jun 1936, Chungsan (II-19): 25 Jul 1959 (WON), Joksongri (*II-19): 4 Sep 1955 (ZIP), Taedong (II-21): 21 Jun



1955 (WON), Nampho (II-26): 13 May 1980 (MAUERS), 9-11 Aug 1984 (KOLBE), Aug 1991 (BÁLDI), 26 May 1997 (PERT), Aug 1999 (DUCK), Usanri (II-27): 6 Jun 1987, Taesong-ho (II-28): 3 Aug 1979, 24 May, 8, 9 Jun 1980, 13-15 Jul 1983, Yonpung-ho (II-30): 7 Jun 1987 (TOM);

Pyongan North (III): 23 Aug 1912, 6 Jun 1917, 11-23 May 1929 (AUST), Yangsi (*III-13): 27, 28, 30 (month?) 1949, 25 May 1950 (WON), Ryongampho (III-15): 11, 12 May 1949 (WON), Sujinri (III-17): 6 Jun 1982, Chonmasan (III-20): 13 Jun 1961, Unchangri (*III-21): 13 Jun 1961, Myohyangsan (III-24): 29 Jun 1954 (ZIP), 25-27 May 1980, 6-20 Jun 1983 (TOM), 8-12 Aug 1991 (BÁLDI);

Pyongan North-Chagang (III-IV): Amnok riv.(III-IV-?): before 1923 (SOWERBY);

Chagang (IV): Okasan (IV-3): no date (HO), Huichon (IV-10): 16-18 May 1987 (TOM);

Rygang (V): Samsu (V-4): 5 Jul 1897, Hyesan (V-5): 27 Jul 1897 (YANK), Samjiyon (V-10): no date (HO), Sobaeksan (V-11): 10 Oct (ZIP), no date (HO);

Hamgyong North (VI): Hoeryong (VI-9): 27 May 1897, Musan (VI-12): 11 Jun 1897, Samjangmyon (*VI-12): 10 Jun 1897, Chayuryong (VI-13): 3 Jun 1897, Nongsari (*VI-20): 19 Jun 1897 (YANK), Kwamori (VI-26): 23 May 1959 (WON), Jangyon-ho (VI-29): 4 Jul 1983, Ryongchaeho (*VI-29): 28 Jun 1983 (TOM);

Hamgyong South (VII): Sangryong (VII-7): 30 May, 3 Jun 1987 (TOM), Sinhungri (VII-32): 29 May 1960 (WON), 8 Jun 1960, Chowonri (VII-34): 29 May 1960 (ZIP);

Kangwon (VIII): Wonsan (VIII-3): 20, 24, 25 May 1980, Sijungho (VIII-5): 20 May 1980 (MAUERS), Samil-pho (VIII-7): 9 Oct 1978, 10, 13 Jun 1980 (TOM), 22 May 1980 (MAUERS), Kumgangsán (VIII-8): 12 Jun 1949 (WON), 8 Aug 1979 (TOM), 1-4 Aug 1991 (BÁLDI), Onjongri (*VIII-8): 10 Aug 1979, 11, 12 Jun 1980 (TOM), 23 May 1980 (MAUERS), 18 Aug 1984 (KOLBE), 23 Apr 1987 (GLOW);

Hwanghae North (IX): Sinpyong (IX-1): 25 May 1980 (MAUERS), Koksán (IX-3): 27 May 1962 (ZIP), Sohungho (IX-7): 22 May 1987, Yonsán (IX-17): 20 May 1987 (TOM);

Hwanghae South (X): Talchonri (X-9): 21, 30 Jun, 2 Aug 1957 (ZIP), Kohyonri (*X-10): 24 May 1957 (WON), Onchon (*X-10): 25 Jun 1962 (ZIP), Sinchon (X-11): 30 May 1980, Suyangsán (X-24): 31 May 1980 (TOM);

Kaesong (XI): Kaesong (XI-1): 10 Apr, May 1926, 12 Jun, 1, 4, 7, 16 Sep, 6 Oct 1927, 29 May 1931 (WON), 15 May 1980 (MAUERS), 16 Aug 1984 (KOLBE), 26 May 1989 (FIEB), 24-25 Aug 1991 (BÁLDI), 24, 25 May 1997 (PERT), Pagyon (XI-3): 31 Aug 1955, 16 Jun 1956, 20 May, 20 Sep 1957, 30 Jun, 4 Sep 1958 (WON), 16 May 1980, Kongminghang (XI-7): 16 May 1980 (MAUERS), 24, 25 Sep 1986 (TOM), 21 May 1997 (PERT);

no data: 2 specimens (ZIP), 50 specimens in shops (GLOW).

M e a s u r e m e n t s (12 specimens of the collection ZIP, 3 specimens of the collection ISEA):

	5♂♂	\bar{x}	7♀♀	\bar{X}	?sex	?sex	?sex
wing	146-155	151.2	147-156	151.0	154	154	157
tarsus	24-27	25.0	25-29	26.0	26	26	30
bill	28-32	29.8	26-31	29.0	28	31	23
tail	87-100	93.3	93-101	95.6	99	91	106

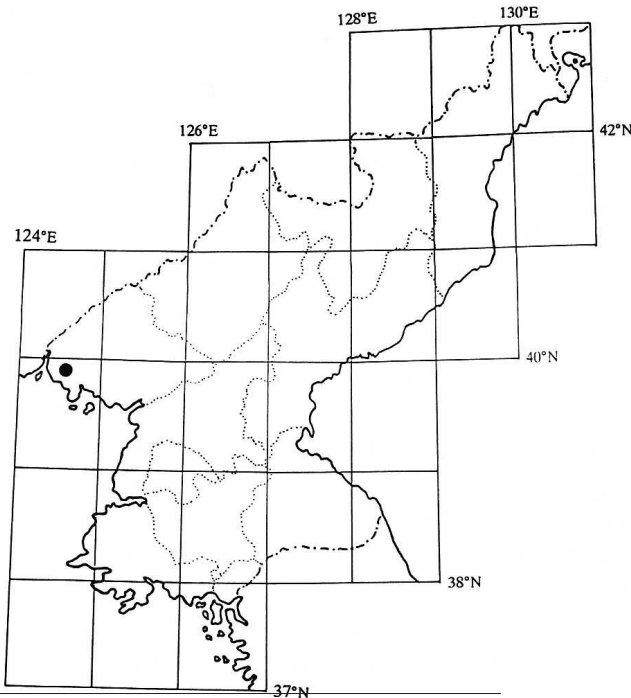
Common breeding species. Observed from 10 Apr till 25 Sep. Black-naped Oriole is found in deciduous, mixed forests and afforested area. Its song can be heard in just about all city parks. The relatively few points marked on the map reflects the poorly developed state of research in some areas of the country and that many authors do not give record sites (WON Hong-Koo 1965, FIEBIG 1995 and others).

The Black-naped Oriole is common breeding in South Korea (WON Pyong-Oh 2000), but in China and Primorye is only common breeding locally in areas bordering Korea (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, NECHAEV 1998a) whereas in Japan it appears only on migration (MORIOKA 2000).

Dicruridae

356. *Dicrurus macrocercus* VIEILLOT, 1817

Black Drongo



Data:

Pyongan North (III): Kachado (*III-10): 14 May 1967 (Li Hi-Tae cited by MAUERSBERGER 1981, ZIP³⁷).

M e a s u r e m e n t s (♀ of the collection ZIP): wing 138, tarsus 21, bill 20.5, tail 139.

Vagrant. Only one record. Black Drongo is a common resident in eastern China. Its presence is given in areas adjacent to Chinese Liaoning Province (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). Therefore it is entirely possible that it also occurs in northwest provinces of North Korea (Pyongan North and Chagang) which, outside the coastal area

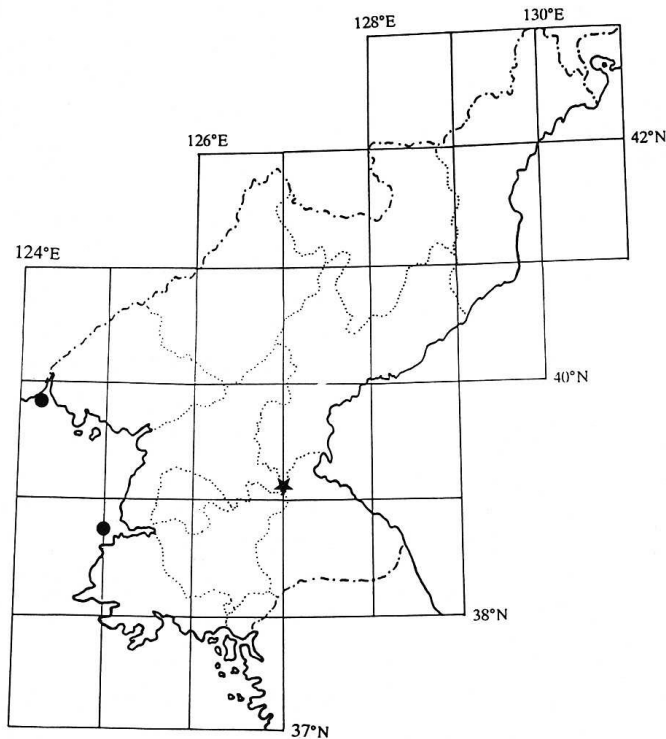
37

The skin found in the ZIP collection with a 14 Jul 1967 date with no location given is evidently based on LI Hi-Tae's publication (1970) since the measurements of the bird given in his publication (and cited by MAUERSBERGER 1981) and those of the collection's specimen are identical; the difference in date is probably a writing mistake (e.g. while rewriting the labels).

are very poorly researched. To date the Black Drongo was seen also (as vagrant) in Primorye (DEMENTEV & GLADKOV 1951-1954, NASAROV & LABZYUK 1975, NECHAEV 1998a) and South Korea (WON Pyong-Oh 2000, LEE Woo-Shin et al. 2000), however it has not been noted in Japan (MORIOKA 2000).

357. *Dicrurus leucophaeus* VIEILLOT, 1817

Ashy Drongo



Data:

Pyongan South (II): Tokto (II-25): breeding season 1995 (CHONG Jong-Ryol et al. 1996);

Pyongan North (III): Sindo (III-14): 11 Oct 1961 (ZIP and WON Hong-Koo 1961)³⁸;

no locality: 4 Jun 1967 (ZIP).

Measurements (♀ of the collection ZIP): wing 134, tarsus 18.5, bill 17, tail 117.

Vagrant. Observed only several times. In eastern China Ashy Drongo is a common resident species. Its north-east border covers Hebei [Hopeh] Province (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000). Its breeding grounds are therefore 400 km from the western border of North Korea. The records of Ashy Drongo in North Korea is to date the only ones outside the borders of China, and at the same time is the most eastern

record site. This species till now has not been noted in Russia (NECHAEV 1998a), Japan (MORIOKA 2000) nor in South Korea (WON Pyong-Oh 2000, LEE Woo-Shin et al. 2000).

Dicrurus hottentottus LINNAEUS, 1766

Hair-crested Drongo

Has not been recorded from North Korea so far (vagrant in the southern part of the peninsula – GORE & WON Pyong-Oh 1971, WON Pyong-Oh 2000, LEE Woo-Shin et al. 2000).

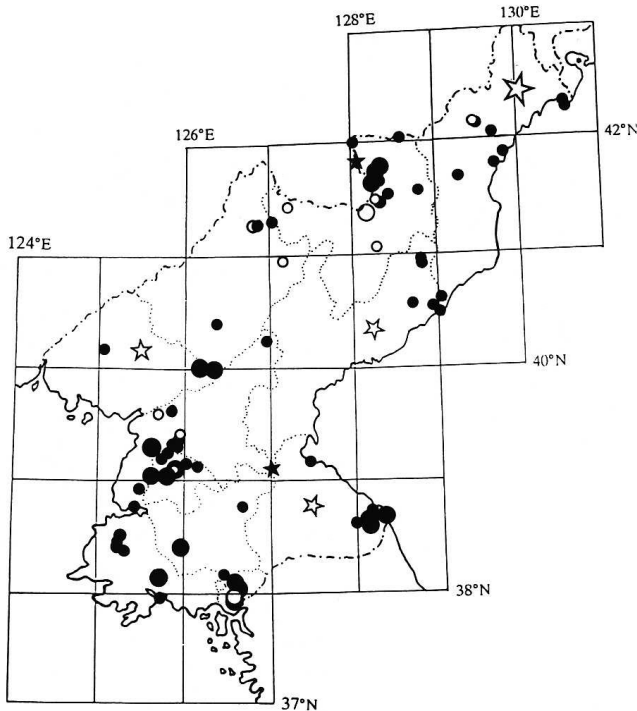
38

In his monograph WON Hong-Koo (1965) mistakenly gave a 11 Jan 1961 date.

Corvidae

358. *Garrulus glandarius* LINNAEUS, 1758[*Garrulus Brandti*]

Jay



Data:

Pyongyang (I): Pyongyang (I-1): 2, 23 Oct 1984 (TOM), winters 1986-1988 (CHON Gil-Pyo 1988), Oct 2000 (DUCK), Kangdong (I-3): 18 Feb 1957 (WON), Ponghwari (I-4): 28 Sep 1978 (TOM), Taesongsan (I-6): 2 Apr, 5, 6 Dec 1948 (WON), 3 Oct 1984, 21 Sep 1986 (TOM), 23 Oct 1988 (FIEB), Masanri (*I-8): 25 Oct 1954 (WON), Ryongaksan (I-10): 6 Oct 1984, 20 Sep 1986, Sogam (I-15): 24 Oct 1984 (TOM);

Pyongan South (II): Rangrimri (II-1): 14 Jun 1960, Sunchon (II-11): 4 Jan 1949, Jasan (II-12): 5, 24 May, 24 Sep, 14, 16 Oct 1953 (WON), 5 Sep 1953 (ZIP), Paeksongri (II-13): 27, 29 Apr 1953, Jamosan (II-15): 14 Oct 1953, Anju (II-16): 19 Oct 1933, Kongdokmyon (*II-17): 2, 31 Mar 1951, 21 Apr, 21 Jun 1953 (WON), Nampho (II-26): 10 Aug 1984

(KOLBE), Taesong-ho (II-28): 16 Oct 1978, Yonpung-ho (II-30): 30 Sep, 1 Oct 1978 (TOM);

Pyongan North (III): 26 Nov 1917 (AUST), Unrimri (*III-20): 12 Jul 1961 (ZIP), Hyangsan (III-23): 5 Oct 1986 (TOM), Aug-Nov 2000 (DUCK), Myohyangsan (III-24): 23, 26, 29, 31 Aug, 10, 11 Nov 1956 (WON), 14 Jul, 31 Aug 1965 (ZIP), 25 May 1980, 6-20 Jun 1983, 4-8 Oct 1986 (TOM), 12 Apr 1987 (GŁOW), 21 May 1988 (FIEB), Apr 1999, Sep-Dec 2000 (DUCK);

Chagang (IV): Hwapyong (IV-2): 4 Sep 1897 (YANK), Karimri (*IV-2): 19 Mar 1980 (ZIP), Okasan (IV-3): 19 Mar, 18 Oct 1958 (HO; see footnote 2, page 20), 28 Aug 1897, Rangnim (IV-5): 8 Sep 1897 (YANK), Myongmun (IV-6): 17 May 1987 (TOM);

Rygang (V): Huchang (V-1): 25 Aug 1897, Hyesan (V-5): 20, 21 Aug 1897 (YANK), 1 Feb 1931 (WON), Pochon (V-6): 9 Jul 1897 (YANK), 21 Oct 1978, Naegokri (V-7): 13-18 Oct 1986 (TOM), Photae (V-8): 23 Oct (WON), 19 Oct 1967 (ZIP), Namphothae (*V-8): no date (HO), 19 Oct 1986 (TOM), Rimyongsu (V-9): 19 Apr 1962 (ZIP), no date (HO), 30 Sep 1991 (TOM), Samjiyon (V-10): 19 Oct 1958, 16 Apr 1965, 3 Oct 1967 (ZIP), 21 Oct 1978, 5 Jun 1980, 26-27 Sep 1991 (TOM), no date (HO), Paekdusan (V-12): 22 Oct 1978 (TOM), Pukkyesu (*V-16): 2 Mar 1965 (ZIP), Kapsan (V-19): 20 Jan 1931 (WON), Mupo (V-20): 28 Sep 1991 (TOM), Amnok riv. (V-?): 15, 16 Aug 1989 (FIEB);

Hamgyong North (VI): 25 Apr, 22 Aug 1912, 26 Sep 1917, 9 Aug-3 Sep 1929 (AUST), Kulphori (VI-4): Apr, 17 May 1961, Sosura (VI-5): 13 Jul 1959 (WON), Chayuryong (VI-13): 3 Jun 1897 (YANK), 7, 10 Jul 1983

(TOM), Puryong (VI-16): Jun 1984 (ZIP), Koanjuryong (VI-18): 6 Jul 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), Kwanmobong (VI-22): 10 Jun 1959 (WON);

Hamgyong South (VII): 20 Jan, 1 Feb 1931 (WON cited by AUST), Pukdae-chon riv. (VII-1): 1 Jun 1987, Kumdok (VII-2): 29 May 1987, Machonryong (VII-5): 26, 27 May 1987, Tongdokri (*VII-6): 28 May 1987, Sangryong (VII-7): 30 May 1987, Yomsongdok (VII-13): 24 May 1987 (TOM);

Kangwon (VIII): 22 Sep 1914 (AUST), Wonsan (VIII-3): 24 Apr 1987, near Kosong (*VIII-6): 19 Apr 1987, Samil-pho (VIII-7): 23 Apr 1987 (GŁOW), 13 Oct 1991, Kumgangsán (VIII-8): 7 Oct 1978, 11 Jun 1980, 12 Oct 1991, Onjongri (*VIII-8): 7 Oct 1978 (TOM), 22 Apr 1987 (GŁOW), 13 Oct 1991 (TOM), Kumgang (VIII-9): 29 Aug 1956 (ZIP);

Hwanghae North (IX): Koksán (IX-3): 3 Oct 1988, Sohungho (IX-7): 25 Sep 1978 (TOM), 3 May 1987 (GŁOW), Kumchón (IX-13): 3 Feb 1972 (ZIP);

Hwanghae South (X): Kuwolsán (X-6): Apr 1999 (DUCK), Woljongri (X-8): 17 Sep 1957, Talchonri (X-9): 2 Jul 1957 (ZIP), Kohyonri (*X-10): 19, 22, 26 Apr 1957 (WON), Hyongchesom (X-20): 13 Oct 1984, Suyangsán (X-24): 23 Sep 1978, 14 Oct 1984 (TOM), 28 Apr 1987 (GŁOW);

Kaesong (XI): Kaesong (XI-1): 22 Sep, 8 Oct, 5, 21 Dec 1920, 17 Oct 1927, 20 Mar 1930, 4 Jan 1955, 24 Sep 1956, 22 Oct 1958 (WON), 21 Oct 1984 (TOM), 24-25 Aug 1991 (BÁLDI), Pagyón (XI-3): 22 Oct 1984, 26, 27 Oct 1986 (TOM), 26 May 1989 (FIEB), 22, 24 May 1997 (PERT), Kongminghang (XI-7): 24 Oct 1984, 24, 25 Sep 1986, 7 Oct 1988 (TOM);

province unknown: Yonchonri: 6 Oct 1991 (GŁOW);

no data: 2 specimens (ZIP).

M e a s u r e m e n t s (17 specimens of the collection ZIP):

	$7\sigma\sigma$	\bar{x}	♀	♀	8 ?sex	\bar{x}
wing	174-190	182.5	181	176	158-185	177.1
tarsus	34-44	40.5	38	41	40-50	43.4
bill	27-33	29.2	27	30	25-30	28.0
tail	155-181	163.7	167.5	148	154-161	157

Common resident species. Present throughout the whole country, even in city parks (although much less frequently than in forest and afforested areas). The relatively few points on the map reflects the poorly developed state of research in some areas of the country and that many authors do not give record sites (WON Hong-Koo 1965, FIEBIG 1995 and others). Outside the breeding season single individuals appear or form nomadizing flocks of up to a dozen individuals (TOMEK & DONTCHEV 1986, GŁOWACIŃSKI et al. 1989).

The Jay is also a common resident in China, Japan and South Korea (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, DISTRIB. 1981, MORIOKA 2000, WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000). Only in Primorye some individuals migrate and in winter there are fewer numbers than during breeding season (PANOV 1973, NECHAEV 1998a).

On the Korean Peninsula the subspecies *Garrulus glandarius brandti* EVERS-MANN, 1842 (WON Hong-Koo 1965, GORE & WON Pyong-Oh 1971, GŁOWACIŃSKI et al. 1989, and my data) is found.

