# ILLEGAL EXPORT OF AMPHIBIANS AND REPTILES FROM THE RUSSIAN FAR EAST TO COUNTRIES OF THE ASIAN REGION: THE SITUATION IN 2003

# I. V. Maslova<sup>1</sup> and S. N. Lyapustin<sup>2</sup>

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# INTRODUCTION

Russia's Far East is facing a critical situation connected with mass illegal export of its natural resources, such as ginseng, paws of Asiatic black bear, skins of tigers and leopards and many other things, to the countries of South East Asia. This leads to inconvertible changes in the ecosystems of the Far East region. The situation is especially critical in the Primorskii Krai area. Many representatives of local herpetofauna are among the most exported bioresources. Chinese and sometimes Koreans catch amphibians and reptiles for traditional oriental medicine and culinary. Over the past 10 years, a comprehensive network of poachers, co-dealers and Chinese traders was established in Primorskii Krai. This illegal network also includes many Russian people whose present-day living standard has become particularly low. In this report we give a general overview of the situation connected with poaching.

#### MATERIAL AND METHODS

We have been collecting data over 11 years (from 1993 to 2003). These are the archives' data of several local Nature Conservancy committees, the data of the Primorskii Krai ecological group "Tiger," the information from the border guards and regional customs officials, and also the materials of the local mass media and police reports. We also included the information received during the interviews of the residents of 18 districts of Primorskii Krai.

## **RESULTS AND DISCUSSION**

Two species are in greatest danger: *Rana dybowskii* and *Pelodiscus sinensis*. However, according to the reports of the Far East customs officials, live specimens and parts of *Bombina orientalis*, *Bufo gargarizans*, *Hyla japonica*, and *Rana nigromaculata* are also exported.

*Rana dybowskii* is a common species in the southern Far East, and is not listed in the Red Data Book. However, its population has notably decreased in this region because of poaching.

Before 1917 the Chinese harvested these species of frogs in the Suifun River valley (which is now called Razdol'naya River valley). *Rana dybowskii* is valuable because of its fat, which is used in oriental medicine. Later, the main catches of frogs were conducted in the Manchuria area. Beginning from the 1990s the borderline between China and Russia has become more open. Many Chinese began to travel to the Primorskii Region, and some of them purchased *Rana dybowskii*.

Chinese poachers harvest *Rana dybowskii* in autumn and early winter for pharmacological needs, and in spring for culinary purposes. Poachers use different types of traps to catch amphibians. These traps may include polyethylene fences put along the rivers in the mountains, in order to collect frogs on their way during the autumn migration.

Thus, for example, in October 1994, members of the Ussuriisk Regional Environmental Committee found a 3-km polyethylene fence near the Komarovka River, which was installed by Chinese farmers.

Another instrument taking frogs are fishing nets. For example, (Protocol 13 of 03/24/1999, Ussuriisk Regional Environmental Committee), near Kondratenovka village two citizens from China had illegally taken wintering frogs from the left tributary of the Kamenyushka River. For their purposes they used nets (length 1.5 m, height 0.8 m). When these Chinese were detained, they had 500 live animal specimens in their bags.

Poachers also used electric fishing rods and traps. This was recorded from the Pogranichnyi raion.

Poaching has drastically increased since 2002. Mass poisoning of rivers has started. There was a newspaper report, presenting materials and photographs, which were handed over by the border guards. The analysis of videos made by border guards on the Ryazanovka River showed that the Chinese took motionless frogs and did this for a long time. They had managed to take 400 specimens of *Rana dybowskii*.

<sup>&</sup>lt;sup>1</sup> Khankaiskii State Nature Reserve, Ershov str. 10, Spassk-Dalnii, 692245 Primorskii Krai, Russia; E-mail: rana@mail.primorye.ru.

<sup>&</sup>lt;sup>2</sup> Far East Task Force Customs, Krasnogo Znameni str. 66a, Vladivostok, Russia.

Rangers who took the water from the river, 20 km downstream from this place, got seriously poisoned. Members of the Far East branch of WWF inspected the Ryazanovka River and showed that a lot of water life (fish, amphibians, water invertebrates) of the river was destroyed. Also a large part of the rivers in the Khasan raion had been poisoned recently.

Besides the border guards, the Russian Far East customs officials play an important role in minimizing illegal trade. Since 1996 they are making attempts to prevent illegal export of amphibians and their parts from Russia. Over the period 1996 - 2003 the customs officials have prevented attempts of the citizens of China to take out 3720 live frogs, 90 kg of dried frogs, 39 kg of dried frog meat, 55 kg of fatlike frog substance, 74 g of frog brown fat, 3.3 kg of frog eggs.

They also prevented the export of 2.4 kg of fatlike substance of *Hyla japonica* and 3 kg of secretor substance of *Bombina orientalis*.

Mass illegal collection of soft-shelled turtles has also begun. In 2001 we conducted expeditions in Primorskii Krai and studied places with *Pelodiscus sinensis* habitat. We found out that at present, out of 13 districts inhabited by the turtles, there are only two regions with few cases of poaching. Reptilian sales have existed a long time and have a mass character. It is perfectly clear that in some districts turtles are collected by the local fishery inspection. Lesozavodsk and Dal'nerechensk are the main illegal bases for transporting these species to the Chinese territory.

The population of one of the villages on the Malinovka River lives on the money from the sales of soft-shelled turtles. According to reliable sources, one of the poachers bought his car with the money from the turtle trade. It was estimated that he collected and sold no less than 500 specimens.

Villagers of all the regions report that large turtles have not been found in these areas. At present the length of carapax does not exceed 20 - 25 cm. It has been pointed out that the number of these animals has decreased. There are lakes and river areas, where these species were met earlier, but are no longer found at present.

There is the following information about the Far East customs service. Beginning in the middle 1990s, the Far East customs inspection reported about numerous attempts of illegal export of *Pelodiscus sinensis* to China. The export is conducted in different ways. For example, in 1999 the Ussuriisk Customs officials detected several turtles

bound by metal wires and attached to the bottom of a railway cargo carriage.

During the last 8 years, the Far East customs inspectors have withdrawn 215 specimens and 40 eggs of *Pelodiscus sinensis* from illegal export. However, the amount of illegal export to China have been significantly increased. There is testimony that the Chinese market is overflown by *Pelodiscus sinensis* taken from Russia.

Very recently, police officers from the October District detained a car, in which they discovered big amounts of soft-shelled turtles, whose weight totaled 184 kg. Co-dealers purchased these turtles for 70 - 100 rubles from the local poachers in order to sell them to China.

Thus, the situation is as follows. The numbers of the *Rana dybowskii* in the south of Primorskii Krai (Khasan, Ussuriisk, and Nadezhdinskii raions) have decreased to a disastrous extent (V. A. Kostenko, 2003, personal communication). In the rest of the districts the number of frogs has drastically decreased. After the winter of 2002 a big part of the rivers in the Khasan raion have been poisoned. *Pelodiscus sinensis* has disappeared in some places, while elsewhere the numbers have declined.

The problem of illegal collection of amphibians and reptiles in Primorskii Krai for the purpose of illegal export needs to be tackled urgently. Mass collection of different species from the wild has already brought ecosystems to imbalance. It is necessary to pass effective laws for conservation of herpetofauna in the Far East of Russia.

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