Introduction

Lesser White-fronted Geese (*Anser erythropus*) has yellow eye-ring, more white on forehead and darker head, neck and upper parts than White-fronted Goose (*Anser albifrons*), and has shorter pale pink beak, and average body weight is 1300-2300g. Female slightly smaller. Juvenile lacks white forehead, back spotting underneath and transverse lines on upperparts.

In Japan *A. erythropus* been said “sanbyakumonme Geese”; its means the weight of this geese is about 1200g, and sometime “Kinme”; its means this goose has Golden eyes. According to these ancient records, it has been distinguished with White-fronted Goose since 17 century. In the journal of ornithology in Japan, Kuroda mentioned “magan” as *Anser albifrons*, and “kokarigane” as *Anser minutus* (1918), and he reported that they were distinguished these two species since Edo period in Japan, according to the old records (Kuroda 1934). It was specified White-fronted Goose (*Anser albifrons*) and Lesser-White-fronted Goose(*Anser erythropus*) in the reversion list of birds (Japan ornithological society 1932). Now, *A. erythropus* reckoned to be endangered in Europe, and vulnerable in the world.

Breeding and Wintering

Breeding area of *A. erythropus* spreads from Scandinavian Peninsula to the East Siberia, favors variety of arctic open habitats, particularly scrub covered and lightly wooden tundra near taiga zone; also lakes and slopes in mountain regions at least 700m. Breeding habitat thus intermediate between that of low tundra nesters and that of species using precipitous sites. Nests among dwarf shrubs, rough grasses or
patches of stones, or boggy hollows (Cramp & Simons 1977 eds.)

Breeding starts May/June. In single pairs; nest is shallow depression on ground line with grass, moss and dawn. Usually 4-6eggs (2-8); incubation 25-28 days; chicks have dark brown above, yellowish below; fledging 35-40 days (del. Hoyo et al eds.1992). Shifts for summer moult to large open waters fringed with sedge Carex, etc. Adopt at hiding especially during moult, in such cover as dwarf willow Salix.

Main wintering areas on coastal planes of Caspian and Black Seas and in East China. Most abundant goose wintering on Yangtzu river. USSR breeding population perhaps concentrated in the region on Yamal Peninsula and lower reaches of Obi. In past was widespread winter visitor to Japan, but now very few birds, normally mixes with groups of A. albifrons. They are feeding mainly green parts of grasses, plants and small bushes. Feeds mostly on land, by gathering on the dry farmlands and steps.

The records of Japan

Hunting lists named “Tokugawa-Jikki”; Tokugawa Shoguns’ Annual of Hunting in Edo period (from Shogun Ieyasu1611- to Shogun Ieharu 10th Shogun; 1611-1786) was remained, that was consisted of 510 books (Kanayama, M 1985). This records of hunting treated with 467 Geese samples. The records of species were only distinguished Geese and Snow Geese in 1611, but they had started to distinguish with White-fronted Goose, Lesser White-fronted Goose, Bean Goose and Snow Goose in 1724. Total records of A. erythropus Tokuawa-Jikki were 8.

In 1887, Swinhoe got the 2 body of Goose on Hakodate in Hokkaido Island in Japan, one of them was clearly male of White-fronted Goose, but another was female of White-fronted Goose or Lesser White-fronted Goose (Swinhoe 1877). Seebohm said about this record, this collection (No2007) was evidently A. erythropus. After 1874, the records of A. erythropus was shown by GHQ (General Head-quarters) in the Waterfowl of Japan (Austin 1949), there were 46 examples about this species.

While now, these 5 years records of A. erythropus shows Table 1. Only a few birds wintering in Japan, and 15 individuals recorded in the Hokkaido region where is one of the staging area.

<table>
<thead>
<tr>
<th>Year</th>
<th>Hokkaido Island (Staging region)*1</th>
<th>Honshu Island (Wintering region)*2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991/92</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>1992/93</td>
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<tr>
<td>1993/94</td>
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<td>1994/95</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1995/96</td>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>

*1 Miyajima marsh (Bibai), Kamihibai (Bibai)
*2 Kabukuri marsh (Tajiri, Miyagi Pref.), Furukawa (Miyagi Pref.), Itai (Fukui Pref.)
Ooarai (Ibaraki Pref.) Asahi pond (Zyoetsu, Niigata Pref.), Oogataura (Akita Pref.)
World distribution and Status

The world population of the *A. erythropus* was estimated at about 100,000 birds in the 1960’s but now wintering on shore of Caspian Sea, black Sea, West Siberia, total population of Western Eurasia estimates 15,000-35,00 (Scott & Rose 1996), and East Asia will be estimates 6,000 (Perennou et al. 1994). Population of *A. erythropus* rapidly declined in these several years.