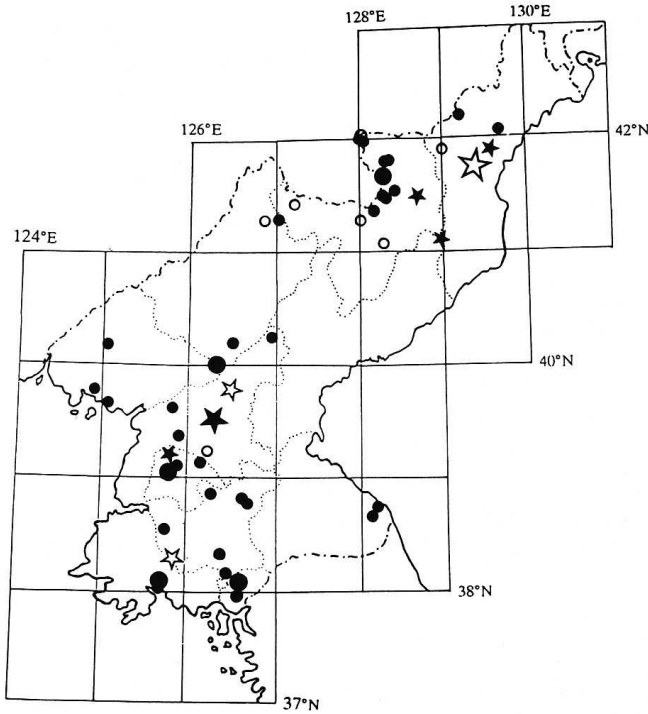
359. *Cyanopica cyanus* (PALLAS, 1776)

[*Cyanopica cyana*, *Cyanopica cyanea*]

Azure-winged Magpie

Data:

Pyongyang (I): Pyongyang (I-1): winters 1986-1988 (CHON Gil-Pyo 1988), 26 Nov 1989, 19 Mar 1990 (FIEB), Pyongyang-Sunán (I-1-8): 6 Aug 1984 (KOLBE), Kangdong (I-3): 2 Feb 1957 (WON), Taesongsán (I-6): 12 Dec 1954 (MAUERS);



Pyongan South (II): 3 May 1934 (AUST), breeding seasons 1988-1990 (FIEB), Rangrimri (II-1): 15 May 1958, Songchon (II-9): 3 May 1934, Jasan (II-12): 7 Sep 1953 (WON), Yonpung-ho (II-30): 7 Jun 1987 (TOM);

Pyongan North (III): Kwaksan (III-4): 22 Sep 1951 (WON), Samsongri (*III-6): 28 May 1963, Chonmasan (III-20): 31 May 1961 (ZIP), Myohyangsan (III-24): 12, 19 Jun 1950 (WON), 26 Jun 1954, 6 Apr 1979 (ZIP), 6-13 May, 3-4, 29 Jun 1990 (FIEB), 8-12 Aug 1991 (BÁLDI), 29 May 1997 (PERT);

Chagang (IV): Hwapyong (IV-2): 6 Sep 1897 (YANK), Karimri (*IV-2): 17 Apr 1958 (ZIP), Okasan (IV-3): 17 Apr, 15 Nov 1958 (HO; see footnote 2, page 20), Wongungri (IV-8): 15 May 1987 (TOM);

Ryanggang (V): Huchang (V-1): 27 Aug 1897, Samsu (V-4): 18 Jul

1897 (YANK), Hyesan (V-5): 12 Oct 1986 (TOM), Pochon (V-6): no date (HO), Hungsongri (*V-6): 16 Jul 1958 (ZIP), Naegokri (V-7): 14-17 Oct 1986 (TOM), Photae (V-8): 23 Oct 1958 (WON), 20 Oct 1967 (ZIP), Samjiyon (V-10): 25 Oct 1978, Pekebong (*V-10): 2 Jun 1980 (TOM)), Paekdusan (V-12): 30 Jul 1929 (WON 1956), 22 Oct 1978 (TOM), Nongsari (*V-12): no date (HO), Kapsan (V-19): 12 Aug 1897 (YANK), Mupong (V-?): no date (HO); Railway Hyesan-Tanchon (V-5-VII-8): 19 Oct 1978, 1 Jun 1980 (TOM);

Hamgyong North (VI): 19 Apr-3 Jun, 22 Aug 1912, 25 Sep 1917, 30 Jul 1929 (AUST), Musan (VI-12): 13, 17 Jul 1959 (WON), Mayang-Chongjin (VI-15-19): 29 Jun 1983 (TOM), Puryong (VI-16): 25 May 1985 (ZIP), Yonsa (VI-20): 15 Jun 1897 (YANK);

Kangwon (VIII): Kosong (VIII-6): 9 Dec 1989, Kumgangsán (VIII-8): 12 Oct 1989 (FIEB);

Hwanghae North (IX): Koksán (IX-3): 18 May 1962 (WON), Taegaksán (IX-4): 25 May 1962 (ZIP), Pongtanri (*IX-11): "except breeding season" (FIEB), Kumchon (IX-13): 3 Apr 1959 (WON), Sariwon (IX-16): May 1987 (GŁOW), Yonsán (IX-17): 20 May 1987 (TOM);

Hwanghae South (X): Haeju (X-22): 27, 28 Apr 1987 (GŁOW), Suyangsán (X-24): 23 Sep 1978, 30 May 1980 (TOM);

Hwanghae (IX-X): 15 Apr 1930 (AUST);

Kaesong (XI): Kaesong (XI-1): 21 May 1997 (PERT), Pagyon (XI-3): 20 Mar 1956, 15 Jan, 20 May 1957, 7 Feb 1958, 2 Mar 1959 (WON).

M e a s u r e m e n t s (10 specimens of the collection ZIP, 1 specimen of the collection MZB):

	♂	\bar{x}	♀	♀	♀	4 ?sex	\bar{x}
wing	137-143	138.7	141	148	144	128-157	143.2
tarsus	28-36	33.0	—	35	35	31-43	33.0
bill	23-25.5	24.6	29	25	28	20-25	22.7
tail	202-223	213.3	232	237	233	200-210	212.2

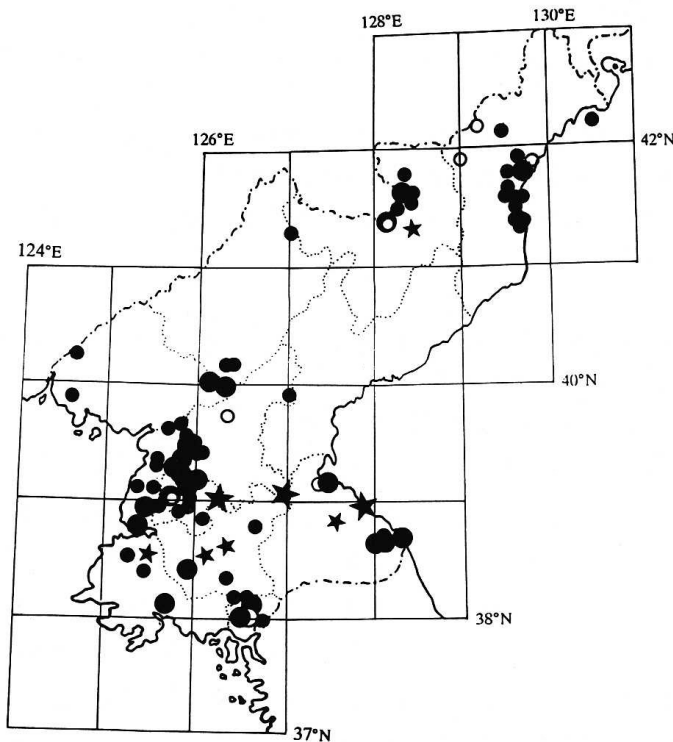
Resident species. Not found very often throughout the entire country. Nests singly (WON Hong-Koo 1965) or in small colonies (FIEBIG 1995). After breeding season it occurs in flocks from a few up to about 20 (even up to 30) individuals (GŁOWACIŃSKI et al. 1989, FIEBIG 1995 and my data).

The Azure-winged Magpie also occurs (as common or fairly common) in all bordering countries (CHENG Tso-Hsin 1987, DISTRIB. 1981, NECHAEV 1998a, MORIOKA 2000, MACKINNON & PHILLIPS 2000, WON Pyong-Oh 2000).

360. *Pica pica* (LINNAEUS, 1758)

[*Pica japonica*]

Black-billed Magpie



Data:

Pyongyang (I): 19, 25 May 1980 (MAUERS), Aug 1991 (BÁLDI), Pyongyang (I-1): 4 Jun 1949 (WON), 5 Jun 1984 (ZIP), winters 1986-1988 (CHON Gil-Pyo 1988), ♦, Sungho (I-2): 27 Jul 1955 (ZIP), Ponghwari (I-4): ♦, Sijok (*I-5): 12 Apr 1950 (WON), 29 Jan 1966 (ZIP), Taesongsan (I-6): 30 May 1950 (WON), 17 Feb 1977 (ZIP), ♦, Sunan (I-8): 5 May 1980 (MAUERS), Maram (*I-8): Feb, Apr 1950 (WON), 29 Jun 1955 (ZIP), Ryongaksan (I-10): ♦, Mankyongdae (I-11): ♦, Chunghwa (I-13): 8 Sep 1955 (ZIP), Sangwon (I-14): 21 Sep 1986 (TOM), Sogam (I-15): ♦, Tongmyongwang (I-16): 9 May 1980 (MAUERS);

Pyongan South (II): Kumsongri (II-4): 8 Sep 1955 (WON), Unsan (II-10): 3 Jun, 7 Sep 1955 (ZIP), 28 Dec (ZISP), Sunghwari (*II-10): 3 Sep 1955 (ZIP), Sunchon (II-11): 16 Oct 1951 (WON), Jehyonri

(*II-11): 23 Jun, 29 Dec 1954 (ZIP), Othanri (*II-11): 21 Nov 1954 (MAUERS), Namri (*II-11): 6 Sep 1954, 6 Jun 1955 (ZIP), Paesanjom (*II-11): 9 May 1950 (WON), Ponghwa (*II-11): 24 Nov 1955, Kochonri (*II-11): 30 Jun 1955, Jasan (II-12): 16 Oct 1953, 17 Feb, 23 Mar, 20 Apr, 5, 14 May, 30 Jun 1954 (ZIP), Anju (II-16): 10 Nov 1989 (FIEB), Pyongwon (II-17): 24, 29 Apr 1951, Wolphyong (*II-17): 27 Jun 1955, Mupongri (*II-19): 17 Mar 1963 (ZIP), Taedong (II-21): 20 Jun 1955 (WON), Nampho (II-26): ♦, Taesong-ho (II-28): ♦, Yonpung-ho (II-30): 7 Jun 1987 (TOM), Tokchon (II-33): Feb, Nov 1949 (WON);

Pyongan North (III): Namsi (*III-10): 29 Oct 1954 (WON), Sujinri (III-17): 6 Jun 1982, Hyangsan (III-23): 1999-2000 (DUCK), Myohyangsan (III-24): 6 May 1951, 22 Jun 1954 (ZIP), ♦;

Chagang (IV): Karimri (*IV-2): 2, 7 Feb 1958 (ZIP), Okasan (IV-3): 2 Feb, 14 Sep 1958 (HO; see footnote 2, page 20), Huichon (IV-10): 15-18 May 1987, Chongsan (*IV-10): 14 May 1987 (TOM);

Ryanggang (V): Hyesan (V-5): 1 Feb 1931 (WON), 20 Oct 1978, 19 Oct 1986, Pochon (V-6): 21 Oct 1978, Naegokri (V-7): 14 Oct 1986 (TOM), Photae (V-8): 22 Oct 1958 (WON), 11, 20 Apr 1963, 21 Oct 1967 (ZIP), Namphothae (*V-8): no date, Samjiyon (V-10): no date, Mupong (V-?): no date (HO);

Hamgyong North (VI): Pipa (*VI-6): 9 Apr 1996 (EDW), Musan (VI-12): 7 Jun 1897 (YANK), Chayuryong (VI-13): 10 Jul 1983 (TOM), Koanjuryong (VI-18): 24 May 1897 (YANK), Chongjin (VI-19): ◆, Yonsa (VI-20): 16, 20 Jun 1897 (YANK), Onphori (VI-23): 27 Jun 1983, Ryongsanri (VI-24): 5 Jul 1983 (TOM), Kyongsong (VI-25): 23 May 1955 (ZIP), Osangri (*VI-25): 4 Oct 1991, Orang (VI-28): 7 Jul 1983, Jangyon-ho (VI-29): 4 Jul 1983, Ryongchaeho (*VI-29): 28 Jun 1983, Oyuri (VI-33): 3 Oct 1991, Kumgangri (VI-34): 2 Oct 1991, Ryonghyonri (VI-36): 5 Oct 1991 (TOM);

Kangwon (VIII): 19, 23 May 1980 (MAUERS), Wonsan (VIII-3): 6 Oct 1897 (YANK), ◆, Wonsan-Onjongri (VIII-3-8): ◆, Samil-pho (VIII-7): ◆, Kumgangsán (VIII-8): ◆, Onjongri (*VIII-8): 20-23 May 1980 (MAUERS), Aug 1984, Jun 1985, Kuryong (*VIII-8): Aug 1984 (KOLBE);

Hwanghae North (IX): 21 Sep 1955 (ZIP), May 1980 (MAUERS), Koksán (IX-3): 3 Oct 1988, Sohungho (IX-7): 25 Sep 1978, 22 May 1987 (TOM), Pyongsán (IX-11): 2 Oct 1955 (ZIP), Kumchon (IX-13): 15 May 1963 (WON), Janghyong (IX-?): 17 Apr 1955 (ZIP);

Hwanghae South (X): 24 Sep 1978 (TOM), Kuwolsán (X-6): Apr 1999 (DUCK), Sinchon (X-11): 30 May 1980, Suyangsán (X-24): ◆;

Kaesong (XI): Kaesong (XI-1): Feb, Apr 1928, 20 Apr 1929, 24 May 1930, 21 Feb 1931, ◆, Pagyón (XI-3): 21 Oct 1984 (TOM), Panmunjom (XI-6): Aug 1984, Kongminghang (XI-7): ◆;

Roads: Pyongyang-Kaesong: Aug 1984 (Kolbe), Pyongyang-Wonsán: Aug 1984 (KOLBE), Hyesán-Tanchon (V-5-VII-8): 19 Oct 1978 (TOM);

no data: 13 specimens (with 9 no-feathered nestlings – ZIP).

no locality: 15 Jan 1956 (VLAD), “all places” 1987-1990 (FIEB), Apr 1987 (GLOW), “all places without Kumgangsán Mts: 13 Nov-5 Dec 1989 (STEP), roads in all country: ◆.

M e a s u r e m e n t s (19 specimens of the collection ZIP):

	6♂♂	\bar{x}	7♀♀	\bar{x}	6 ?sex	\bar{x}
wing	193-225	208.0	157-197	186.6	190-200	196.3
tarsus	47-53	50.0	45-59	52.6	44-55	48.8
bill	31-36.5	34.3	30-35	31.8	31-33	31.8
tail	234-258	246.4	201-229	216.8	204-257	230.6

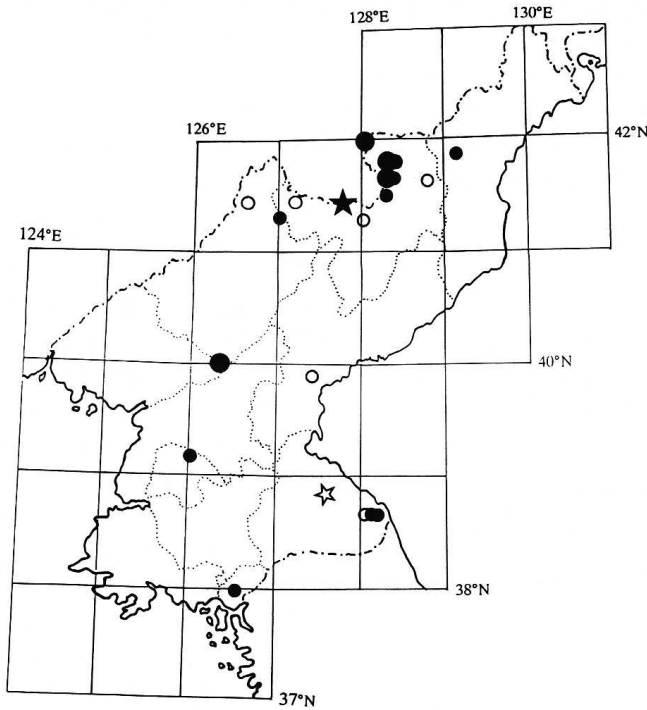
Common resident species. Black-billed Magpie is one of the most frequently encountered birds. It nests most numerously near human settlements and along communication routes. It was not noted only in a forested and high mountainous areas (GŁOWACIŃSKI et al. 1989, FIEBIG 1995). It is such a common bird that ornithologists carrying out research for a long time did not give record sites (AUSTIN 1948, WON Hong-Koo 1965, FIEBIG 1995).

In bordering areas i.e. China, Russia, South Korea and also Kyushu Island the Black-billed Magpie is also a common resident (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, DISTRIBUTION. 1981, MORIOKA 2000, NECHAEV 1998a, WON Pyong-Oh 2000), but it does not nest on the remaining Japanese Islands (DISTRIBUTION. 1981, MORIOKA 2000).

361. *Nucifraga caryocatactes* (LINNAEUS, 1758) Spotted (Eurasian) Nutcracker

Data:

Pyongyang (I): Ponghwari (I-4): 28 Sep 1978 (TOM);



Amnok riv. (V-?): breeding seasons 1988-1990 (FIEB);

Hamgyong North (VI): Samphori (VI-21): 26, 31 Jul 1959 (ZIP);

Hamgyong South (VII): Hamju (VII-45): 19 Oct 1943 (WON 1956);

Kangwon (VIII): 10, 11 Sep 1914, Jun (AUST), Kumgangsan (VIII-8): 14 Aug 1930 (WON), 7 Oct 1978, Kuryong (*VIII-8): 8 Oct 1978 (TOM);

Kaesong (XI): Kaesong (XI-1): 9 Sep 1957 (WON);

no locality: 31 Aug 1956 (VLAD);

no data: specimens (ZIP), 1 spec. in shop (GLOW).

M e a s u r e m e n t s (13 specimens of the collection ZIP):

	8♂♂	\bar{x}	♀	♀	♀	?sex	?sex
wing	177-198	187.3	187	184	186	192	197
tarsus	38-48	42.0	38	40	43	44	45
bill	44-53	49.0	46.5	45	47	47	51
tail	122-147	134	136	125	124	124	132

Very probably a breeding species. During breeding season it was recorded many times in higher parts of the Myohyangsan Mountains and in the Paekdusan region (FIEBIG 1995) and certainly nests there (it is one of the most frequently met species on the northern slopes of Paekdusan on the Chinese side – WON Pyong-Oh 1990). Furthermore it probably nests in the Kumgangsan Mountains, since it was recorded there in Jun and it is possible that it is found in this mountainous part of South Korea (WON Pyong-Oh 1983). According to WON Hong-Koo (1965) it nests insularly in higher parts of mountains throughout the entire peninsula. This is very probable because the Spotted Nutcracker has a similar status in South Korea as well as bordering areas (PANOV 1973, GORE & WON Pyong-Oh 1971, MEYER DE SCHAUNSEE 1984, CHENG Tso-Hsin 1987, NECHAEV 1998a, MACKIN-

Pyongan North (III): Myohyangsan (III-24): 18 Jun 1955, 21 Apr, 21 Aug 1956, 21 Jun 1957 (ZIP), 11 Jun 1983 (TOM), breeding seasons 1988-1990 (FIEB), 8-12 Aug 1991 (BÁLDI), Apr 1999 (DUCK);

Chagang (IV): Okasan (IV-3): 14 Sep, 12 Nov 1958 (HO), Chasong (IV-1): 4 Sep 1897 (YANK);

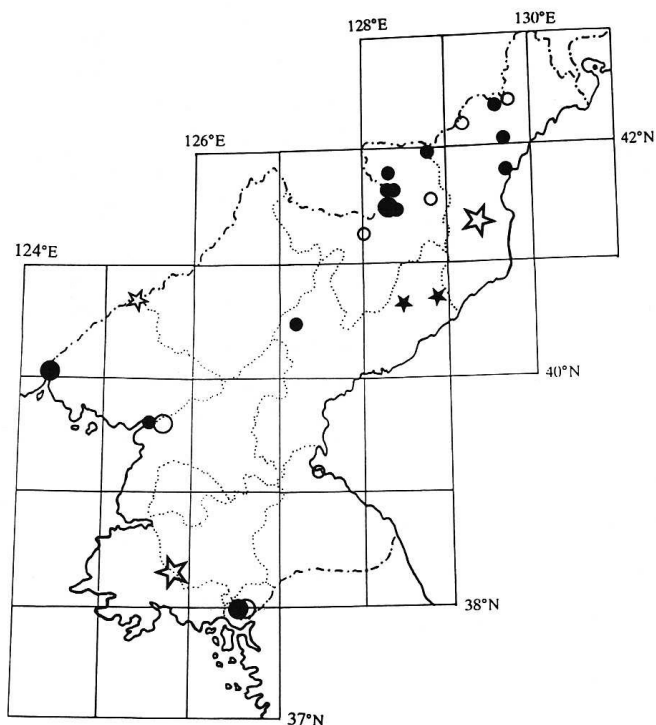
Rygang (V): Huchang (V-1): 25 Jul 1897, Samsu (V-4): 12 Jul 1897 (YANK), Pochon (V-6): 21 Oct 1978 (TOM), Photae (V-8): 10 Oct 1958, 12 Oct 1964 (ZIP), Namphothae (*V-8): no date (HO), Pekebong (*V-10): breeding seasons 1988-1990 (FIEB), Kanpaegsan (*V-10): 26 Jun 1963 (ZIP), no date (HO), Paekdusan (V-12): 27 Jul 1963 (ZIP), 5 Jun 1980 (TOM), breeding seasons 1988-1990 (FIEB), Paegam (V-16): 1 Jul 1897 (YANK),

NON & PHILLIPS 2000, WON Pyong-Oh 2000). In my opinion inadequate research in the mountainous regions of North Korea is the only reason for the lack of good documentation of the occurrence (and nesting) of the Spotted Nutcracker.

