On the issue of the reduction of the range and the number of birds of prey associated with illegal hunting

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Abstract. The article discusses issues related to the illegal catch of large birds of the genus Falco (Falco), which has a significant impact on reducing the number of these predators. The share of participation in these illegal actions of the Far East and other regions of Russia was revealed. As a result of the study, it has been shown that the main perpetrators of criminal acts are local residents who do not understand the amount of harm caused to nature in connection with the capture of birds of prey.

1. Introduction

Despite the ongoing nature conservation programs on the territory of the Russian Federation, the International System of Measures for the Protection of Species, the number of large predatory birds continues to decline [1-5]. Feathered predators living on the territory of the Russian Federation are increasingly becoming objects of illegal hunting [6]. Illegal prey is reflected in the number of populations of large birds of prey (saker falcon, peregrine falcon, gyrfalcon), since it significantly exceeds the natural loss in nature. In connection with the growing popularity of falconry in the world, there are numerous cases of catching and exporting birds of prey of the falcon family outside Russia: Saudi Arabia, Qatar, Bahrain, Kuwait, United Arab Emirates [3; 6]. The domestic predator market is characterized by a lower turnover, but it is stable. Shooting and trapping of such birds is prohibited on the territory of our country. These species have a high conservation status, are included in the Red Book of the Russian Federation, in the CITES Appendix [2; 4].

The purpose of this work: to study the quantitative and qualitative indicators in the field of illegal hunting of birds of prey.

Tasks:

- Identify the prevalence of illegal falcon hunting in the regions of Russia;
- Describe the main perpetrators arrested for illegal harvesting of falcons;
- Study the prevalence of falcon species in the Far East;
- Suggest possible ways to reduce poaching.
2. Materials and methods
The literature data on criminal activity in the field of illegal hunting of predatory birds of the Falco genus are analyzed. Based on the study of cases of illegal hunting and smuggling of rare birds, a characteristic of the dominant poacher species was compiled.

3. Results and Discussion
The quantitative characteristics of the collected cases of "falcon detention" by region and individual countries are given by S.N. Lyapustin, P.V. Fomenko (2014), E.G. Nikolenko (2018) and others. Of 100 cases of illegal hunting of falcons, information about which was collected in a study conducted by E.G. Nikolenko, 36 occurred in the Far East, 24 - in the regions of the Siberian Federal District (Irkutsk region, Tyva, Khakassia, Altai, Altai Territory), 14 - in the European part of the Russian Federation (Chelyabinsk, Samara, Bryansk, Belgorod, Moscow Domodedovo international airports, Sheremetyevo and Vnukovo, Moscow region) (figure 1) [7-14].

![Figure 1. The number of illegal acts related to birds of prey of the falcon family, by regions of Russia for the period 2006-2015.](image)

Analyzing the data (figure 1) of the number of crimes in the regions of our country, almost half (49%) falls on the Far East, which has access to the Asia-Pacific region (APR), has vast natural resources and untouched nature.

Analyzing the places of detention of criminals, it should be noted that the most effective places are such as the airport (43%) and private territory (31%), then cars (11%), when catching (9%), sea vessels and ports (6%). These values indicate that poachers predominantly use falcons for sale and that third parties are involved in transportation (table 1).

| View                 | Primary natural areas and habitats                                                                 | Distribution in the RF                                                                 |
|----------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Gyrfalcon Falco rusticolus | Arctic and subarctic zones, found in the forest-tundra and forest zone Rocky sea coasts, river valleys, mountain tundra | In Kamchatka, the main population is in Russia. In Primorsky, Khabarovsk Territories, in the Autonomous Jewish Republic it occurs as a wintering bird. |
| Saker Falcon Falco cherrug | Steppe, forest-steppe Open spaces combined with island forests or rocks                          | In the Russian Federation, there is a relatively complete area in Altai and Tuva. In Primorsky, Khabarovsk Territories, Yakutia, the number is low. |
| Peregrine Falcon Falco peregrinus | Tundra, forest zone Rocky shores of various water bodies                                       | In the Far East, it lives everywhere - from Primorsky Territory to Chukotka.            |
These species of predatory birds are widespread in the Far East (table 1). The majority of those arrested for illegal hunting of rare birds of prey are local residents, who account for 55% of all violators. Most often they act as a performer. Describing a local resident as a person who broke the law, the following should be attributed:

- Knows the area and is well oriented on it;
- Familiar with the behaviour and habits of birds of prey belonging to the falcon family (gyrfalcon, saker falcon, peregrine falcon, etc.);
- Possesses ornithological knowledge, allowing to determine the type of bird;
- Uses methods of catching birds of prey using various means;
- Possesses the techniques of forcible retention of a captured bird;
- Possesses the skills of keeping birds in captivity;
- Does not understand the extent of harm caused to nature in connection with the capture of birds of prey.

To prevent environmental crimes in the field of illegal mining, it is necessary to form the environmental consciousness of the population, to increase the level of environmental culture, which is possible with the dissemination of environmental knowledge through the media, environmental institutions, etc.

4. Conclusion

Thus, using the quantitative and qualitative indicators of criminal acts in the field of catching and exporting birds of prey of the Sokoly genus, the share of Russian regions involved in this criminal process is revealed, and therefore the all-Russian nature of environmental crimes is shown. The leading place of the Far East in this series is due to the spread of these predatory birds, the low ecological culture of the local population.

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