West Palearctic

The breeding range of *A. erythropus* has been declining during the past twenty years in Russia. On the Kola peninsula, this species in now extinct as breeding birds, and it is apparent that this is also the case on the Kannin Peninsula and west of the Pechola River (Morozov 1995).

The *A. erythropus* is one of the most endangered bird species in Fennoscandia. Scatters pairs still breed in 40-50% of the former breeding area. Estimates indicate that the Fennoscandian population has been reduced by more than 95%. The present population probably numbers less than 500 birds (Norderhaug 1984) Largest wintering region was Caspian Sea Region (Vinogradov 1990). But in the 1930’s 30,000-50,000 may have wintered south-east of Caspian Sea (Bauer & v. Blotzheim, 1968). By the mid 1970’s the population in this area was reduced to about 1/10 of the former level (D. Scott, pers. com.). In Kazakhstan, 7,900 individuals is the most highest population in one place in these several years on Eastern Palearctic (Tolvanen, p.1996).

East Palearctic

Breeding region of *A. erythropus* on East Palearctic had not estimated certainly yet, only south-east part of Tymir peninsula and Chuyukoto region were recognized by the survey.

In Kamchatka, the *A. erythropus* is a rare migrant. until the middle of 1970’, *A. erythropus* had been recorded on the south-east coast of Zhupanov lagoon (less than 300 individuals) and Semyachinsk lagoon (Lovkov 1993). At least 400 geese migrated through Lake Kharchinskoe in the spring of 1981 and 1982. In 1983, 1984 and 1987 flocks (less than 400 individuals) were observed on the south-west coast of Kamchatka (Gerasimov et Gerasimov.1995)

In China, Dongting Lakes and Poyang Lakes were the largest wintering region of East Palearctic regions. According to the Asian waterfowl census 1987-91: distribution and status of Asian waterfowl, the East Dongting Lakes (FYM; Five Years Mean 170 individuals), and Hannan Lake (360 individuals), and Poyang Lake (FYM
2,450), and Shijiu Lake (FYM; 410), but according to the Water-bird Research in China, 9,000 birds were observed on Xiaoxi Lake of East Dongting Lakes (Liu et al.,1994). And the estimate by Antti Below and Erkki Virolainen was 2000-3000 individuals altogether of which a maximum of 1800 birds in one flock (Below et al.,1997). It is very difficult to estimate the total population of *A. erythropus* in Dongting Lakes, because East Dongting Lakes, 70,000 ha, and West Dongting Lakes, 50,000 ha and South Dongting Lakes, 70,000 ha. There are huge feeding habitat for geese.

**Factors of decline,**

We have pointed out the following potential negative factors:

- Illegal hunting
- Disturbance in the breeding areas
- Disturbance at the molting grounds
- Disturbance on resting sites used during migration
- Damage to biotopes (hydro-electric power project?)
- Expansion of the fox into mountain regions

Factors explaining the population decline is the result of a set of factors.

**Recommendation on urgent actions for the conservation of the *A. erythropus***

In connection with the International meeting of Goose Research Group of International Water-fowl and Wetlands Research Bureau, a workshop was held on the implementation of the International Action Plan for the *A. erythropus* (BirdLife International/ Bern Convention 1995) Twenty leading experts from 10 *A. erythropus*
range states participated in the workshop. An International working group for implementation of the Action Plan, prioritizing activities and raising funds for action was created,

- There is a continued alarming decline in numbers throughout the range, and even disappearance from former important breeding area in northern Russia
- Important late summer and autumn staging areas have been located on the Kanin Peninsula, A north Russia, through the successful use of satellite transmitters mounted on geese in Fennoscandia.
- Furthermore, potentially important staging area have been located in northern corner of Brandenburg in Germany, in the Azov Sea in Russia and in northern Kazakhstan;
- Encouragingly, the protection of wintering areas in Hungary and north-eastern Geese has been followed by increases number of A. erythropus.
- The available information indicates that the declines are primarily caused by excessive mortality mainly due to hunting.

In 1997 JAWGP, Action plan for A. erythropus is under preparation in response to a global plan and Russian action plan of the species.

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