362. *Corvus dauuricus* PALLAS, 1766

[*Lycos neglectus*, *Lycos dahuricus*, *Monedula dahurica*, *Corvus monedula dauuricus*, *Corvus monedula davuricus*, *Corvus davuuricus*, *Corvus dauricus*]

Daurian Jackdaw



Data:

Pyongan South (II): Anju (II-16): 5 Nov 1932, 24 Mar 1936 (WON), mouth of Chongchon (*II-29): 11 Nov 1989 (FIEB);

Pyongan North (III): Synuiju (III-28): 28, 29 Apr 1990 (FIEB), 4 Feb 1995 (PERT), Amnok riv (III-?): breeding season before 1923 (SOWERBY);

Ryanggang (V): Samsu (V-4): 14-15 Aug 1897 (YANK), Pochon (V-6): 16 Feb 1962, 22 Mar 1963 (ZIP), Thongnamri (*V-6): no date (HO), Photae (V-8): 20 Apr 1963 (ZIP), Hongkyesu (*V-8): no date (HO), Samjiyon (V-10): 8 Oct 1963 (ZIP), Yukok (*V-15): no date (HO), Paegam (V-16): 18 Jun 1897 (YANK);

Hamgyong North (VI): 23 Apr-19 May 1912, 23 Dec 1917, 21 Oct 1929 (AUST), Hoeryong (VI-9): 28,

29 May 1897 (YANK), Hungsanri (VI-10): 4 Sep 1959 (ZIP), Musan (VI-12): 8, 13 Jun 1897 (YANK), Puryong (VI-16): 29 Jun 1983, Chongjin (VI-19): 26 Jun 1983 (TOM);

Hamgyong South (VII): Jangjinho (VII-25): 23 Apr 1955 (WON), Kumdok-Tanchon (VII-2-6): 29 May-2 Jun 1987, no locality: 19 Oct 1978 (TOM);

Kangwon (VIII): Wonsan (VIII-3): 26 Oct 1897 (YANK);

Hwanghae (IX-X): 24 Mar 1910, 5 Mar 1911 (AUST);

Kaesong (XI): Kaesong (XI-1): Nov 1927, 20 Feb 1931, 14 24 Feb 1946, 6 Mar 1955, Feb 1957 (WON), 15 Feb 1970 (ZIP).

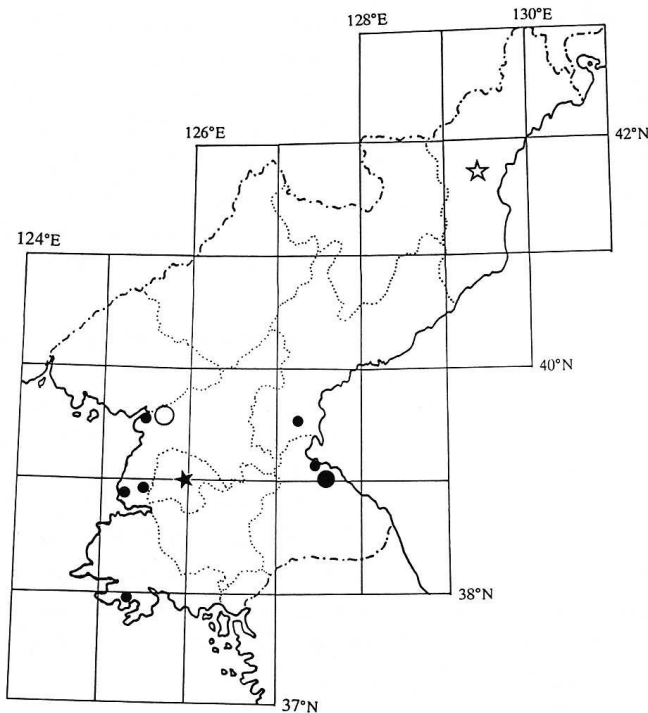
M e a s u r e m e n t s (7 specimens of the collection ZIP):

	♂	♂	♂	♂	♀	♀	♀
wing	223	234	228	210	238	194	205
tarsus	44	45	44	45	45	44	44
bill	31	26	31	25	27	30	27
tail	139	146	138	120	147	142	117

Breeding, wintering and passage migrant species. The existence of Daurian Jackdaw colonies in Hoeryong (YANKOVSKII 1898), Synuiju (FIEBIG 1995), the cliff banks of the Amnok River (SOWERBY 1923), and Tanchon (my unpubl. data) has been recorded. WON Hong-Koo (1965) was of the opinion that the Daurian Jackdaw also nests near Lake Jangincho and in the other 5 sites it was observed in the breeding season (Apr-Jun). Outside the breeding season it was also observed in southern provinces. Flocks after breeding season consisted of two color forms: light and dark (YANKOVSKII 1898, FIEBIG 1995, my unpubl. data) meaning that there were young and adult birds (see: NECHAEV 1975).

The Daurian Jackdaw is a breeding species in China, and southeast Russia (ETCHECOPAR & HÜE 1983, KNYSTAUTAS & SHIBNEV 1986, CHENG Tso-Hsin 1987, NECHAEV 1998a, MACKINNON & PHILLIPS 2000) i.e. in areas north and west of North Korea, while in South Korea and Japan it is present only in winter (WON Pyong-Oh 2000, MORIOKA 2000). Therefore the border of its breeding area crosses North Korea (covering areas as far as 40°N).

363. *Corvus frugilegus* LINNAEUS, 1758
Rook



Data:

Pyongyang (I): 7 Nov 1989 (FIEB);

Pyongan South (II): Anju (II-16):

8 Jun 1931 (WON), 23 Mar 1936

(WON 1956), Onchon (II-24): 7 Dec

1989 (FIEB), Taesong-ho (II-28): 27

Oct 1978 (TOM), mouth of Chong-

chon (*II-29): 10 Mar 1989 (FIEB);

Hamgyong North (VI): 21 Oct
1929 (AUST);

Hamgyong South (VII): Kumya
(VII-38): 28 Mar 1985 (ZIP);

Kangwon (VIII): Wonsan

(VIII-3): 9 Feb, 13 Apr 1990,

Anbyon (VIII-17): 17 Oct, 1989, 9 Feb
1990 (FIEB);

Hwanghae South (X): Ongjin
(X-26): 15 Dec 1989 (FIEB).

M e a s u r e m e n t s
(1 specimen of the collection
ZIP, sex unknown): wing 307,
tarsus 53 bill 47, tail 150.

Passage migrant and winter

visitor. Observed from 17 Oct till 13 Apr. WON Hong-Koo (1965) and WON Hong-Koo cited by AUSTIN (1948) give one additional record from the breeding period but both authors agree that Rook was not a breeding species on the Korean Peninsula³⁹. Since the seventies an expansion of Rook towards the southeast has been observed (TARASOV 1992, DUGINTSOV 1992) and nesting is present in

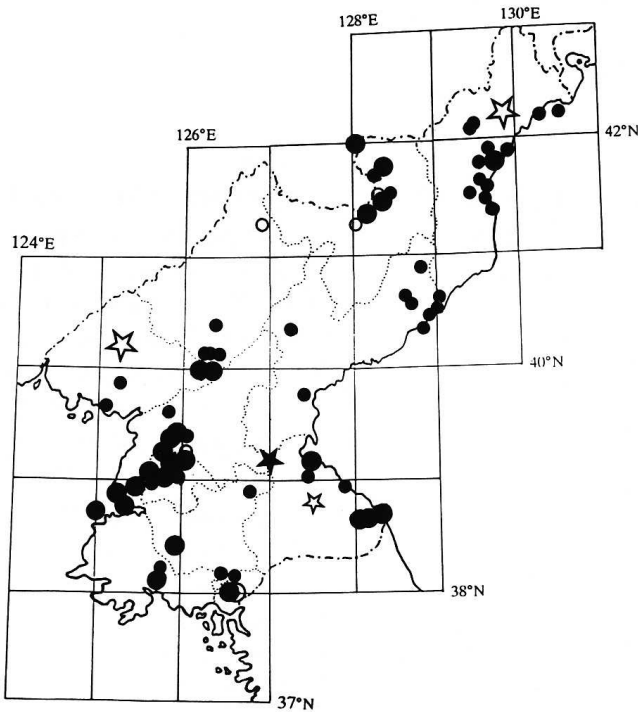
39

There is possibly a mistake in the date given by Won Hong-Koo because in publications after the war he gives 2 different record dates of Rook during the 1930's for the same place, Anju.

Primorye (TARASOV 1992, GLUSHCHENKO et al. 1986, NECHAEV 1998a) and in areas of China bordering North Korea (MACKINNON & PHILLIPS 2000). Present data indicate that breeding grounds do not extend beyond the frontier forming Amnok and Tuman Rivers. On the entire Korean Peninsula and in Japan Rook is to date only a wintering species (WON Hong-Koo 1965, O Hung-Dam 1988, WOO Yong-Tae et al. 1997, WON Pyong-Oh 2000, MORIOKA 2000), and flocks number up to several hundred individuals (GORE & WON Pyong-Oh 1971, FIEBIG 1995, LEE Jong-Nam & HUR Wee-Haeng 1998, LEE Woo-Shin et al. 2000).

364. *Corvus corone* LINNAEUS, 1758

Carrion Crow



Data:

Pyongyang (I): Pyongyang (I-1): ♦, winters 1986-1988 (CHON Gil-Pyo 1988), Sungho (I-2): 9 May-23 Jun 1955 (WON), Ponghwari (I-4): 28 Sep 1978, 5 Jul 1987 (TOM), Sijok (*I-5): 14 Apr 1950, Taesongsan (I-6): 13 Nov 1949 (WON), 3 Oct 1984, 21 Sep 1986, 21 Sep 1991, Ryongaksan (I-10): 19 Sep 1978, 23 May 1980, 6 Oct 1984, 19 Sep 1986, 23 Sep 1991 (TOM), Mankyongdae (I-11): 7 May 1980 (MAUERS), Sogam (I-15): 24 Jun 1983, 24 Oct 1984 (TOM);

Pyongan South (II): Unsan (II-10): 2, 5 Sep 1955 (WON), Ponghakri (*II-11): 23 Nov 1953 (MAUERS), 17 Mar 1955, Jasan (II-12): 19 Nov 1953, 9 Jun, 20 Jul 1954, 10 May 1955, 30 Nov 1956, Ryonggang (*II-24): 17 Sep 1952, 27 Sep 1954 (WON), Tokto (II-25):

breeding season 1995 (CHONG Jong-Ryol et al. 1996), 27 May 1997 (PERT), Nampho (II-26): 24 May 1980 (TOM), 10 Aug 1984 (KOLBE), Aug 1991 (BÁLDI), Taesong-ho (II-28): 16 Oct 1978, 3 Aug 1979, 24 May 1980, 6 Oct 1984, 1 Oct 1986, Yonpung-ho (II-30): 30 Sep-1 Oct 1978 (TOM);

Pyongan North (III): 15 Dec 1912, 19 Jun 1917, 10 Apr 1929 (AUST), Kwaksan (III-4): 1 Oct 1955 (WON), Hyangsan (III-23): 4 Oct 1986 (TOM), Apr 1999, Jul 2000 (DUCK), Myohyangsan (III-24): 23 Jun 1954, 10 Jul 1955 (WON), 12 Aug 1979, 25-28 May 1980, 6-21 Jun 1983, 3-8 Oct 1986 (TOM), 8-12 Aug 1991 (BÁLDI), Panghyondong (III-26): 24 Dec 1951 (WON);

Chagang (IV): Hwapyong (IV-2): 28 Aug 1897 (YANK), Myongmun (IV-6): 17 May 1987, Masonri (IV-9): 13 May 1987, Huichon (IV-10): 15-18 May 1987, Chongsan (*IV-10): 14 May 1987 (TOM);

Ryanggang (V): Samsu (V-4): 14-15 Jul, 4 Aug 1897 (YANK), Hyesan (V-5): 20 Oct 1978, 11, 19 Oct 1986, 24 Sep 1991 (TOM), Pochon (V-6): 6 Jul 1897 (YANK), 21 Oct 1978 (TOM), no date (HO), Naegokri (V-7): 12-18 Oct 1986, Rimyongsu (V-9): 29-30 Sep 1991, Samjiyon (V-10): 21-24 Oct 1978, 1-6 Jun 1980, 25-30 Sep 1991, Paekdusan (V-12): 22 Oct 1978, 5 Jun 1980 (TOM);

Hamgyong North (VI): 14 Aug 1917, 3, 21 Oct 1929 (AUST), Pipa (*VI-6), 10 Apr 1996 (EDW), Chayuryong (VI-13): 10 Jul 1983, Chayuri (VI-14): 1-2 Jul 1983, Chongjin (VI-19): 26 Jun 1983 (TOM), 18-20 Aug 1991 (BÁLDI), Onphori (VI-23): 27 Jun 1983, Osangri (*VI-25): 4 Oct 1991, Mehyangri (VI-27): 27 Jun 1983, Jangyon-ho (VI-29): 4, 9 Jul 1983, Oyuri (VI-33): 3 Oct 1991, Kumgangri (VI-34): 2 Oct 1991, Ryongchonri (VI-35): 6 Oct 1991, Ryonghyonri (VI-36): 5 Oct 1991 (TOM), Rajin (VI-39): 1 Oct 1989 (FIEB);

Hamgyong South (VII): Kumdok (VII-2): 29 May 1987, Machonryong (VII-5): 27 May 1987, Sangryong (VII-7): 30 May 1987, Tanchon (VII-8): 23 May-3 Jun 1987, Kiam (VII-10): 31 May 1987, Yomsongdok (VII-13): 24 May 1987, Hochon (VII-14): 25 May 1987 (TOM), Jangjin (VII-26): 12, 14 Jun 1955 (WON), Kwangpo (*VII-31): 12, 13 Sep 1989 (FIEB);

Kangwon (VIII): 12, 23 Sep, 2 Oct 1914 (AUST), Wonsan (VIII-3): ◆, Sokwangsa (VIII-4): 12 Oct 1978, Sijungho (VIII-5): 9 Oct 1991 (TOM), Samil-pho (VIII-7): 9 Oct 1978 (TOM), 22 May 1980 (MAUERS), 10, 13 Jun 1980, 13 Oct 1991, Kumgangsán (VIII-8): 7-8 Oct 1978, 11-13 Jun 1980 (TOM), 1-4 Aug 1991 (BÁLDI), Onjongri (*VIII-8): 22 May 1980 (MAUERS), Aug 1984 (KOLBE), 10-14 Oct 1991 (TOM);

Hwanghae North (IX): Sinpyong (IX-1): 25 May 1980 (MAUERS), Sohungho (IX-7): 25 Sep 1978, 22 May 1987 (TOM), Kumchon (IX-13): 4 Jun 1972 (ZIP);

Hwanghae South (X): Suyangsan (X-24): 23 Sep 1978, 30 May 1980, 12, 14 Oct 1984, Changsu (X-25): 14 Oct 1984 (TOM);

Kaesong (XI): Kaesong (XI-1): 17 Sep 1929, 7 Jun 1930, 9 Feb 1931, 1 Jan-4 Feb 1946, 3 Jan 1955, 4 Feb 1956, 3 Feb 1958 (WON), 20 Oct 1984, Pagyon (XI-3): 26 Sep 1986 (TOM);

no locality: 17 Jun 1955 (ZIP), seen many times on all communication routes in the years 1978 to 1991 (TOM);

no data: 1987-1990 (FIEB), Apr 1987 (GŁOW), Nov-Dec Nov 1989 (STEP), 1 specimens (ZIP).

M e a s u r e m e n t s (2 specimens of the collection ZIP, 2 specimens of the collection ISEA sex unknown):

	?sex	?sex	?sex	?sex
wing	320	301	278	-
tarsus	55	57	55	60
bill	45	45	50	48
tail	178	183	170	175

Abundant breeding species. Frequent and numerous throughout the entire country. Carrion Crow is resident and probably breeding everywhere it was recorded. The relatively few points on the map reflects the poorly developed state of research in some regions or it results from the fact that many authors did not give report sites (WON Hong-Koo 1965, GŁOWACIŃSKI et al. 1989, FIEBIG 1995, STEPANYAN 1998 and others).

The Carrion Crow is an abundant resident species in all bordering areas (CHENG Tso-Hsin 1987, MACKINNON & PHILLIPS 2000, DISTRIB. 1981, MORIOKA 2000, NECHAEV 1998a, WON Pyong-Oh 2000).

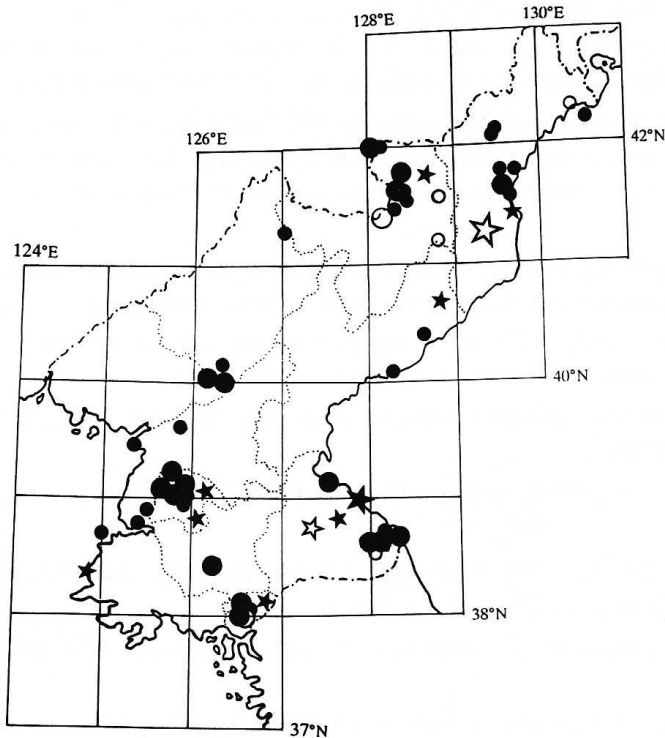
365. *Corvus macrorhynchos* WAGLER, 1827

[*Corvus levaillantii mandschuricus*, *Corvus coronoides mandschuricus*]

Jungle Crow

Data:

Pyongyang (I): Aug 1991 (BÁLDI), Pyongyang (I-1): 18, 19 May 1980 (MAUERS), 1987-1990 (FIEB), 1999-2000 (DUCK), Sonbongri (*I-2): 23 Jun 1955 (ZIP), Taesongsan (I-6): 22 May 1980, 3 Oct 1984, 21 Sep 1991 (TOM), Apr (FIEB), Ryongaksan (I-10): 5 Aug 1979 (TOM), 7 May 1980 (MAUERS), 21 Sep 1991, Sogam



(I-15): 24 Oct 1984 (TOM), Apr 1987 (GLOW), Tongmyongwang (I-16): 9 May 1980, Kogydong (I-?) 28 Nov 1954 (MAUERS);

Pyongan South (II): Tokto (II-25): breeding season 1995 (CHONG Jong-Ryol et al. 1996), Nampho (II-26): 13 May 1980 (MAUERS), Taesong-ho (II-28): 28 May 1988 (FIEB), Yonpung-ho (II-30): 7 Jun 1987 (TOM), sea shore in region 39°30'N: 25-26 Nov 1989 (STEP);

Pyongan North (III): Hyangsan (III-23): Apr 1999, Sep-Nov 2000 (DUCK), Myohyangsan (III-24): 15 May 1950, 20 Jul 1956 (WON), 24 Aug 1984 (KOLBE), 6-20 Jun 1983, 6 Oct 1986 (TOM), 23 May 1988 (FIEB), 8-12 Aug 1991 (BÁLDI), Apr 1999-Nov 2000 (DUCK);

Chagang (IV): Okasan (IV-3): 2 Feb, 30 Jun 1958 (HO), Chongsan (*IV-10): 14 May 1987 (TOM);

Ryanggang (V): Hyesan (V-5): 11 Jul 1897 (YANK), 1 Nov 1931

(WON), Thongnamri (*V-6): no date (HO), Naegokri (V-7): 18 Oct 1986 (TOM), Photae (V-8): 9 Nov 1963, 23 Oct 1967 (ZIP), Photoaesan (*V-8): no date, Samjiyon (V-10): no date (HO), 21-30 Sep 1991 (TOM), Paekdusan (V-12): Aug 1981, 18 Jun 1983, 8 Jul 1987, 8 Jul 1988 (JIN Dok-Jun & O Hung-Dam 1990), 13 Aug 1989 (FIEB), Nongsari (*V-12): no date (HO), Paegam (V-16): 25 May 1897, Paegam (V-18): 24 May 1897 (YANK), Mupong (V-?): no date (HO);

Hamgyong North (VI): 26 Apr-15 May 1912, 14 Aug 1917, 22 Aug, 3 Oct, 28 Nov 1929 (AUST), Pipa (*VI-6): 9 Apr 1996 (EDW), Unggi (VI-7): 24 May 1897 (YANK), Chayuryong (VI-13): 10 Jul 1983, Chayuri (VI-14): 2 Jul 1983 (TOM), Chongjin (VI-19): 18-20 Aug 1991 (BÁLDI), Chongjin-Orang (VI-19-28): 9 Jul 1983 (TOM), Onphori (VI-23): 3 Sep 1955 (WON), 27 Jun 1983, Osangri (*VI-25): 4 Oct 1991, Oyuri (VI-33): 3 Oct 1991 (TOM);

Hamgyong South (VII): 27 May-3 Jun 1987 (TOM), Jongdongri (VII-12): 16 Jul 1960 (WON), Sinpho (VII-16): 12 Mar 1972 (ZIP);

Kangwon (VIII): 1 May, 1 Sep 1914 (AUST), 20 Aug 1984 (KOLBE), Wonsan (VIII-3): 7 Aug 1979 (TOM), 19, 24 May 1980, Wonsan-Onjongri (VIII-3-8): 20, 23 May 1980 (MAUERS), 14 Jun 1980, 14 Oct 1991 (TOM), Apr 1987 (GLOW), 1987-1990 (FIEB), Kosong (VIII-6): 20 May 1980, Samil-pho (VIII-7): 22 May 1980 (MAUERS), 19 Aug 1984 (KOLBE), Apr 1987 (GLOW), 13 Oct 1991 (TOM), Kumgangsán (VIII-8): 9 Aug 1930 (WON), 20, 22 May 1980 (MAUERS), 18 Aug 1984 (KOLBE), 1-4 Aug 1991 (BÁLDI), Kuryong (*VIII-8): 18 Aug 1984 (KOLBE), 12 Oct 1991 (TOM), Onjongri: (*VIII-8): 1987-1990 (FIEB);

Hwanghae North (IX): Sohung (IX-9): 15, 17 May 1980 (MAUERS), Apr 1987 (GLOW);

Hwanghae South (X): sea shore between 38°20'N and 38°30'N: 25-26 Nov 1989 (STEP);

Kaesong (XI): 15, 16 May 1980 (MAUERS), Kaesong (XI-1): 3 Nov 1928, 21 Dec 1929, 3 Jan 1955 (WON), 24-25 Aug 1991 (BÁLDI), Pagyon (XI-3): 15 Aug 1984 (KOLBE), 21 Oct 1984, 27 Sep 1986 (TOM), Kongminghang (XI-7): 16 May 1980 (MAUERS);

Roads: Hyesan-Tanchon (V-5-VII-8): 19 Oct 1978 (TOM);
 no locality: 14 May 1957 (VLAD);
 no data: 2 specimens (ZIP).

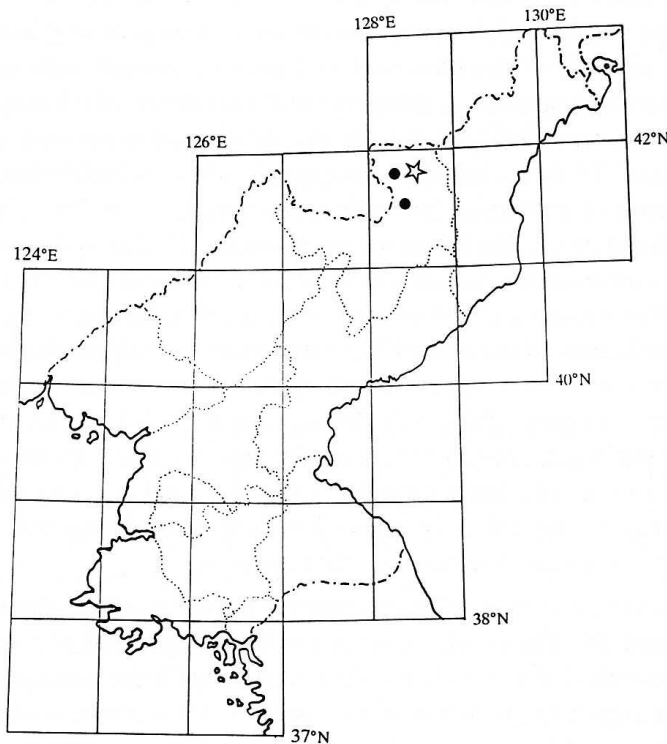
M e a s u r e m e n t s (5 specimens of the collection ZIP):

	♂	?sex	?sex	?sex	?sex
wing	305	339	345	370	325
tarsus	61	59	61	54	54
bill	56	60	61	58	60
tail	219	201	330	202	212

Resident species. Observed throughout the entire country, but significantly less numerous than Carrion Crow. More frequently seen in mountains, where it occurs in small groups of several up to a dozen birds than in urbanized terrain and the lowlands.

The Jungle Crow is a resident species in all bordering areas. In South Korea it is also less common than Carrion Crow (uncommon resident – WON Pyong-Oh 2000), however in China, Russia and Japan it is abundant, common, or fairly common species (CHENG Tso-Hsin 1987, NECHAEV & FUJIMAKI 1994, VOLOSHINA et al. 1999, NECHAEV 1998a, MACKINNON & PHILLIPS 2000, MORIOKA 2000). On the northern slopes on Paekdusan it is 3 times more numerous than Carrion Crow (WON Pyong-Oh 1990).

366. *Corvus corax* LINNAEUS, 1758
 Common Raven



Data:

Ryanggang (V): Naegokri (V-7): 12 Oct 1986 (TOM), Samjiyon (V-10): 2 Apr 1965, Mupong (V-?): 17 Mar 1963 (ZIP).

M e a s u r e m e n t s (2 males of the collection ZIP): wing 366, 297; tarsus 67, 55; bill 60, 56; tail 247, 200 mm

Vagrant, but perhaps breeding species. To date only 3 records (2 records are skins in the ZIP collection). The Common Raven is resident, and only nomadizes short distances after breeding season. Therefore the presence of birds in the Paekdusan region during 3 different years (at the time when birds stay near their nests) suggests that they may nest there. The Common Raven often nests in higher parts of mountains (GOODWIN 1976, CRAMP &

PERRINS 1994), and high elevations, such as inaccessible regions in Ryanggang Province are areas conducive to nesting. However including it into breeding fauna (or wintering species) requires greater numbers of records and more exact data. The nearest breeding place of the Common Raven is found in the Bikin River basin (MIKHAILOV et al. 1998), in the Sikhote-Alin Mountains (VOLOSHINA et al. 1999), the northern coast of Primorye (ELSUOKOV 1984) and the Kuril Islands (NECHAEV & FUJIMAKI 1994). In the nearest adjacent areas it is a wintering species only in southern Primorye, the Chinese Hebei Province and Hokkaido Island (LITVINENKO & SHIBAEV 1971, PANOVA 1973, MEYER DE SCHAUENSEE 1984, ETCHECOPAR & HÜE 1983, CHENG Tso-Hsin 1987, MORIOKA 2000). To date it has not been recorded in South Korea (GORE & WON Pyong-oh 1971, WON Pyong-Oh 2000).

V. CONCLUSIONS

The data presented consist of the existing knowledge about the occurrence of birds: Non-passeriformes (TOMEK 1999) and Passeriformes (this work) in North Korea. In many instances one should call it rather “state of ignorance” since it is far from a satisfactory presentation of the fauna of this area. The primary reason is the inadequate degree of research done in the country; large areas lack any kind of data concerning birds living there. Here is a reference mainly to mountainous and forested provinces in the north (see map showing Non-passeriformes). For political reasons there is a lack of information from the last 50 years from most areas lying near the line of demarcation. Thus there are no clear bases for drawing conclusions or presenting hypotheses concerning changes in occurrence or numbers of individual species. With such existing knowledge of the avifauna of North Korea it is possible to give only a very general summary.

In the territory of North Korea 366 bird species were recorded (Table 1 and Appendix 2). Of these 218 represent breeding or possibly breeding fauna: 141 species whose nesting was recorded [Appendix 2, category: B], a further 25 species for which the number of observations during breeding season indicate more or less regular nesting but till now have not been adequately described [Appendix 2, category: (B)]; a next 52 species [Appendix 2, category: (?B)] are those which may be nesting or expected to be nesting: they were recorded sporadically during the nesting period, and nested not far from the area being referred to. To this category belong species about which breeding is only supposed (not supported by evidence of nesting or the evidence is unreliable but for which nesting is very probable). To these latter belong: *Histrionicus histrionicus*, *Circus spilonotus*, *Cephus carbo*, *Anthus richardii*, *Zoothera sibirica*, *Locustella certhiola*, *Ficedula narcissina*, *Emberiza yessoensis* and *Passer rutilans*. The remaining 148 species are non-breeding species. Of these there are 55 species, mainly representatives of the order Charadriiformes and pipits and buntings from the order Passeriformes (Table 1 and Appendix 2), which appear more or less regularly [category M] or should appear more often [category (?M)] only during migration. 64 species (primarily from the order: Anseriformes, and raptors, cranes, buntings and finches) are those which stay here during the winter [category: W and (?W)]. The latter category vagrants [Vag] and stragglers [Strag] numbers 29 species. They were observed sporadically and such is their status throughout the entire region (in bordering areas they are known as “Vagrant” or “Straggler”).

Among the above mentioned categories of birds in North Korea there are species whose status is unknown (in the Checklist they are marked: ►). They were observed as breeding (*Phalacrocorax carbo*, *Dryocopus javensis*, *Picoides hyperythrus*, *Locustella pleskei*), wintering (*Nipponia nippon*, *Otis tarda*) or passage migrants (*Tringa guttifer*, *Eurynorhynchus pygmeus*). All of these, with the exception of *Picoides hyperythrus*, are on a world-wide list of birds threatened by extinction, with small or drastically diminishing numbers of the entire population (BIRD LIFE INTERNATIONAL 2000). These species were not observed on the territory of North Korea for the last several dozen

years, or as in the case of *Dryocopus javensis*, its total population on the Korean Peninsula, about 15 years ago did not exceed more than 20 pairs (HAM Kyu-Hwang & WON Pyong-Oh 1982, CHONG Jong-Ryol 1987, PAK U-II oral comm. – cited by GŁOWACIŃSKI et al. 1989), and part of this population i.e. residing in North Korea no longer exists (WON Pyong-Oh 2000, KOO Tae-Hoe pers. Comm).

There are 5 species (*Gavia pacifica*, *Oceanodroma monorhis*, *Platalea leucorodia*, *Spizaetus nipalensis* and *Charadrius (asiaticus) veredus*) not included in the bird fauna of North Korea, which probably also appeared here but were not noted. These species were not included in the list of birds of North Korea because they do not fulfill the record criteria of the area under discussion. They were observed less or more regularly in all neighboring areas. *Oceanodroma monorhis* and *Platalea leucorodia* should belong to nesting species. Their breeding is known in all adjacent areas and it would be difficult to explain their absence only in North Korea. *Spizaetus nipalensis* and *Charadrius (asiaticus) veredus* probably should be in the category [Vag]. These are species which were recorded during the 1st half of the 20th century on the Korean Peninsula, but it is not known in which part. *Spizaetus nipalensis* nests in Japan and Russia and was later observed as migrant in South Korea and in Chinese provinces adjacent to North Korea. *Charadrius (asiaticus) veredus* nests in China and was also seen as vagrant in Japan, Primorye and South Korea.

A complete list of North Korean birds numbers 366 species. It is considerably shorter than lists given by neighboring areas: in South Korea 415 species (WON Pyong-Oh 2000), Primorye 458 species (NECHAEV 1998a). However it must be kept in mind that the difference results mainly from a small number – only 29 – registered in North Korea of species appearing randomly or irregularly [category: Vagrant and Straggler] while in bordering areas such records were significantly larger (e.g. South Korea 76, Primorye 87).

It is very difficult to mark with precision the borders where species occur, particularly when an area has been poorly researched, as is the case in the northern part of the Korean Peninsula. And yet, after a comparison of the status of individual species in North Korea and bordering countries it can clearly be seen that probably the breeding border about 2/3 of all birds nesting here (see Table 1 and Appendix 2) crosses the territory of the Korean Peninsula, especially its northern part. The higher elevations of the northern provinces of North Korea with its severe climate and taiga plant life have the appropriate nesting conditions for many palaeartic species. The breeding grounds of these species do not cover the warmer and lower regions of the peninsula. For palaeartic species: owls, woodpeckers, warblers, flycatchers and finches it is the southern limit of their occurrence. They are breeding birds in North Korea and do not nest in the southern part of the peninsula. At the same time this terrain is a barrier which do not crossed by the species living in warmer habitats; they also have resident borders on the Korean Peninsula (but northern) and nest in the south and central (i.e. at lower elevations) parts of the Korean Peninsula.

The Asian Changbai mountain range (the highest peak is Paekdusan 2744 m) separating the Korean Peninsula from the continent is a barrier for birds. Further north, outside the Korean Peninsula the breeding grounds of the following species are not found: *Egretta garzetta*, *Egretta sacra*, *Bubulcus ibis*, *Synthliboramphus wumizusume*, *Hypsipetes amaurotis*, *Terpsiphone atrocaudata* and others. The breeding areas of some other species extend somewhat farther north, but only on lower terrain on the north-eastern or north-western side of the above mentioned mountain range. Thus: *Strix aluco*, *Athene noctua*, *Halcyon coromanda*, *Halcyon pileata*, *Ropophilus pekinensis*, *Parus varius* nest on the Korean Peninsula and areas of China bordering Korea from the northwestern side, but they do not occur in Primorye. North Korea is the northeast distribution area of these species. In turn *Egretta intermedia*, *Accipiter soloensis* nest in North Korea and Primorye, but were not seen west of mountain range Changbai i.e. in China. The western breeding border of these species crosses North Korea. The other group of species is made up of those for whom higher terrain or the

Changbai Mountain range is the southern barrier. *Ardea purpurea*, *Anas falcata*, *Rallus aquaticus*, *Emberiza schoeniclus*, *Corvus frugilegus* nest in China and Primorye as far as the frontier with North Korea, but there is a lack of premises about their nesting on the Korean Peninsula. *Ciconia boyciana*, *Circus spilonotus*, *Bucephala clangula*, *Corvus corax*, *Carpodacus erythrinus* reside in North Korea but only in the northeast, while *Gallinago solitaria*, *Dicrurus macrocerus*, *Dicrurus leucophaeus*, *Calandrella cheleensis* in the northwest. The former group is known to be in Primorye and the northeastern part of the Korean Peninsula, while the latter occurs in China and were reported in the northwest provinces of North Korea. However they do not nest in Primorye, South Korea and Japan. While discussing the distribution borders of species which do not nest in North Korea must also be mentioned the birds which nest only in the southern part of the peninsula. The northern borders of: *Pitta nympha*, *Cisticola juncidis*, *Synthliboramphus wumizusume*, *Columba janthina*, *Zosterops japonica* crossed the Korean Peninsula.

The range of mountains dividing the Korean Peninsula from the Asian continent creates a barrier not only for breeding birds but also for wintering birds. The significantly milder climate in the central and southern parts of the Korean Peninsula enable resident species to stay for the winter which are resident on the Korean Peninsula. Some species (i.e. *Ardea cinerea*, *Accipiter nisus*, *Lanius bucephalus*, *Turdus pallidus* and others), distributed at northern side of the Changbai mountain range are migrants, leaving breeding grounds for the winter. The warm waters of the southern and central parts of the peninsula do not freeze and are also winter grounds for water-and-marsh birds nesting in Palaearctic regions farther north. Of the species wintering on the Korean Peninsula 42 were not met in winter in areas farther north i.e. primarily in Primorye, but also in northeastern provinces of China. Among others these are 4 species of cranes, geese, ducks, shore birds and passerines. For these species the winter boundary goes across the Korean Peninsula.

Finally, the occurrence (nesting) of species on the Korean Peninsula (and bordering China and/or Primorye) which are found on the world-wide list of endangered, vulnerable or near threatened (BIRD LIFE INTERNATIONAL 2000)⁴⁰ should be mentioned. On this list are: *Ciconia boyciana*, *Egretta eulophotes*, *Platalea minor*, *Mergus squamatus*, *Haliaeetus pelagicus*, *Rallina paykullii*, *Larus saundersi*, *Emberiza jankowskii*. Also on the endangered, vulnerable or near threatened list there are species which appear in Korea outside the breeding period. To these belong migrating *Anser cygnoides*, *Coturnicops noveboracensis*, *Haliaeetus albicilla*, *Numenius madagascariensis*, *Tringa guttifer*, *Eurynorhynchus pygmeus*, *Emberiza yessoensis* and also: *Grus japonensis*, *Grus monacha*, *Grus vipio*, *Anas formosa*. Particular attention should be paid to the last group, as the Korean Peninsula is their main wintering area. The overall state of these species and even existence to a large degree depends on their survival through winter and therefore the maintenance and protection of their winter grounds must be ensured.

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The list given at: www.redlist.cymbiont is confusing. It lists 153 species for North Korea (151 for South Korea) as being on The 2000 IUCN Red List of Threatened Species, many of which have never been noted on the Korean Peninsula. So, it is difficult to say that they are threatened in this area.

Table I

Numbers of species belonging to particular orders (Non-Passeriformes) and families (Passeriformes) and their status in North Korea. The last two columns include only those species in which the borders of breeding areas and winter quarters cross Korean Peninsula. **Breeding** – (1) resident and migrating breeding species, (2) probably breeding i.e. those observed in breeding season in convenient habitats but whose nesting have not been confirmed, and (3) – possibly breeding i.e. those observed rarely in nesting season or nesting in neighboring areas; **Passage migrants** – (1) birds observed on passage only, and (2) probably migrants i.e. those which should be observed on passage because they are reported from neighboring areas; **Wintering** – (1) observed in winter only, and (2) possibly wintering i.e. those which should be found as wintering.

Ordo/Family	The numbers of species in North Korea					The numbers of species having area borders on the Korean Peninsula	
	Total	Breeding + possibly breeding	Passage migrants	Wintering	Vagrants, Stragglers	Breeding	Wintering
Non-Passeriformes							
Gaviiformes	3	–	–	2	1	–	–
Podicipediformes	5	2+1	1	1	–	–	2
Procellariiformes	2	1	–	–	1	–	–
Pelecaniformes	4	1+2	–	–	1	–	–
Ciconiiformes	18	11+4	2	1	–	11	2
Anseriformes	35	6+6	1	22	–	7	21
Falconiformes	26	12+5	–	7	2	9	4
Galliformes	4	4	–	–	–	2	–
Gruiformes	15	5+2	1	6	1	3	5
Charadriiformes	68	11+7	37	8	5	11	10
Columbiformes	5	3	–	–	2	2	–
Cuculiformes	5	5	–	–	–	1	–
Strigiformes	10	7+2	–	1	–	5	–
Caprimulgiformes	1	1	–	–	–	–	–
Apodiformes	2	2	–	–	–	1	–
Coraciiformes	6	5	–	–	1	2	–
Piciformes	11	11	–	–	–	6	1
Total non-Passeriformes	220	87+29	42	48	14	60	45

Table I continued							
Passeriformes							
Pittidae	1	–	–	–	1	1	–
Alaudidae	4	2+1	–	–	1	2	–
Hirundinidae	4	3+1	–	–	–	1	1
Moltacilidae	11	4+3	4	–	1	2	2
Campephagidae	1	1	–	–	–	–	–
Pycnonotidae	1	1	–	–	–	1	–
Laniidae	5	3+1	–	1	–	1	1
Bombycillidae	2	–	–	2	–	–	–
Cinclidae	1	1	–	–	–	–	–
Troglodytidae	1	1	–	–	–	–	–
Prunellidae	2	1	–	1	–	1	–
Turdidae	21	11+2	1	1	6	6	2
Panuridae	1	1	–	–	–	–	–
Sylviidae	21	12+5	2	1	1	12	–
Muscicapidae	8	6+1	1	–	–	4	–
Monarchidae	2	1+1	–	–	–	2	–
Aegithalidae	1	1	–	–	–	–	–
Remizidae	1	–	1	–	–	–	–
Paridae	5	5	–	–	–	1	–
Sittidae	2	2	–	–	–	1	–
Certhidae	1	1	–	–	–	1	–
Zosteropidae	1	1	–	–	–	2	–
Emberizidae	17	6+2	4	4	1	5	3
Fringillidae	14	4+4	–	5	1	6	1
Ploceidae	2	1+1	–	–	–	–	–
Sturnidae	4	2	–	–	2	–	–
Oriolidae	1	1	–	–	–	–	–
Dicruridae	2	–	–	–	2	1	–
Corvidae	9	7+1	–	1	–	2	–
Total Passeriformes	146	79+23	13	16	16	52	10
Total	366	166+52	55	64	30	112	55

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APPENDIX 1

Alphabetical list of place names where information about birds came from.

Places have numerical symbols: provinces (Roman numerals) and places (Arabic numerals) used in the text and corresponding to points on the map (Fig 1 in the publication TOMEK 1999), the exact locations are defined by means of their geographical coordinates. Localities given to an accuracy of district (and mentioned with „*”) are defined by means of geographical coordinates of the district cities, however observations localized only to an accuracy of province do not have coordinates only province numbers and a question mark, e.g. (I-?). Other (synonymous) names of the same places (different from those on the labels of the specimens in the ZIP collection owing to the changes carried out in the North Korea and the improper of differently spelled place-names in publications by European ornithologists) are given with „=” referring back to the proper name.

Provinces:

- I. Pyongyang
- II. Pyongan South
- III. Pyongan North
- IV. Chagang
- V. Ryanggang
- VI. Hamgyong North
- VII. Hamgyong South
- VIII. Kangwon
- IX. Hwanghae North
- X. Hwanghae South
- XI. Kaesong (XI):

Aedo (*III-29)	39°26'N 124°37'E	Changyon (X-27)	38°15'N 125°05'E
Alsom (VI-6)	42°14'N 130°31'E	Changyon-ho=Jangyon-ho	
Alsom=Tongchon		Chasong (IV-1)	41°27'N 126°38'E
Amisan (I-?)		Chayuri (VI-14)	42°07'N 129°26'E
Anak (X-3)	38°31'N 125°29'E	Chayuryong (VI-13)	42°09'N 129°29'E
Anbyon (VIII-17)	39°02'N 127°31'E	Chilbosan (VI-37)	41°02'N 129°30'E
Anchon (VII-?)		Chimbong (*V-6)	41°33'N 128°19'E
Anju (II-16)	39°37'N 125°39'E	Chodo (IX-?)	
Ankukri (*II-11)	39°26'N 125°54'E	Choksuri (*II-3)	40°06'N 126°54'E
Annong(VII-?)		Cholsan (III-9)	39°47'N 124°40'E
Ansokri (II-23)	38°57'N 125°12'E	Chongdan (X-23)	37°58'N 125°56'E
Ch'ongjin=Chongjin		Chongjin (VI-19)	41°48'N 129°45'E
Chaekdo (*III-9)	39°47'N 124°40'E	Chongju=Jongju	
Chaeryong (X-28)	38°24'N 125°37'E	Chongpalri (*III-10)	39°54'N 124°35'E
Chaho (VII-?)		Chongsan (*IV-10)	40°11'N 126°17'E
Chailbong (VII-23)	40°38'N 127°44'E	Chonmasan (IX-?)	
Changsu (X-25)	38°11'N 125°46'E	Chonmasan (III-20)	40°12'N 125°02'E

Chonnae (VIII-1)	39°22'N 127°12'E	Hungsanri (*VII-31)	39°48'N 127°23'E
Chonpansok (?)		Hungsanri (VI-10)	42°23'N 129°35'E
Chonphyongri (*VII-38)	39°32'N 127°14'E	Hungsongri (*V-6)	41°33'N 128°19'E
Chonpol (*VI-25)	41°36'N 129°37'E	Huthan (?)	
Chosan Bay=Unsang		Huthan (II-?)	
Chowonri (VII-34)	39°40'N 127°29'E	Hwadae (VI-30)	40°50'N 129°29'E
Chowonryong=Chowonri		Hwajin (II-35)	39°12'N 125°24'
Chowonsan=Chowonri		Hwangbong (*V-16)	41°34'N 128°48'E
Chuamri (IX-?)		Hwangchoryong (VII-27)	40°14'N 127°17'E
Chunghwa (I-13)	38°51'N 125°48'E	Hwapyong (IV-2)	41°17'N 126°52'E
Chungsan (II-19)	39°06'N 125°22'E	Hyangsan (III-23)	40°02'N 126°11'E
Chuponri (*II-19)	39°06'N 125°22'E	Hyesan (V-5)	41°24'N 128°10'E
Dongsakol (*VI-14)	42°07'N 126°26'E	Hyongchesom (X-20)	37°58'N 125°44'E
Dongsankos (*III-9)	39°47'N 124°40'E	Hyongjesan (I-9)	39°09'N 125°41'E
Genzan=Wonsan		Hyongsanr (*II-21)	39°04'N 125°32'E
Gumbangyang (VIII-?)		Ichon (VIII-11)	38°28'N 126°53'E
Gumbong riv. (VIII-?)		Inhung (VII-37)	39°31'N 127°21'E
Guranri (IX-X-?)		Jambongri (*X-10)	38°20'N 125°18'E
Hachari (*I-8)	39°10'N 125°41'E	Jamosan (II-15)	39°18'N 125°52'E
Haebangri (X-?)		Janganri (*II-19)	39°06'N 125°22'E
Haeju (X-22)	37°02'N 125°44'E	Jangdong (VII-43)	39°24'N 126°55'E
Haejungri (*VII-38)	39°32'N 127°14'E	Janghungri (*II-17)	39°19'N 125°36'E
Haepyeongri (*XI-5)	37°57'N 126°28'E	Janghungri (*VI-30)	40°50'N 129°29'E
Haesonri (XI-4)	37°59'N 126°30'E	Janghyong (IX-?)	
Haksori (*III-10)	39°54'N 124°35'E	Jangjin (VII-26)	40°23'N 127°14'E
Hamhung (VII-30)	39°56'N 127°31'E	Jangjinho (VII-25)	40°31'N 127°12'E
Hamjongri (*II-19)	39°06'N 125°22'E	Jangkongri (*II-19)	39°06'N 125°22'E
Hamju (VII-45)	39°52'N 127°26'E	Jangkongri (*X-21)	38°02'N 125°32'E
Hanchon (*II-35)	39°12'N 125°24'	Jangmori (*III-6)	39°48'N 124°54'E
Hangsan=Hyangsan		Jangphung (XI-2)	38°04'N 126°41'E
Hantaeri (VII-24)	40°40'N 127°32'E	Jangsongri (*III-9)	39°47'N 124°40'E
Hapyongri (VI-31)	40°50'N 129°32'E	Jangyon-ho (VI-29)	41°23'N 129°40'E
Hari (*I-8)	39°10'N 125°41'E	Jasan (II-12)	39°21'N 125°54'E
Hasokri (*III-10)	39°54'N 124°35'E	Jedo (X-1)	38°41'N 125°22'E
Hedzu=Haeju		Jehyonri (*II-11)	39°26'N 125°54'E
Hochon (VII-14)	40°41'N 128°36'E	Jinghungri (*III-13)	39°59'N 124°27'E
Hoeryong (VI-9)	42°27'N 129°46'E	Jinhungri (*VI-20)	41°55'N 129°01'E
Hohangryong (*V-10)	41°50'N 128°19'E	Joho (*III-13)	39°59'N 124°27'E
Homultang (V-21)	41°46'N 128°08'E	Joksongri (*II-19)	39°06'N 125°22'E
Honamri (VII-21)	39°59'N 127°53'E	Jolkol (*VI-12)	42°14'N 129°14'E
Hongkyesu (*V-8)	41°42'N 128°19'E	Jömdshu=Yomju	
Hongnamri (*V-10)	41°50'N 128°19'E	Jongak-san=Ryongaksan	
Hongwon (VII-20)	40°01'N 127°56'E	Jongbong (*V-6)	41°33'N 128°19'E
Hopanri (*VII-22)	40°29'N 127°38'E	Jongchon (III-?)	
Huchang (V-1)	41°31'N 127°16'E	Jongdongri (VII-12)	40°22'N 128°36'E
Huichon (IV-10)	40°11'N 126°17'E	Jonggwang (VII-28)	40°02'N 127°26'E
Huksuri (II-2)	40°08'N 127°03'E	Jongju (III-3)	39°41'N 125°13'E
Hunghari (*V-3)	41°25'N 127°45'E	Jongjungri (*VII-8)	40°27'N 128°54'E
Hungkyesu (?)		Jongkongri (*III-6)	39°48'N 124°54'E
Hungnam (*VII-30)	39°56'N 127°31'E	Jongmunri (*VI-30)	40°50'N 129°29'E
Hungnam=Hyngnam		Jönpung-ho=Yönpung-ho	
Hungsang (VII-39)	39°42'N 126°56'E	Jonphyong (VII-31)	39°48'N 127°23'E

Josanri (*VI-7)	42°21'N 130°23'E	Kumgang (VIII-9)	38°38'N 127°59'E
Juamsan (I-?)		Kumgangri (*VI-7)	42°21'N 130°23'E
Juari (*III-10)	39°54'N 124°35'E	Kumgangri (VI-34)	41°56'N 129°42'E
Juhung (VII-?)		Kumgangsán (VIII-8)	38°39'N 128°07'E
Jungamsan (V-?)		Kumgwangri (III-18)	40°16'N 124°37'E
Jungkonri (*II-19)	39°06'N 125°22'E	Kumjongri (*II-21)	39°04'N 125°32'E
Jungsanri (*VI-30)	40°50'N 129°29'E	Kumkyo (*IX-13)	38°09'N 126°28'E
Jungsori (*VII-20)	40°01'N 127°56'E	Kumsanri (X-4)	38°36'N 125°09'E
Kachado (*III-10)	39°54'N 124°35'E	Kumsongri (II-4)	39°56'N 127°02'E
Kaechon (II-31)	39°42'N 125°53'E	Kumsuri (*X-19)	37°55'N 125°30'E
Kaedong (IX-?)		Kumya (VII-38)	39°32'N 127°14'E
Kaepung (XI-5)	37°57'N 126°28'E	Kungtho (*X-3)	38°31'N 125°29'E
Kaesong (XI-1)	37°58'N 126°33'E	Kupongsan (*IX-4)	38°48'N 126°40'E
Kambang (IV-?)		Kuponri (*I-3)	39°08'N 126°06'E
Kangchongri (*X-3)	38°31'N 125°29'E	Kuryong (*II-24)	38°54'N 125°13'E
Kangdong (I-3)	39°08'N 126°06'E	Kuryong (*VIII-8)	38°38'N 128°10'E
Kangnam (I-12)	38°53'N 126°05'E	Kuryongri (VII-19)	40°10'N 127°48'E
Kangpukri (*IX-13)	38°09'N 126°28'E	Kusong (III-27)	39°58'N 125°14'E
Kangryong (X-19)	37°55'N 125°30'E	Kusonri (*III-13)	39°59'N 124°27'E
Kangso (*II-28)	38°55'N 125°25'E	Kuwolsan (X-6)	38°30'N 125°16'E
Kanpaegsan (*V-10)	41°50'N 128°19'E	Kwail (X-13)	38°28'N 125°01'E
Kansambong (*V-12)	42°00'N 128°05'E	Kwaksan (III-4)	39°41'N 125°05'E
Kapsan (VII-?)		Kwangchon (VII-6)	40°33'N 128°59'E
Kapsan (V-19)	41°05'N 128°16'E	Kwangdokri (*VII-38)	39°32'N 127°14'E
Karimri (*IV-2)	41°17'N 126°52'E	Kwangpo (*VII-31)	39°48'N 127°23'E
Karungryong (IV-4)	41°06'N 126°05'E	Kwangryongmun (II-?)	
Kasari (*X-12)	38°21'N 125°08'E	Kwankungri (*III-10)	39°54'N 124°35'E
Käsöng=Kaesong		Kwanmobong (VI-22)	41°42'N 129°16'E
Kawonri (VII-9)	40°27'N 128°46'E	Kwanmori (VI-26)	41°33'N 129°30'E
Kekoge=Myongmun		Kyngang=Kumgangsán	
Kiam (VII-10)	40°23'N 128°47'E	Kyongsong (VI-25)	41°36'N 129°37'E
Kilju (VI-32)	41°26'N 129°20'E	Laudo=Nampho	
Kimchaek (VI-38)	40°39'N 129°11'E	Lazarev=Yonghung	
Kimjongsup (*V-3)	41°25'N 127°45'E	Maando (*III-14)	39°50'N 124°14'E
Koangchonri (*X-19)	37°55'N 125°30'E	Machonryong (VII-5)	40°37'N 129°04'E
Koanjuryong (VI-18)	41°54'N 129°48'E	Maengsan (II-32)	39°39'N 126°30'E
Kochonri (*II-11)	39°26'N 125°54'E	Mangjöngdä=Mankyongdae	
Kohyonri (*III-4)	39°41'N 125°05'E	Mangryong (*X-2)	38°33'N 125°25'E
Kohyonri (*X-10)	38°20'N 125°18'E	Mankyongdae (I-11)	39°00'N 125°35'E
Koksan (IX-3)	38°48'N 126°40'E	Manmulsan (*VIII-8)	38°43'N 128°08'E
Kongdokmyon (*II-17)	39°19'N 125°36'E	Manpho (IV-11)	41°09'N 126°17'E
Kongminghang (XI-7)	38°03'N 126°36'E	Manphori (*VI-7)	42°21'N 130°23'E
Konjang (*V-9)	41°44'N 128°16'E	Manpo (VI-2)	42°22'N 130°31'E
Kosong (VIII-6)	38°45'N 128°10'E	Maram (*I-8)	39°10'N 125°41'E
Kosong=Onjongri		Maryongri (*III-2)	39°41'N 125°30'E
Kowon (VII-44)	39°29'N 127°14'E	Masanri (*I-8)	39°10'N 125°41'E
Kujangri (*VIII-12)	38°46'N 127°00'E	Masingryong (VIII-?)	
Kukdo (VIII-16)	39°09'N 127°43'E	Masonri (IV-9)	40°09'N 126°22'E
Kulphori (VI-4)	42°20'N 130°34'E	Mayang (VI-15)	42°04'N 129°30'E
Kumchon (IX-13)	38°09'N 126°28'E	Mayonho (*VI-29)	41°23'N 129°40'E
Kumchonri (*X-10)	38°20'N 125°18'E	Mehyangri (VI-27)	41°33'N 129°24'E
Kumdok (VII-2)	40°56'N 128°47'E	Miamri (I-?)	

Misando (I-?)		Ondshongri=Onjongri	
Mjohjang=Myohyangsan		Ongjin (X-26)	37°56'N 125°22'E
Moamsan (I-?)		Onjongri (*VIII-8)	38°41'N 128°12'E
mouth of Chongchon (*II-29)	39°44'N 125°28'E	Onphori (VI-23)	41°39'N 129°30'E
Muchangri (*VI-39)	42°13'N 130°17'E	Onsupiong (V-7)	41°34'N 128°24'E
Mugido (*III-6)	39°48'N 124°54'E	Onsupiong=Naegokri	
Mugyecho (*VI-29)	41°23'N 129°40'E	Opha (*II-17)	39°19'N 125°36'E
Mukungri (*VIII-11)	38°28'N 126°53'E	Orang (VI-28)	41°25'N 129°39'E
Mumyongpyong (*III-14)	39°50'N 124°14'E	Osangri (*VI-25)	41°36'N 129°37'E
Munchon (VIII-2)	39°22'N 127°20'E	Othanri (*II-11)	39°26'N 125°54'E
Mundok (II-34)	39°29'N 125°36'E	Othanri (*VIII-2)	39°22'N 127°20'E
Munsanri (III-?)		Oyuri (VI-33)	41°47'N 129°35'E
Mupo (V-20)	42°01'N 128°36'E	Padukisom (*III-9)	39°47'N 124°40'E
Mupong (V-?)		Paechon (X-29)	38°00'N 126°19'E
Mupongri (*II-19)	39°06'N 125°22'E	Paegam (V-16)	41°34'N 128°48'E
Musan (VI-12)	42°14'N 129°14'E	Paegam (V-18)	41°15'N 128°47'E
Musanri (*III-6)	39°48'N 124°54'E	Paegkol (*II-17)	39°19'N 125°36'E
Mutubong (V-13)	41°57'N 128°11'E	Paekchonri (*IX-8)	38°19'N 126°07'E
Myohyangsan (III-24)	40°01'N 126°19'E	Paekdusan (V-12)	42°00'N 128°05'E
Myongchon (VII-?)		Paekhyonri (*X-10)	38°20'N 125°18'E
Myongmun (IV-6)	40°23'N 127°21'E	Paeksanri (IV-7)	40°22'N 126°30'E
Naekangri (*VIII-9)	38°38'N 127°59'E	Paeksongri (II-13)	39°19'N 125°53'E
Namhaeri (*X-26)	37°56'N 125°22'E	Paektusan=Paekdusan	
Namkyongri (*III-6)	39°48'N 124°54'E	Paesanjom (*II-11)	39°26'N 125°54'E
Namkyori (*II-17)	39°19'N 125°36'E	Pagjon=Pagyon	
Nampho (II-26)	38°44'N 125°23'E	Pagyon (XI-3)	38°04'N 126°34'E
Namphothae (*V-8)	41°44'N 128°24'E	Pakan-kori (VI-?)	
Nampo=Nampho		Pakchon (III-1)	39°44'N 125°34'E
Namri (*II-11)	39°26'N 125°54'E	Pakchon (V-17)	41°26'N 128°47'E
Namri (*X-10)	38°20'N 125°18'E	Päksongri=Paeksongri	
Namsangri (II-7)	39°41'N 126°19'E	Paldongkyo (I-?)	
Namsanri (*I-3)	39°08'N 126°06'E	Palsanri (*II-19)	39°06'N 125°22'E
Namsi (*III-10)	39°54'N 124°35'E	Pandongri (*VII-38)	39°32'N 127°14'E
Nangsari (*V-10)	41°50'N 128°19'E	Panghyondong (III-26)	39°53'N 125°14'E
Nansanri (*I-12)	38°53'N 126°05'E	Pangyo=Panpyo	
Nohari (*II-11)	39°26'N 125°54'E	Pankungri (*III-10)	39°54'N 124°35'E
Nohori (VIII-?)		Pankyo (*VIII-12)	38°46'N 127°00'E
Nongsadong (*V-12)	42°00'N 128°05'E	Panmunchom=Panmunjom	
Nongsadong (*VI-20)	41°55'N 129°01'E	Panmunjom (XI-6)	37°57'N 126°40'E
Nongsari (*V-12)	42°00'N 128°05'E	Pansokri (*II-19)	39°06'N 125°22'E
Nongsari (*VI-20)	41°55'N 129°01'E	Pegaebong=Pekebong	
Nuchonri (*IX-11)	38°19'N 126°22'E	Pekebong (*V-10)	41°50'N 128°19'E
Nyongbyo (III-30)	39°49'N 125°48'E	Phaldongkyo (*I-11)	39°00'N 125°35'E
Obongsan (VI-11)	42°19'N 129°42'E	Phanmundshöm=Panmunjom	
Ochongdong (*II-19)	39°06'N 125°22'E	Phjōngjang=Pyongyang	
Ochonri (*II-19)	39°06'N 125°22'E	Photae (V-8)	41°42'N 128°19'E
Okasan (IV-3)	41°25'N 127°02'E	Photaeasan (*V-8)	41°42'N 128°19'E
Okdokri (*II-24)	38°54'N 125°13'E	Phungdong=Ryongmu	
Onchon (*X-10)	38°20'N 125°18'E	Phunghaeri (*X-13)	38°28'N 125°01'E
Onchon (II-24)	38°54'N 125°13'E	Phyonghwari (*II-3)	40°06'N 126°54'E
Onchonri (*II-24)	38°54'N 125°13'E	Pidansom (*III-14)	39°50'N 124°14'E
Ondori (*VI-25)	41°36'N 129°37'E	Pipa (*VI-6)	42°14'N 130°31'E

Pochon (V-6)	41°33'N 128°19'E	Ryonganri (*III-6)	39°48'N 124°54'E
Pogo (VII-4)	40°52'N 128°45'E	Ryongchaeho (*VI-29)	41°23'N 129°40'E
Pomphori (VII-36)	39°31'N 127°25'E	Ryongchon (III-13)	39°59'N 124°27'E
Ponghakri (*II-11)	39°26'N 125°54'E	Ryongchonri (VI-35)	41°54'N 129°54'E
Ponghwa (*II-11)	39°26'N 125°54'E	Ryongdori (*I-14)	38°50'N 126°05'E
Ponghwari (I-4)	39°13'N 126°00'E	Ryonggang (*II-24)	38°54'N 125°13'E
Pongtanri (*IX-11)	38°19'N 126°22'E	Ryonghung riv. (VII-46)	39°24'N 127°26'E
Popdong (VIII-13)	38°58'N 127°04'E	Ryonghungri (I-?)	
Posanri (*III-3)	39°41'N 125°13'E	Ryonghyonri (*III-6)	39°48'N 124°54'E
Pujon (VII-22)	40°29'N 127°38'E	Ryonghyonri (VI-36)	41°32'N 129°31'E
Pukchang (*II-32)	39°39'N 126°30'E	Ryongje-ho (VI-17)	41°56'N 129°55'E
Pukchong (VII-15)	40°15'N 128°19'E	Ryongjori (V-2)	41°23'N 127°03'E
Pukdae-chon riv. (VII-1)	40°59'N 128°47'E	Ryongmu (VII-17)	40°03'N 128°08'E
Pukhaso (*VI-25)	41°36'N 129°37'E	Ryongnamdong (I-?)	
Pukkyesu (*V-16)	41°34'N 128°48'E	Ryongori (II-29)	39°44'N 125°28'E
Pungjongri (II-22)	39°01'N 125°14'E	Ryongori (*VIII-2)	39°22'N 127°20'E
Puryong (VI-16)	42°04'N 129°43'E	Ryongphori (*VI-7)	42°21'N 130°23'E
Pusanri (*II-21)	39°04'N 125°32'E	Ryongpunri (IX-?)	
Pyokdong (III-19)	40°36'N 125°19'E	Ryongsando (*III-9)	39°47'N 124°40'E
Pyoksong (X-21)	38°02'N 125°32'E	Ryongsanri (VI-24)	41°38'N 129°30'E
Pyongnam (*II-24)	38°54'N 125°13'E	Ryongsinri (VII-18)	40°11'N 128°01'E
Pyongsan (IX-11)	38°19'N 126°22'E	Ryongsong (I-7)	39°07'N 125°47'E
Pyongsong (II-14)	39°15'N 125°52'E	Ryongunri (II-6)	39°32'N 126°37'E
Pyongwon (II-17)	39°19'N 125°36'E	Ryongyang (II-?)	
Pyongyang (I-1)	39°01'N 125°44'E	Ryongyon (X-14)	39°09'N 124°53'E
Raengjongri (*IX-9)	38°26'N 126°13'E	Sabekdo (III-?)	
Rajin (VI-39)	42°13'N 130°17'E	Sadong (I-17)	39°02'N 125°52'E
Rakdo (*III-9)	39°47'N 124°40'E	Sainjang (*II-14)	39°15'N 125°53'E
Raksaengri (II-18)	39°07'N 125°20'E	Sajonri (II-20)	39°05'N 125°25'E
Rando=Alsom		Sakiri (*X-12)	38°21'N 125°08'E
Rangnim (IV-5)	40°58'N 127°07'E	Sakju (*II-24)	38°54'N 125°13'E
Rangrimri (II-1)	40°17'N 126°58'E	Sambang (IV-?)	
Ransanri (*I-3)	39°08'N 126°06'E	Sambang (VIII-10)	38°43'N 127°21'E
Rapdo (*III-6)	39°48'N 124°54'E	Sambongri (III-8)	39°42'N 124°54'E
Ribsokri (VIII-?)		Samchon (X-10)	38°20'N 125°18'E
Rimhungri (*III-23)	40°02'N 126°11'E	Samchon (I-?)	
Rimyongsu (V-9)	41°47'N 128°15'E	Samdori=Samphori	
Rinsan (IX-8)	38°19'N 126°07'E	Samdung (*I-3)	39°08'N 126°06'E
Rinsanri (*I-3)	39°08'N 126°06'E	Samil-pho (VIII-7)	38°41'N 128°18'E
Ripha (VII-3)	40°50'N 128°52'E	Samilpo=Samil-pho	
Ripsokri (VII-41)	39°46'N 126°49'E	Samjangmyon (*VI-12)	42°14'N 129°14'E
Riuganpo (III-?)		Samji-see=Samjiyon	
Riuganpo=Ryongampho		Samjiyon (V-10)	41°50'N 128°19'E
Riwon (VII-11)	40°20'N 128°38'E	Samphori (VI-21)	41°54'N 129°07'E
Rjongaksan=Ryongaksan		Samsanri (X-15)	37°58'N 125°14'E
Rodongri (*I-14)	38°50'N 126°05'E	Samsin(I-?)	
Rohari (III-5)	39°44'N 125°00'E	Samsok (I-5)	39°06'N 125°54'E
Ryomchang (?)		Samsongri (*III-6)	39°48'N 124°54'E
Ryondongri (VII-35)	39°30'N 127°30'E	Samsu (V-4)	41°17'N 128°01'E
Ryongaksan (I-10)	39°02'N 125°34'E	Sangamri (IX-?)	
Ryongammyon (*I-3)	39°08'N 126°06'E	Sangkyori (X-18)	37°45'N 125°25'E
Ryongampho (III-15)	39°56'N 124°22'E	Sangryong (VII-7)	40°31'N 129°01'E

Sangsokri (*III-9)	39°47'N 124°40'E	Sokwangsa (VIII-4)	39°01'N 127°22'E
Sangwon (I-14)	38°50'N 126°05'E	Solban-san (*VI-38)	40°39'N 129°11'E
Sanjiri (*VIII-11)	38°28'N 126°53'E	Sonbong=Unggi	
Sanmori (*VI-25)	41°36'N 129°37'E	Sonbongri (*I-2)	39°02'N 125°58'E
Sansangbong (*V-12)	42°00'N 128°05'E	Sonchon (III-6)	39°48'N 124°54'E
Sansokri (II-?)		Songchon (II-9)	39°15'N 126°13'E
Sansongri (IX-14)	38°06'N 126°36'E	Songdo=Kaesong	
Sapho (*VI-7)	42°21'N 130°23'E	Songhwa (X-12)	38°21'N 125°08'E
Sariwon (IX-16)	38°30'N 125°48'E	Songhwari (*III-10)	39°54'N 124°35'E
Sariwŏn=Sariwon		Songmaeri (*II-17)	39°19'N 125°36'E
Sayukpun (?)		Songmunri (*I-2)	39°02'N 125°58'E
Sidok (*I-2)	39°02'N 125°58'E	Songrimri (*III-13)	39°59'N 124°27'E
Sidshungho=Sijungho		Songryong=Jongdongri	
Sijok (*I-5)	39°06'N 125°54'E	Sontchŏn=Sonchon	
Sijok=Sidshok		Sopaekri (*II-3)	40°06'N 126°54'E
Sijungho (VIII-5)	39°00'N 127°48'E	Sophyongri (*VII-8)	40°27'N 128°54'E
Sijyok (*II-19)	39°06'N 125°22'E	Sori (*II-17)	39°19'N 125°36'E
Sinchamri (*VI-15)	42°04'N 129°30'E	Sosura (VI-5)	42°16'N 130°36'E
Sinchon (X-11)	38°21'N 125°29'E	Soyonjibong (*V-12)	42°00'N 128°05'E
Sinchŏn=Sinchon		Suan (IX-5)	38°47'N 126°20'E
Sindo (III-14)	39°50'N 124°14'E	Sujang-san=Suyangsan	
Sindori (*III-14)	39°50'N 124°14'E	Sujinri (III-17)	40°15'N 124°36'E
Singhangri (*II-11)	39°26'N 125°54'E	Sunan (I-8)	39°10'N 125°41'E
Singwangri (*III-22)	39°55'N 125°28'E	Sunchon (II-11)	39°26'N 125°54'E
Singye (IX-10)	38°30'N 126°30'E	Sundo or Suundo (III-?)	
Sinhungri (*V-6)	41°33'N 128°19'E	Sunfakan (I-?)	
Sinhungri (III-25)	40°57'N 126°06'E	Sunghwari (*II-10)	39°24'N 126°21'E
Sinhungri (VII-32)	39°43'N 127°24'E	Suntchŏn=Sunchon	
Sinmido (III-7)	39°33'N 124°54'E	Sunwido=Sunwiri	
Sinmusong (V-14)	41°57'N 128°18'E	Sunwiri (X-16)	37°43'N 125°16'E
Sinpha (V-3)	41°25'N 127°45'E	Suwanri (*III-21)	40°13'N 125°13'E
Sinphjŏng=Sinpyong		Suyangsan (X-24)	38°09'N 125°42'E
Sinpho (VII-16)	40°02'N 128°10'E	Syngho=Sungho	
Sinpyong (IX-1)	38°55'N 126°43'E	Synuiju (III-28)	40°06'N 124°23'E
Sinsang (VII-33)	39°40'N 127°24'E	Tädong=Taedong	
Sinsongchon (II-8)	39°21'N 126°14'E	Taeamri (*VI-7)	42°21'N 130°23'E
Sinthaeri (*VII-15)	40°15'N 128°19'E	Taechodo (VI-8)	42°09'N 130°17'E
Siyung-ho=Sijungho		Taechon (III-22)	39°55'N 125°28'E
Sobaeksan (V-11)	41°52'N 128°11'E	Taechonri (*I-2)	39°02'N 125°58'E
Sobonpho (VI-3)	42°22'N 130°35'E	Taedong (II-21)	39°04'N 125°32'E
Sodo (IX-X-?)		Taedonggang-Mündung=Nampho	
Sogam (I-15)	39°13'N 125°41'E	Taedongho (II-?)	
Sogam-do (*III-29)	39°26'N 124°37'E	Taegaksan (IX-4)	38°51'N 126°35'E
Sohaeri (*X-16)	37°43'N 125°16'E	Taegwan (III-21)	40°13'N 125°13'E
Sohari (*II-24)	38°54'N 125°13'E	Taehongdan (*V-12)	42°00'N 128°05'E
Sohung (IX-9)	38°26'N 126°13'E	Taechung (II-3)	40°06'N 126°54'E
Sohungho (IX-7)	38°25'N 126°00'E	Taechungdan (V-15)	41°59'N 128°48'E
Sohyng-ho=Sohungho		Taechungri (*IX-11)	38°19'N 126°22'E
Sokam=Sogam		Taekyedo (*II-24)	38°54'N 125°13'E
Sokamho=Sogam		Taeposan (*II-28)	38°55'N 125°25'E
Soksanri (*III-1)	39°44'N 125°34'E	Taesong-ho (II-28)	38°55'N 125°25'E
Sok-vang-sa=Sokwangsa		Taesongho=Taesong-ho	

Taesongri (*II-21)	39°04'N 125°32'E	Unchon (II-?)	
Taesongsan (I-6)	39°04'N 125°50'E	Unchon (*X-10)	38°20'N 125°18'E
Taesukri (VII-40)	39°48'N 126°50'E	Unchon (X-2)	38°33'N 125°25'E
Taethaekhosu (*V-16)	41°34'N 128°48'E	Undok (VI-1)	41°32'N 130°20'E
Talchonri (X-9)	38°24'N 125°14'E	Unggi (VI-7)	42°21'N 130°23'E
Tanch'on=Tanchon		Ungyesan (*IX-13)	38°09'N 126°28'E
Tanchon (VII-8)	40°27'N 128°54'E	Ungyesan (*X-10)	38°20'N 125°18'E
Tanchön=Tanchon		Unjon (III-2)	39°41'N 125°30'E
Tasa=Tasado		Unmudo (III-?)	
Tasado (III-12)	39°49'N 124°21'E	Unrimri (*III-20)	40°12'N 125°02'E
Tasari (III-11)	39°51'N 124°22'E	Unryul (X-5)	38°32'N 125°10'E
Tatari (*III-10)	39°54'N 124°35'E	Unsan (II-10)	39°24'N 126°21'E
Techonri (IX-?)		Unsang (*VI-4)	42°20'N 130°34'E
Tegam-do (III-29)	39°26'N 124°37'E	Usanri (II-27)	38°49'N 125°20'E
Tesöng-ho=Taesong-ho		Vonsan=Wonsan	
Thaepyongri (*III-23)	40°02'N 126°11'E	Wangkol (*IX-13)	38°09'N 126°28'E
Thongnamri (*V-6)	41°33'N 128°19'E	West Sea Barrage=Nampho	
Thori (*VI-7)	42°21'N 130°23'E	Wolamri (IX-15)	38°07'N 126°28'E
Thosan (IX-12)	38°19'N 126°42'E	Woljiri (X-7)	38°28'N 125°19'E
Thowonri (*VI-7)	42°21'N 130°23'E	Woljongri (X-8)	38°30'N 125°15'E
Tochon (*II-21)	39°04'N 125°32'E	Wolphyong (*II-17)	39°19'N 125°36'E
Togkumari (*VII-38)	39°32'N 127°14'E	Wondang (*II-21)	39°04'N 125°32'E
Tohari (*II-9)	39°15'N 126°13'E	Wondo (*III-9)	39°47'N 124°40'E
Tokchon (II-33)	39°46'N 126°18'E	Wongungri (IV-8)	40°13'N 126°30'E
Toksan (VII-29)	40°01'N 127°36'E	Wonhari (*III-3)	39°41'N 125°13'E
Tokto (II-25)	38°44'N 124°59'E	Wonsan (VIII-3)	39°09'N 127°25'E
Tokto (II-36)	39°44'N 124°59'E	Yangdok (II-?)	
Tongamri (X-17)	37°43'N 125°21'E	Yangham (*IX-13)	38°09'N 126°28'E
Tongbonpho (*VI-3)	42°22'N 130°35'E	Yangju (?)	
Tongchangri (*III-9)	39°47'N 124°42'E	Yangsakol (*V-10)	41°50'N 128°19'E
Tongchon (VIII-?)		Yangsi (*III-13)	39°59'N 124°27'E
Tongchon (VIII-15)	39°00'N 128°07'E	Ynsan=Unsan	
Tongchonho=Tongjiongho		Yodok (VII-42)	39°37'N 126°50'E
Tongdokri (*VII-6)	40°33'N 128°59'E	Yomjonri (*VIII-1)	39°22'N 127°12'E
Tonghori (*VII-16)	40°02'N 128°10'E	Yomju (III-10)	39°54'N 124°35'E
Tonghyongri (*X-10)	38°20'N 125°18'E	Yomsongdok (VII-13)	40°36'N 128°40'E
Tongjongho (VIII-18)	39°06'N 128°45'E	Yonan (?)	
Tongmyongwang (I-16)	38°54'N 125°56'E	Yonan (X-30)	38°07'N 126°09'E
Tongpalri (*III-10)	39°54'N 124°35'E	Yondongri=Ryondongri	
Tongpongri (*VII-31)	39°48'N 127°23'E	Yongan (VII-?)	
Tongpukri (*I-8)	39°10'N 125°41'E	Yonghung (VIII-14)	39°21'N 127°24'E
Tongrimri (*II-29)	39°44'N 125°28'E	Yongpongri (*III-6)	39°48'N 124°54'E
Tongsanri (IX-2)	38°49'N 126°50'E	Yongyuri (*II-17)	39°19'N 125°36'E
Tongsin=Wongungri		Yonpaek (IX-X-?)	
Tschasan=Jasan		Yonpaek (X-?)	
Tschonmasan=Pagyon		Yonpung-ho (II-30)	39°39'N 125°48'E
Tschunghwa=Chunghwa		Yonsa (VI-20)	41°55'N 129°01'E
Tumen-ula (VI-?)		Yonsan (IX-17)	38°52'N 126°15'E
Tungpaeksan (II-5)	39°53'N 126°51'E	Yonthan (IX-6)	38°38'N 125°58'E
Uido (*III-6)	39°48'N 124°54'E	Yoppori (*VI-7)	42°21'N 130°23'E
Uiju (III-16)	40°12'N 124°32'E	Yukok (*V-15)	41°59'N 128°48'E
Unchangri (*III-21)	40°13'N 125°13'E	Yuson (VI-?)	

APPENDIX 2.

Checklist of the Birds of North Korea and the status of these species in adjacent areas according to: NECHAEV (1998), CHENG Tso-Hsin (1987), MACKINNON & PHILLIPS (2000), MORIOKA (2000), WON Pyong-Oh (2000). In the case of China and Japan areas of more or less the same latitude as the Korean Peninsula and Primorye were taken into consideration. Abbreviations:

B – breeding, nesting reported, (B) – probably breeding, nesting not confirmed, (?B) – should be or perhaps nesting (indicated by numerous observations during the breeding season, or also very rarely observed but there is nesting in neighboring areas), W – wintering, (?W) – should be or perhaps is wintering (wintering in neighboring areas), M – migrant, (?M) – should be or perhaps appear on passage (reported on passage in neighboring areas), Vag – Vagrant, Strag – Straggler, Res – resident, SV – summer visitor (encountered during summer nomadizing or during moulting), ► – the existing status is not clear due to observed changes in the entire population, Ext – probably extinct, ? status unknown, ab – abundant, c – common, u – uncommon, r – rare, sc – scarce, irr – irregular, acc – accidental, l – local.

Numbers of species correspond to those used in text. Species mentioned in text as not recorded in North Korea to date are not numbered.

Species, which have their borders nesting or wintering areas on the Korean Peninsula are marked as follows:

 – breeding

 – wintering

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
1	Gaviiformes					
1	<i>Gavia stellata</i> Red-throated Diver	uM uSV rW	W	Vag (?W)	uW	W
	<i>Gavia pacifica</i> Pacific Diver	uM rSV	Vag	–	luW	W
2	<i>Gavia arctica</i> Black-throated Diver	uM uSV uW	W M	W	luW	W
3	<i>Gavia adamsii</i> White-billed Diver	uW rSV	Vag	Vag	Vag	W
2	Podicipediformes					
4	<i>Tachybaptus ruficollis</i> Little Grebe	rB uM rW	B	(?B) W M	uRes, cW	Res
5	<i>Podiceps griseogen</i> Red-necked Grebe	uB cM rSV rW	M	B M	scW	B
6	<i>Podiceps cristatus</i> Great Crested Grebe	uB cM rSV	B M	(B) cM cW	rRes, cW	B
7	<i>Podiceps auritus</i> Slavonian Grebe	uM	M	scM W	scW	scM W
8	<i>Podiceps nigricollis</i> Black-necked Grebe	rB rM	B M	M	cW	M W
3	Procellariiformes					
	<i>Diomedea albatrus</i> Short-tailed Albatross	Vag	rRes	–	Vag	irrV
9	<i>Calonectris leucomelas</i> White-faced Shearwater	rB	B	rB	lcB	B
10	<i>Puffinus tenuirostris</i> Short-tailed Shearwater	Vag	–	Vag	Vag	M
	<i>Oceanodroma monorhis</i> Swinhoe's Storm Petrel	cB	rRes	– (?B)	labB	B M
4	Pelecaniformes					
	<i>Pelecanus crispus</i> Dalmatian Pelican	–	scW	–	–	accV
11	<i>Phalacrocorax carbo</i> Great Cormorant	rB rM	(?B)	B ►	scB	Res W
12	<i>Phalacrocorax capillatus</i> Japanese Cormorant	uB rM rW rSV	B	M W (?B)	luRes uW	Res W
13	<i>Phalacrocorax pelagicus</i> Pelagic Cormorant	uB cM uW rSV	W	rM rW (?B)	luRes uW	Res W

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
14	<i>Fregata ariel</i> Lesser Frigate Bird	Vag	Vag	Vag	Vag	Vag
5	Ciconiiformes					
15	<i>Ardea cinerea</i> Grey Heron	cB cM rW uSV	B	B M W	cRes	Res M W
16	<i>Ardea purpurea</i> Purple Heron	rB rM rSV	B	scM	scM	irrV
17	<i>Egretta alba</i> Great Egret	uB rM rW rSV	B	rB rW cM	cB scW	irrV
18	<i>Egretta intermedia</i> Intermediate Egret	rB rSV	Vag	(B)	uB	B W
19	<i>Egretta garzetta</i> Little Egret	Vag	Vag	(?B) M W	cRes	Res W
20	<i>Egretta eulophotes</i> Swinhoe's Egret	Vag	Vag	B	rB rM	Vag accV
21	<i>Egretta sacra</i> Reef Heron	–	–	Vag (?B)	scRes(?B)	Res
22	<i>Bubulcus ibis</i> Cattle Egret	Vag (?B)	Vag	(B)	cRes	B M W
23	<i>Ardeola bacchus</i> Chinese Pond Heron	Vag	B	(?B)	luB	occB
24	<i>Butorides striatus</i> Green-backed Heron	cB cM	B	cB M	cB	B
25	<i>Nycticorax nycticorax</i> Black-crowned Night Heron	rB rM	B	Vag (?B)	cRes	Res
26	<i>Ixobrychus sinensis</i> Chinese Little Bittern	Vag (?B)	B	rB M	cB	B W
27	<i>Ixobrychus eurhythmus</i> Schrenk's Bittern	cB cM	B	B	uB	B W
28	<i>Botaurus stellaris</i> Eurasian Bittern	rB uM	B	rM	rW	B W
29	<i>Ciconia nigra</i> Black Stork	uB uM rSV	B	scB	rW	accV
30	<i>Ciconia boyciana</i> Oriental White Stork	uB uM rSV	M	scB W	rW	irrV
31	<i>Nipponia nippon</i> Japanese Crested Ibis	Vag (B?)	BExt	M W ►	Ext?	Ext
	<i>Platalea leucorodia</i> White Spoonbill	rB rSV	B	?(?B)	rW	irrV
32	<i>Platalea minor</i> Black-faced Spoonbill	Vag	M	rB	lrB lrW lrM	irrV
6	Anseriformes					
33	<i>Cygnus olor</i> Mute Swan	Vag	M	scW	rW	irrB W
34	<i>Cygnus cygnus</i> Whooper Swan	rB cM rSV	W	M W	lcW	W
35	<i>Cygnus columbianus</i> Tundra Swan	–	M W	M W	lcW	M W
36	<i>Anser cygnoides</i> Swan Goose	rB rM rSV	B M	M (?W)	luW	–
37	<i>Anser fabalis</i> Bean Goose	uM	M	M W	uW	M W
38	<i>Anser albifrons</i> White-fronted Goose	abM	W	M W	uW	M W
	<i>Anser erythropus</i> Lesser White-fronted Goose	uM	M	–	Vag	irrV
	<i>Anser anser</i> Greylag Goose	rB rM rSV	M	–	Vag	AccV
39	<i>Anser caerulescens</i> Snow Goose	rM	Vag	rW	rW	irrV, rW
*41	<i>Branta canadensis</i> Canada Goose	Vag	scRes	scW	scW	W
40	<i>Branta bernicla</i> Brent Goose	rM	W	scW	rW	M W

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*The species should be included to the list of birds of North Korea because wintering Canada Geese were reported near the coast of South Korea and Japan. Thus, FIEBIG's (1993) observation might well refer to a wintering bird rather than to an individual that escaped from captivity. In the present paper, all Non-Passeriformes species retain their numbers that were ascribed to them previously (TOMEK 1999). Although the Canada Goose has been included to the North Korean fauna, the number of Non-Passeriformes species remains the same because *Phalaropus lobatus* was by mistake described twice (under the number 115 and 145).

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
41	<i>Tadorna ferruginea</i> Ruddy Shelduck	rM	M	rM W	scW	accV
42	<i>Tadorna tadorna</i> Common Shelduck	rM	M	M W	lcW	W
	<i>Tadorna cristata</i> Crested Shelduck	Vag	M	– ►	Ext?	accV Ext?
43	<i>Aix galericulata</i> Mandarin Duck	cB cM uSV	B M	B M W	uRes	Res
44	<i>Anas penelope</i> European Wigeon	cM rSV	M W	M W	cW	M W
45	<i>Anas falcata</i> Falcated Teal	cB cM cSV	B M	M W	cW	B M
46	<i>Anas strepera</i> Gadwall	rB rM rSV	B	cM(?B)	cW M	B W
47	<i>Anas formosa</i> Baikal Teal	rM rSV	M	M W	lcW	W
48	<i>Anas crecca</i> Green-winged Teal	cB cM rW rSV	B	M W (?B)	abW M	Res
49	<i>Anas platyrhynchos</i> Mallard	cB cM rW	B M W	B M W	scRes abW	Res M W
50	<i>Anas poecilorhyncha</i> Spotbill Duck	uB uM	B	Res	abRes abW	Res M
51	<i>Anas acuta</i> Northern Pintail	uB cM uSV	M	M W	cW	M W
52	<i>Anas querquedula</i> Garganey	uB cM cSV	B M W	M	scW	B M W
53	<i>Anas clypeata</i> Northern Shoveller	uB cM uSV	M	M W	uW	M W
54	<i>Aythya ferina</i> Common Pochard	uM rSV	M	M W	abW	B M W
55	<i>Aythya baeri</i> Baer's Pochard	rB rM	B M	Vag(?B)	rW	irrV
56	<i>Aythya fuligula</i> Tufted Duck	uB cM rSV	cM	cM W (B)	abW	B M W
57	<i>Aythya marila</i> Greater Scaup	cM rSV	cM	M W	abW	M W
58	<i>Histrionicus histrionicus</i> Harlequin Duck	rB uM cW rSV	M	M W (?B)	scW	Res W
59	<i>Clangula hyemalis</i> Long-tailed Duck	uM abW rSV	W M	rM rW	uW	W
60	<i>Melanitta nigra</i> Black Scoter	rM cW rSV	–	rM rW	cW	W
61	<i>Melanitta fusca</i> Velvet Scoter	uM cW rSV	M W	M W	cW	W
62	<i>Bucephala clangula</i> Common Goldeneye	rB uM rW	M W	rM cW (?B)	cW	W
63	<i>Mergus albellus</i> Smew	uM	W	M W	uW	B M W
64	<i>Mergus serrator</i> Red-breasted Merganser	uM uW rSV	M (W)	M scW B ►	cW	W
65	<i>Mergus squamatus</i> Chinese Merganser	rB rM rW	B M	(B)	rW	accV
66	<i>Mergus merganser</i> Goosander	rB uM uW	B M W	cM cW (?B)	rRes cW	Res M W
7	Falconiformes					
67	<i>Pandion haliaetus</i> Osprey	rB rM	Res B M	M (?B)	rM	Res
68	<i>Pernis ptilorhynchus</i> Oriental Honey Buzzard	rB rM	B	M (?B)	rM occW	B M
69	<i>Milvus migrans</i> Black Kite	rB rM rSV	Res	M W B	scRes uW	Res
70	<i>Haliaeetus albicilla</i> White-tailed Sea Eagle	rB rM uW	B	W (?B)	uW	Res W
71	<i>Haliaeetus pelagicus</i> Steller's Sea Eagle	rM uW	W	rW B ►	rW	W
72	<i>Aegypius monachus</i> Cinereous Vulture	rW	Vag	scW	scW	accV
73	<i>Gypaetus barbatus</i> Lammergeier	–	Vag	Vag	–	–
74	<i>Butastur indicus</i> Grey-faced Buzzard Eagle	rB rM	B	M rB	rB uM	B W
75	<i>Circus cyaneus</i> Hen Harrier	rM rW	B M	M W	uW	W
76	<i>Circus melanoleucos</i> Pied Harrier	uB uM rW	B M	B	rRes scW	accV
77	<i>Circus spilonotus</i> Eastern Marsh Harrier	rB rM rW	M	M (?B)	scW	B M
78	<i>Accipiter soloensis</i> Grey Frog Hawk	rB	Vag	cB M	uB uM	M
79	<i>Accipiter gularis</i> Japanese Sparrow Hawk	uB uM	B	B M	scRes uW	Res W
80	<i>Accipiter nisus</i> Northern Sparrow Hawk	uB uM rW	M W	B M W	cRes	Res W

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
81	<i>Accipiter gentilis</i> Northern Goshawk	rB uM rW	M	M W	uW	Res W
82	<i>Buteo buteo</i> Eurasian Buzzard	rB uM uW	B M	M W (B)	cW	Res
83	<i>Buteo lagopus</i> Rough-legged Buzzard	uW	W M	M W	scW	W
84	<i>Buteo hemilasius</i> Upland Buzzard	rW	B W	M W SV	scW	accV
	<i>Aquila clanga</i> Greater Spotted Eagle	rB rM	B	–	rW	accV
85	<i>Aquila rapax</i> Tawny Eagle	Vag	M	Vag	–	–
86	<i>Aquila heliaca</i> Imperial Eagle	Vag	M	W	rW	accV
87	<i>Aquila chrysaetos</i> Golden Eagle	rB rM rW	W	W (?B)	rRes	Res
	<i>Spizaetus nipalensis</i> Hodgson's Hawk Eagle	rB rM rW	M	? (Vag)	Vag	Res
88	<i>Falco tinnunculus</i> Common Kestrel	cB uM rW	Res	cRes	cRes	Res
89	<i>Falco amurensis</i> Eastern Red-footed Falcon	uB uM	B	rM (B)	uM	accV
90	<i>Falco columbarius</i> Merlin	uB rW	M	M W	scW	W
91	<i>Falco subbuteo</i> Northern Hobby	uB uM	B M	B M W	rRes uM	B M
	<i>Falco cherrug</i> Saker Falcon		M	–	Vag	–
92	<i>Falco peregrinus</i> Peregrine Falcon	rB rM rW	M	M W (B)	scRes	Res W
8	Galliformes					
93	<i>Tetrao tetrix</i> Black Grouse	uRes	Res	B	–	–
94	<i>Bonasa bonasia</i> Hazel Grouse	cRes	Res	cRes	cRes	Res
95	<i>Coturnix japonica</i> Japanese Quail	uB uM rW	B W M	M W (B)	cW	B M
96	<i>Phasianus colchicus</i> Common Pheasant	cB uW	Res	cRes	abRes	Res
9	Gruiformes					
97	<i>Turnix tanki</i> Yellow-legged Button-Quail	cB	B	(?B)	rB uM	–
98	<i>Grus grus</i> Common Crane	–	M	scM scW	scW	accV
99	<i>Grus monacha</i> Hooded Crane	rB rM	M	M W	rW uM	M W
100	<i>Grus japonensis</i> Manchurian Crane	rB rM	M	M W	rW	Res accV
101	<i>Grus vipio</i> Japanese White-naped Crane	rB rM	M	M W	rW uM	scB M W
102	<i>Rallus aquaticus</i> Water Rail	uB uM	B	rM rW	rW scM	B M
103	<i>Rallina paykullii</i> Band-bellied Crake	uB	B	(B) M	rM	accV
104	<i>Coturnicops noveboracensis</i> Yellow Rail	rB rM	M	Vag (?M)	rM	M W
105	<i>Porzana pusilla</i> Baillon's Crake	uB uM	B M	M (?B)	scM	B M
106	<i>Porzana fusca</i> Ruddy-breasted Crake	rB	B	uB M	cB	B M
107	<i>Amaurornis phoenicurus</i> White-breasted Water Hen	Vag	Vag	Vag	scM	accV
108	<i>Gallinix cinerea</i> Water Cock	rB	cB	uB	cB	accV
109	<i>Gallinula chloropus</i> Moorhen	cB cM	B	B M	cRes	Res B
110	<i>Fulica atra</i> Black Coot	uB uM	B	B M W	cRes	Res W
111	<i>Otis tarda</i> Great Bustard	Vag B(?)	M W	M W ►	rW	accV
10	Charadriiformes					
	<i>Rostratula benghalensis</i> Painted Snipe	rM	B	–	Vag	Res
112	<i>Haematopus ostralegus</i> Palaearctic Oystercatcher	uM	B	B M	uRes cW	W
113	<i>Himantopus himantopus</i> Black-winged Stilt	rB rM	M	scM	scM	Res
114	<i>Recurvirostra avosetta</i> Pied Avocet	Vag	M	Vag	Vag	irrV

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
116	<i>Glareola pratincola</i> Pratincole	rM rSV	B M	Vag (?M)	rM	M
117	<i>Vanellus vanellus</i> Northern Lapwing	abB cM	B M	M W B	rW	W scB
118	<i>Vanellus cinereus</i> Grey-headed Lapwing	Vag	B M	scM	rM	B M
119	<i>Pluvialis fulva</i> Pacific Golden Plover	cM	M	M ?W	cM	M
120	<i>Pluvialis squatarola</i> Grey Plover	cM	M	M	cM	M W
121	<i>Charadrius hiaticula</i> Ringed Plover	rM	–	M	Vag	M W
122	<i>Charadrius placidus</i> Long-billed Ringed Plover	rB rM	M W B	M W (?B)	scB scW	Res
123	<i>Charadrius dubius</i> Little Ringed Plover	cB cM	cB cM	cB cM	cB cW	B M
124	<i>Charadrius alexandrinus</i> Kentish Plover	cB rM	B	cM (B)	cB cW	Res
125	<i>Charadrius mongolus</i> Lesser Sand Plover	cM rSV	M	M	cM	M W
126	<i>Charadrius leschenaulti</i> Great Sand Plover	Vag	M	Vag	Vag	scM
	<i>Charadrius (asiaticus) veredus</i> Eastern Sand Plover	Vag	B M	? (Vag)	Vag	accV
127	<i>Limosa limosa</i> Black-tailed Godwit	uB cM rSV	M	M	uM	cM scW
128	<i>Limosa lapponica</i> Bar-tailed Godwit	cM	M	M	uM	cM scW
129	<i>Numenius minutus</i> Little Curlew	rM	rM	rM	rM	scM
130	<i>Numenius phaeopus</i> Whimbrel	cM rSV	M	M	cM	cM scW
131	<i>Numenius arquata</i> Western Curlew	rM	M	M rW	lcW lcM	cM scW
132	<i>Numenius madagascariensis</i> Far Eastern Curlew	uB cM rSV	M	M	uM	cM scW
133	<i>Tringa erythropus</i> Spotted Redshank	cM rSV	M	M	uM	cM scW
134	<i>Tringa totanus</i> Common Redshank	rB cM rSV	M	M	uM	cM scB
135	<i>Tringa stagnatilis</i> Marsh Sandpiper	rB rM rSV	M	scM	scM	scM scW
136	<i>Tringa nebularia</i> Common Redshank	cM rSV	M	M	cM	cM cW
137	<i>Tringa guttifer</i> Spotted Greenshank	rM rSV	–	M▶	rM	rM
138	<i>Tringa ochropus</i> Green Sandpiper	uM B(?) rSV	M W	M	uW uM	cM cW
139	<i>Tringa glareola</i> Wood Sandpiper	abM rSV	M W	M	uM	M W
140	<i>Xenus cinereus</i> Terek Sandpiper	cM rSV	M	M	cM	cM scW
141	<i>Actitis hypoleucos</i> Common Sandpiper	cB cM	M	cB M	scB uM	cB cM
142	<i>Heteroscelus brevipes</i> Gray-tailed Tattler	cM rSV	M	M accSV	cM	cM
143	<i>Heteroscelus incanus</i> Wandering Tattler	–	–	Vag	–	rM
144	<i>Arenaria interpres</i> Ruddy Turnstone	uM rSV	cM	rM	uM	M
145	<i>Phalaropus lobatus</i> Red-necked Phalarope	uM rSV	rM	rM	cM	cM
146	<i>Scolopax rusticola</i> Eurasian Woodcock	cB cM	M	rM rW	uM	cB cW
147	<i>Gallinago solitaria</i> Solitary Snipe	uW	Res	rM rW (?B)	scW	scW
	<i>Gallinago hardwickii</i> Japanese Snipe	rB	Vag	–	rRes rM	cB
148	<i>Gallinago stemura</i> Pintail Snipe	cM	M	rM	scM	scM
149	<i>Gallinago megala</i> Swinhoe's Snipe	cB cM	M	Vag(?M)	rM	cM
150	<i>Gallinago gallinago</i> Common Snipe	abM B(?)	M	M	cW cM	cM cW
	<i>Lymnocyptes minima</i> Jack Snipe	Vag	M	–	Vag	rM
151	<i>Calidris canutus</i> Red Knot	cM	M	M	uM	scM
152	<i>Calidris tenuirostris</i> Great Knot	cM rSV	M	M	cM	cM
153	<i>Calidris alba</i> Sanderling	uM	M	M	cW cM	cM cW
154	<i>Calidris mauri</i> Western Sandpiper	–	–	Vag	–	Vag

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
155	<i>Calidris ruficollis</i> Rufous-necked Stint	abM rSV	M	M	cM	M W
156	<i>Calidris temminckii</i> Temminck's Stint	uM	M	scM	uM	M
157	<i>Calidris subminuta</i> Long-toed Stint	cM	uM	rM	scM	M
158	<i>Calidris melanotos</i> Pectoral Sandpiper	rM	Vag	Vag	Vag	scM
159	<i>Calidris acuminata</i> Sharp-tailed Sandpiper	uM	M	rM	scM	cM
160	<i>Calidris alpina</i> Dunlin	abM rSV	M	c M W	abW abM	cM cW
161	<i>Calidris ferruginea</i> Curlew Sandpiper	uM	rM	scM	rM	lcM
162	<i>Eurynorhynchus pygmeus</i> Spoon-billed Sandpiper	rM	–	scM ►	scM	cM
163	<i>Limicola falcinellus</i> Broad-billed Sandpiper	rM	cM	scM ►	scM	scM scW
164	<i>Philomachus pugnax</i> Ruff	rM	rM	rM	Vag	scM
165	<i>Larus crassirostris</i> Japanese Gull	abB uM rW rSV	B M W	cB cM	cRes	cRes
166	<i>Larus canus</i> Mew Gull	uM uW	W M	M W	cW cM	cW
167	<i>Larus argentatus</i> Herring Gull	rB uM uW	M W	M W (?B)	cW	cW
168	<i>Larus schistisagus</i> Slaty-backed Gull	rB uM cW rSV	W	M (W)	cW	Res W
169	<i>Larus hyperboreus</i> Glaucous Gull	uM uW rSV	M	rW	Vag	cW
170	<i>Larus ridibundus</i> Black-headed Gull	uB abM rW rSV	B M W	M(?B)	abW	cM cW
171	<i>Larus saundersi</i> Saunders' Gull	Vag	M	(?B)	scRes luM luW	irrV
172	<i>Rissa tridactyla</i> Black-legged Kittiwake	Vag	W	scM W	cW	cW
173	<i>Chlidonias leucoptera</i> White-winged Black Tern	uB uM rSV	B	M (?B)	Vag	uM
174	<i>Sterna hirundo</i> Common Tern	cB cM	B	M (B)	cM	cM
175	<i>Sterna albifrons</i> Little Tern	rB rM	B	B M	cB	cB
	<i>Thalasseus bergii</i> Great Crested Tern	–	–	–	Vag	irrV
176	<i>Uria aalge</i> Common Guillemot	uB cM uW	–	(B)	scW	Res W
177	<i>Cephus carbo</i> Spectacled Guillemot	cB cM uW	–	(?B)	scW	lcRes
178	<i>Brachyramphus marmoratus</i> Marbled Murrelet	rB uM rW	M	Vag (?M)	rM	W (BExt)
179	<i>Synthliboramphus antiquus</i> Ancient Murrelet	uB uM rW	B M	(B)	luRes abW	scRes
	<i>Synthliboramphus wumizusume</i> Crested Murrelet	Vag B(?)	–	–	rRes rW	Res W
180	<i>Cerorhinca monocerata</i> Rhinoceros Auklet	uB uM	Vag	(B)	scW	W
11	Columbiformes					
181	<i>Syrhaptes paradoxus</i> Pallas' Sandgrouse	Vag rW	W	Vag	Vag	Vag
	<i>Columba livia domestica</i> Feral Rock Pigeon	abRes	–	?		–
182	<i>Columba rupestris</i> Eastern Rock Pigeon	rRes	Res	uRes	lcRes	–
	<i>Columba janthina</i> Black Wood Pigeon	Vag	rB	–	scRes	Res
183	<i>Streptopelia orientalis</i> Eastern Turtle Dove	cB cM rW	Res	abRes	cRes	Res
184	<i>Streptopelia decaocto</i> Collared Dove	Vag	Res	rRes	rRes	Res
185	<i>Streptopelia tranquebarica</i> Red-collared Dove	Vag	Res	Vag	–	accV
12	Cuculiformes					
186	<i>Cuculus fugax</i> Fugitive Hawk Cuckoo	uB	B	(B)	uM	B
187	<i>Cuculus micropterus</i> Short-winged Cuckoo	rM B(?)	B	B	uB(?br)	accV
188	<i>Cuculus canorus</i> Eurasian Cuckoo	cB cM	B	cB	cB	cB
189	<i>Cuculus saturatus</i> Oriental Cuckoo	cB cM	B	cB	uB	B
190	<i>Cuculus poliocephalus</i> Small Cuckoo	rB	B	rB M	uB	B

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
13	Strigiformes					
191	<i>Otus scops</i> Eurasian Scops Owl	uB uM	B	B W(?Res)	uRes uM	B
192	<i>Otus lempiji</i> Collared Scops Owl	uB uM rW	Res	B W	uRes uM	Res
193	<i>Bubo bubo</i> Northern Eagle Owl	rRes	Res	rRes	scRes	rRes
	<i>Nyctea scandiaca</i> Snowy Owl	rW	Vag	–	Vag	rW
194	<i>Strix aluco</i> Eurasian Tawny Owl	–	Res	rRes	uRes	–
195	<i>Strix uralensis</i> Ural Owl	cB uM cW	Res	(B)	Vag	Res
196	<i>Surnia ullula</i> Hawk Owl	rRes	–	(?irrB)	Vag	–
197	<i>Athene noctua</i> Little Owl	–	Res	rRes	rRes	–
198	<i>Ninox scutulata</i> Brown Hawk Owl	uB uM	B	(B)	uB	B
199	<i>Asio otus</i> Long-eared Owl	cB cM cW	B	M W (?B)	cW	B W
200	<i>Asio flammeus</i> Short-eared Owl	uB uM rW	W	rM rW	cW	cW
14	Caprimulgiformes					
201	<i>Caprimulgus indicus</i> Jungle Nightjar	uB uM	B	B	uB	B M
15	Apodiformes					
202	<i>Hirundapus caudacuta</i> White-throated Spinetailed Swift	cB cM	B	B M	uM	B M
203	<i>Apus pacificus</i> Fork-tailed Swift	cB cM	B	B	lcB	B
16	Coraciiformes					
204	<i>Megaceryle lugubris</i> Greater Pied Kingfisher	Vag	Res	sc Vag	Ext?	Res
205	<i>Alcedo atthis</i> River Kingfisher	cB cM	B	B	cRes	Res
206	<i>Halcyon coromanda</i> Ruddy Kingfisher	Vag	B	B	uB	B
207	<i>Halcyon pileata</i> Black-capped Kingfisher	Vag	B	B	uB	irrV
208	<i>Eurystomus orientalis</i> Eastern Broad-billed Roller	uB uM	B	B	uB	B
209	<i>Upupa epops</i> Hoopoe	cB cM	B	cB M	uB	scB scM
17	Piciformes					
210	<i>Jynx torquilla</i> Northern Wryneck	cB cM	B M	(B) M	rW	B W
211	<i>Picoides kizuki</i> Japanese Spotted Woodpecker	cB cM uW	Res	Res	cRes	Res
212	<i>Picoides canicapillus</i> Grey-capped Woodpecker	uB uM rW	rRes	rRes	scRes	–
213	<i>Picoides minor</i> Lesser Spotted Woodpecker	cB uM uW	Res	rRes	–	lcRes
214	<i>Picoides hyperythrus</i> Rufous-bellied Woodpecker	rSV B ⁴²	(B) M	B▶	–	–
215	<i>Picoides leucotos</i> White-backed Woodpecker	cB uM uW	Res	Res	uRes	Res
216	<i>Picoides major</i> Great Spotted Woodpecker	cB uM uW	Res	cRes	cRes	cRes
217	<i>Picoides tridactylus</i> Three-toed Woodpecker	uB uW	Res	Res	–	rRes
218	<i>Dryocopus javensis</i> White-bellied Woodpecker	–	–	B▶	–	Ext
219	<i>Dryocopus martius</i> Black Woodpecker	uB uM uW	Res	rRes	scRes	rRes
220	<i>Picus camus</i> Grey-faced Woodpecker	cB cM uW	cRes	cRes	cRes	cRes
18	Passeriformes					
	Pittidae					
221	<i>Pitta nympha</i> Fairy Pitta	–	Vag	Vag (?B)	lrB rM	lcB

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
Alaudidae						
222	<i>Calandrella brachydactyla</i> Greater Short-toed Lark	rM	M	Vag	–	accV
223	<i>Calandrella cheleensis</i> Mongolian Short-toed Lark	rM	Res	M (?B)	uM	accV
224	<i>Galerida cristata</i> Crested Lark	–	Res	cRes	scRes	–
225	<i>Alauda arvensis</i> Eurasian Sky Lark	abB abM rW	B W	B M W	abRes abW	cRes cM W
Hirundinidae						
226	<i>Riparia riparia</i> Sand Martin, Bank Swallow	rB cM	B	rM (?B)	uM	cB
227	<i>Hirundo rustica</i> Barn Swallow	abB abM	B	cB M	abB	B
228	<i>Hirundo daurica</i> Red-rumped Swallow	abB abM	cB	cB M	lcB cM	B
229	<i>Delichon dasypus</i> Asian House Martin	abB abM	cB	sc B	lrB scW uM	lcB W
Motacillidae						
230	<i>Dendronathus indicus</i> Forest Wagtail	uB uM	uB	uB	uB	scB accV
231	<i>Motacilla flava</i> Yellow Wagtail	abB abM	M	M	uM	B M W
232	<i>Motacilla cinerea</i> Grey Wagtail	cB cM rW	cB	cB	cB	cB
233	<i>Motacilla alba</i> Pied (White) Wagtail	abB abM	cB	cB M	cB	Res
234	<i>Motacilla grandis</i> Japanese Pied Wagtail	M	Vag	Vag (?B)	uW	cRes
235	<i>Anthus richardii</i> Richard's Pipit	cB cM	B	scM (?B)	scM	accV
236	<i>Anthus godlewskii</i> Blyth's Pipit		M	Vag (?B)	rM	accV
237	<i>Anthus hodgsoni</i> Indian Tree Pipit	uB cM	B M	B cM occW	cM occW	cB cW
	<i>Anthus roseatus</i> Hodgson's Pipit	–	–	–	Vag	–
238	<i>Anthus cervinus</i> Red-throated Pipit	cM	M	rM	scW scM	uM
239	<i>Anthus gustavi</i> Petchora Pipit	uB cM	M	scM	scM	accV
240	<i>Anthus rubescens</i> Buff-bellied Pipit	rB cM	cM	M	cW cM	cM cW
Campephagidae						
241	<i>Pericroctus divaricatus</i> Ashy Minivet	cB cM	B M	(B)	scB uM	cB M
Pycnonotidae						
242	<i>Hypsipetes amaurotis</i> Chestnut-eared Bulbul	M	M	cRes	cRes	cRes
Laniidae						
243	<i>Lanius tigrinus</i> Tiger Shrike	rB	B	rB	uB	B
244	<i>Lanius bucephalus</i> Bull-headed Shrike	rB	B	rB rW	uRes	cRes
245	<i>Lanius cristatus</i> Brown Shrike	cB cM	B	cB	uB	B
246	<i>Lanius excubitor</i> Great Grey Shirke	rM uW	W M	rW	rW	scW
247	<i>Lanius sphenocercus</i> Chinese Great Grey Shirke	uB rW	B W	M rW (?B)	rW	accV
Bombycillidae						
248	<i>Bombycilla garrulus</i> Bohemian Waxwing	cM cW	W	M W	irr cW	cM cW
249	<i>Bombycilla japonica</i> Japanese Waxwing	scM cW	W	M scW	irr scW	cM cW
Cinclidae						
250	<i>Cinclus pallasii</i> Brown Dipper	cRes rM	cRes	cRes	cRes	cRes
Troglodytidae						
251	<i>Troglodytes troglodytes</i> Wren	cB uM uW	Res	Res	cRes	cRes
Prunellidae						
252	<i>Prunella collaris</i> Alpine Accentor	rB uM	Res	B	scW	cRes

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
253	<i>Prunella montanella</i> Mountain Accentor	rB cM rW	M W	W	irr cW	irrV
Turdidae						
254	<i>Erithacus akahige</i> Japanese Robin	–	M	Vag	Vag	lcB
255	<i>Erithacus sibilans</i> Swinhoe's Robin	cB cM	M	M (?B)	uM	rM
256	<i>Erithacus calliope</i> Siberian Rubythroat	cB cM	B M	rB M	scM	cB uM
257	<i>Erithacus cyane</i> Siberian Blue Robin	abB abM	B M	cB M	uB	cB
258	<i>Tarsiger cyanurus</i> Red-flanked Bluetail	cB abM	B M	B M	uW uM	B
259	<i>Luscinia svecica</i> Bluethroat	cM	M	Vag	Vag	accV
260	<i>Phoenicurus ochruros</i> Black Redstart	–	Vag	Vag	–	accV
261	<i>Phoenicurus aureus</i> Daurian Redstart	uB uM	B M	cB, M, W	cRes	scB rW
262	<i>Saxicola torquata</i> Common Stonechat	cB cM	B	cB	cB	cB
263	<i>Oenanthe pleschanka</i> Pied Wheatear	Vag	B	Vag	Vag	accV
264	<i>Monticola gularis</i> White-throated Rock Thrush	cB cM	B M	rB rM	scM	accV
265	<i>Monticola solitarius</i> Blue Rock Thrush	uB	B	B	cRes	cRes
266	<i>Zoothera sibirica</i> Siberian Ground Thrush	uB uM	B	rM (?B)	scM	lcB rM
267	<i>Zoothera dauma</i> White's Thrush	uB uM	M	B M	cB	Res
268	<i>Turdus (dissimilis) hortulorum</i> Gray-backed Thrush	cB cM	B M	rB M	uB uM	accV
269	<i>Turdus cardis</i> Japanese Grey Thrush	Vag	–	Vag	Vag	cB cM
270	<i>Turdus merula</i> Eurasian Blackbird	–	–	Vag	–	accV
271	<i>Turdus chrysolaus</i> Red-billed Thrush	–	M	scB	Vag	cB cM cW
272	<i>Turdus pallidus</i> Pale Thrush	cB cM	B	rB M scW	uRes uB	cB cM
273	<i>Turdus obscurus</i> Eyebrowed Thrush	cM	cM	scM	scM	cM cW
274	<i>Turdus naumanni naumanni</i> Naumann's Thrush	abM cW	M	M W	cW uM	uW
	<i>Turdus naumanni eunomus</i> Dusky Thrush	cM uW	M	M W	uW uM	cW
Panuridae						
275	<i>Paradoxornis webbianus</i> Vinous-throated Parrotbill	cB cW	Res	cRes	abRes	–
Sylviidae						
276	<i>Urosphena squameiceps</i> Scaly-headed Stubtail	cB cM	B M	cB M	cB	cB
277	<i>Cettia diphone</i> Japanese Bush Warbler	cB	B	cB	cB	cRes
278	<i>Bradypterus thoracicus</i> Spotted Bush Warbler	rB rM	B	scB	–	–
	<i>Megalurus pryeri</i> Japanese Marsh Warbler	rVag B(?)	B	–	Vag	scB
279	<i>Locustella lanceolata</i> Lanceolated Warbler	uB cM	B M	rM (?B)	uM	cB cM
280	<i>Locustella certhiola</i> Pallas' Grasshopper Warbler	abB cM	BM	rM (?B)	scM	accV
281	<i>Locustella ochotensis</i> Middendorff's Grasshopper Warbler	uM rB	M	scM	uM	cB M
282	<i>Locustella pleskei</i> Styan's (Island, Pleske's) Grasshopper Warbler	rB	–	Vag ▶	lscB scM	M
283	<i>Locustella fasciolata</i> Gray's Grasshopper Warbler	rB cM	B M	rM	uM	cB M
284	<i>Acrocephalus bistrigiceps</i> Schrenk's Reed Warbler, (Black-browed Reed Warbler)	abB abM	B	rB M	uB	cB lcM
285	<i>Acrocephalus orientalis</i> Oriental Great Reed Warbler	abB cM	cB	cB M	cB uM	cB
286	<i>Acrocephalus aedon</i> Thick-billed (Reed) Warbler	abB cM	uB	scM (?B)	scM	accV

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
	<i>Cisticola juncidis</i> Zitting Cisticola	–	–	–	uRes	lc Res
287	<i>Rhopophilus pekinensis</i> White-browed Chinese Warbler	–	Res	rB	scRes	–
288	<i>Phylloscopus fuscatus</i> Dusky Warbler	cB	BM	(B)	uM	irrV
289	<i>Phylloscopus schwarzi</i> Radde's Bush Warbler	cB cM	BM	rB	uM	irrV
290	<i>Phylloscopus proregulus</i> Pallas' Leaf Warbler	cb abM	B	(B) M	scM	irrV
291	<i>Phylloscopus inornatus</i> Yellow-browed Warbler	rB abM	B M	cM (?B)	uM	uM
292	<i>Phylloscopus borealis</i> Arctic Warbler	rB abM	B M	M (?B)	rB cM	B M
293	<i>Phylloscopus plumbeitarsus</i> Two-barred Greenish Warbler	rB cM	B	B	uM	–
294	<i>Phylloscopus tenellipes</i> Pale-legged Willow Warbler	cB cM	B	B M	uM	–
295	<i>Phylloscopus coronatus</i> Temminck's Crowned Willow Warbler	abB abM	B	cB M	scB cM	cB
296	<i>Regulus regulus</i> Goldcrest	cB cM rW	M W	M W	cW	cRes
	Muscicapidae					
297	<i>Muscicapa griseisticta</i> Gray-streaked Flycatcher	rB uM	B M	B M	uM	lcM
298	<i>Muscicapa sibirica</i> Siberian Flycatcher	uB cM	B	B M	uM	lcB M
299	<i>Muscicapa dauurica</i> Brown Flycatcher	cB cM	B M	B M	uM	cB
300	<i>Ficedula zanthopygia</i> Yellow-rumped Flycatcher	abB cM	cB	B M	cB	accV
301	<i>Ficedula narcissina</i> Narcissus Flycatcher	Vag	M	Vag (?B)	Vag	B
302	<i>Ficedula mugimaki</i> Mugimaki Flycatcher	uB cM	B	M (B)	uM	lcM
303	<i>Ficedula parva</i> Red-breasted Flycatcher	rB rM	M	rM	rM	irrV
304	<i>Cyanoptila cyanomelana</i> Blue-and-White Flycatcher	cB cM	cB M	cB M	cB	B
	Monarchidae					
305	<i>Terpsiphone paradisi</i> Asiatic Paradise Flycatcher	rB rM	B	(?B)	–	–
306	<i>Terpsiphone atrocaudata</i> Black Paradise Flycatcher	Vag	M	B	uB	B
	Aegithalidae					
307	<i>Aegithalos caudatus</i> Long-tailed Tit	cB cM uW	cRes	B	cRes	cRes
	Remizidae					
308	<i>Remiz (pendulinus) consobrinus</i> Penduline Tit	rB	M	rM	luM	irrV scW
	Paridae					
309	<i>Parus palustris</i> Marsh Tit	ab B cM cW	cRes	abRes	cRes	cRes
310	<i>Parus montanus</i> Willow Tit	cB cM cW	cRes	cRes	uRes	lcRes
311	<i>Parus ater</i> Coal Tit	cB cM uW	cRes	cRes	cRes	cRes
312	<i>Parus (major) minor</i> Great Tit	cB uM uW	abRes	abRes	abRes	cRes
313	<i>Parus varius</i> Varied Tit	–	Res	Res	cRes	cRes
	Sittidae					
314	<i>Sitta europaea</i> Eurasian Nuthatch	abB cM uW	cRes	cRes	cRes	cRes
315	<i>Sitta villosa</i> Chinese Nuthatch	rB rM	cRes	rRes	rM	–
	Certhidae					
316	<i>Certhia familiaris</i> Common Treecreeper	cB uM uW	cRes	(B)	uW	cRes
	Zosteropidae					
317	<i>Zosterops erythropleura</i> Chesnut-flanked White-eye	cB abM	B	(B)	scM	–
	<i>Zosterops japonica</i> Japanese White-eye	–	–	–	cRes	cRes

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
Emberizidae						
318	<i>Emberiza leucocephala</i> Pine Bunting	uB uM rW	W	rM	rW	accV
319	<i>Emberiza cioides</i> Siberian Meadow Bunting	abB cM rW	cRes	cB	cRes	Res
320	<i>Emberiza jankowskii</i> Jankowski's Bunting	rB rW	B W	sc(B)▶	–	–
321	<i>Emberiza yessoensis</i> Japanese Reed Bunting	uB rM rW	BM	M W (?B)	uW	luRes W
322	<i>Emberiza tristrami</i> Tristram's Bunting	cB cM	B M	B M	cM	accV
323	<i>Emberiza fucata</i> Grey-hooded Bunting+	abB cM	B	B M rW	cB cM	cM W
324	<i>Emberiza pusilla</i> Little Bunting	uM	M	rM	uM uW	irrV
325	<i>Emberiza chrysophrys</i> Yellow-browed Bunting	rM	M	rM	scM	accV
326	<i>Emberiza rustica</i> Rustic Bunting	cM rW	M	cM W	M abW	cM cW
327	<i>Emberiza elegans</i> Yellow-headed Bunting	cB cM rW	B	cB cM cW	cRes	cM cW
328	<i>Emberiza aureola</i> Yellow-breasted Bunting	abB abM	cB	M (?B)	cM	B irrV
329	<i>Emberiza rutila</i> Chestnut Bunting	uB uM	M	M	cM	accV
330	<i>Emberiza sulphurata</i> Japanese Yellow Bunting	–	–	Vag	uM	lcB uM W
331	<i>Emberiza spodocephala</i> Black-faced Bunting	abB abM	B	B M	cM	Res B W
	<i>Emberiza variabilis</i> Japanese Grey Bunting	Vag	–	–	Vag	Res B W
332	<i>Emberiza pallasi</i> Pallas' Reed Bunting	rB uW	M	M rW	uM rW	accV
333	<i>Emberiza schoeniclus</i> Reed Bunting	cB cM	M	rM rW	uW uM	cB cW
334	<i>Calcarius lapponicus</i> Lapland Bunting	cM uW	W	occM occW	occ rW	irrV
	<i>Plectrophenax nivalis</i> Snow Bunting	rM uW	–	–	uW	W
Fringillidae						
335	<i>Fringilla montifringilla</i> Brambling	rB cM rW	W	M W	cW	M cW
336	<i>Carduelis sinica</i> Oriental Greenfinch	cB cM rW	cRes	cRes	abRes	Res
337	<i>Carduelis spinus</i> Spruce Siskin	uB cM rW	W	M W	abW	Res M W
338	<i>Acanthis flammea</i> Redpoll	cM cW	W	W	irr cW	lcW
339	<i>Leucosticte arctoa</i> Rosy Finch	cM uW	W	W	rW	scRes W
340	<i>Uragus sibiricus</i> Long-tailed Rosefinch	cB cM rW	B W	B W	irr cW	B W
341	<i>Carpodacus erythrinus</i> Common Rosefinch, Scarlet Finch	uB uM	M	B	scW	–
342	<i>Carpodacus roseus</i> Pallas's Rosefinch	cM uW	W	W	cW	lcW
343	<i>Pinicola enucleator</i> Pine Grosbeak	uB uM uW	W	Vag	–	Res
344	<i>Loxia curvirostra</i> Red Crossbill	uB uM uW rSV	Res	occV (?B)	irr cW	lcRes
	<i>Loxia leucoptera</i> White-winged Crossbill	uB uM uW rSV	B	–	Vag	uW
345	<i>Pyrrhula pyrrhula</i> Northern (Eurasian) Bullfinch	uB uW	W	M W (?B)	uW	Res W
346	<i>Coccothraustes coccothraustes</i> Hawfinch	uB uM rW	Res M	M W (?B)	cW	rBrW
347	<i>Coccothraustes migratorius</i> Black-tailed Hawfinch	cB cM rW	B	cB rW	uB	uW
348	<i>Coccothraustes personatus</i> Masked Hawfinch	uB uM rW	B M	scM (?B)	uM uW	cRes
Ploceidae						
349	<i>Passer rutilans</i> Cinnamon Sparrow	Vag	B	Vag (?B)	lcRes lcW	B W
350	<i>Passer montanus</i> Eurasian Tree Sparrow	abRes	abRes	abRes	abRes	cRes
Sturnidae						
351	<i>Sturnus philippensis</i> Violet-backed Starling	rB	–	Vag	rB	B M

	Order/Family Species	Status				
		Russia	China	N. Korea	S. Korea	Japan
352	<i>Sturnus sturninus</i> Daurian Starling	uB uM	B	rB	rB	accV
353	<i>Sturnus vulgaris</i> Common Starling	Vag	Vag	Vag	–	Vag
354	<i>Sturnus cineraceus</i> Grey Starling	cB cM rW	cB	cB M rW	cB uW	Res
	<i>Sturnus sinensis</i> Chinese Starling	Vag	–	–	Vag	accV
Oriolidae						
355	<i>Oriolus chinensis</i> Black-naped Oriole	uB uM	B	cB	cB	accV
Dicruridae						
356	<i>Dicrurus macrocerus</i> Black Drongo	Vag	cRes	Vag (?B)	Vag	–
357	<i>Dicrurus leucophaeus</i> Ashy Drongo	–	cRes	Vag	–	–
	<i>Dicrurus hottentottus</i> Hair-crested Drongo	Vag	Vag	–	Vag	–
Corvidae						
358	<i>Garrulus glandarius</i> Jay	cB uM uW	cRes	cRes	cRes	cRes
359	<i>Cyanopica cyana</i> Azure-winged Magpie	cB rM cW	Res	Res	cRes	cRes
360	<i>Pica pica</i> Black-billed Magpie	cRes	cRes	cRes	abRes	scB
361	<i>Nucifraga caryocatactes</i> Spotted Nutcracker	uB uM rW	Res	(B)	luRes	cRes
362	<i>Corvus dauuricus</i> Daurian Jackdaw	uB cM rW	B M W	B M W	uW	irrV
363	<i>Corvus frugilegus</i> Rook	uB uM rW	B	M W	uW	W
364	<i>Corvus corone</i> Carrion Crow	abB cM abW	abRes M	abRes	cRes	cRes
365	<i>Corvus macrorhynchos</i> Jungle Crow	abRes rM	cRes	cRes	cRes cM	cRes
366	<i>Corvus corax</i> Common Raven	rB rM rW	–	Vag (?B)	–	W

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