

Legal Regulation of the Peculiarities of the Organization of Antiepidemiological Measures in Specially Protected Natural Areas of Federal Significance

Sergey V. Gerasimov¹⁴⁴

Chief specialist of the department for organizing measures for the prevention and elimination of animal diseases, laboratory monitoring and veterinary and sanitary examination of the Veterinary Directorate of Leningrad Region, Advisor to the State Civil Service of Leningrad Region, 2nd class. Candidate of Veterinary Sciences, Lecturer at the Department of Microbiology, Virology and Immunology, St. Petersburg State University of Veterinary Medicine (SPBGUVM). 3rd year student of group YR-3-18-31 of the Law Faculty of the North-West Institute of Management of the Russian Academy of National Economy and Public Administration under the President of the Russian Federation (RANEPA), Saint Petersburg, Russian Federation; vetvra4serg@mail.ru

ABSTRACT

The article examines aspects of the legal regulation of the organization and implementation of veterinary preventive and antiepidemiological measures in specially protected natural areas of federal significance on the example of outbreaks of African swine fever in the state nature reserve "Mshinskoe Swamp" of Luga district of Leningrad region in 2018–2019. An assessment of the current in the period 2018–2020 is given veterinary and environmental regulatory legal status of acts, with the revealed practical law enforcement collisions in the analyzed acts in the elimination of real outbreaks of African swine fever in Leningrad region.

The bureaucratic nature of the procedure for making decisions on the need to regulate the number of wild animals in specially protected natural areas of federal significance and the practical implementation of these measures, revealed by practical law enforcement, was leveled by local rule-making of the Veterinary Directorate of Leningrad Region, the legitimization of which was carried out by the actual elimination of infection in a reserve of federal significance and the subsequent implementation of the developed regulation by the Ministry of Natural Resources recourses and ecology of the Russian Federation into the system of quarantine measures.

At the end of the article, substantiated proposals are formulated for amending the veterinary and environmental legislation in order to prevent the occurrence of the same legal collisions in the future and to promptly eliminate outbreaks of infectious diseases in the wild fauna, in particular in specially protected areas of federal significance.

Keywords: legislation, legal regulation, veterinary medicine, environmental law, land law, infection, epizootology, specially protected natural areas, state nature reserves

Introduction

There are several shortcomings in the veterinary (and in environmental) legislation of the Russian Federation, in particular, relating to organization and implementation of veterinary preventive and antiepidemiological measures in the wild fauna. Many documents have become obsolete, others have been canceled, but no regulations have been approved in return. And the new substitutive documents that were made seem to have been created without approval of the relevant departments. As a result, we can say that the veterinary and the environmental authorities of the country adopt different documents, which documents contradict each other on a number of issues.

For instance, in June 2018, when Leningrad Region was first affected by African swine fever (hereinafter ASF) in the wild fauna, inside the troublesome zones within boundaries identified by the Order of the Governor of Leningrad Region¹⁴⁵, there

¹⁴⁴ The author would like to express his acknowledge to: Director of the Veterinary Directorate of Leningrad Region L. N. Krotov and Director of the Federal Public Budget-Funded Institution "Nizhne-Svirsky State Natural Reserve" M.A. Antipin for competent management of quarantine measures in Federal Nature Reserve Mshinskoye Swamp in 2019–2020; Director of Public Budget-Funded Institution of Leningrad Region "Leningrad Regional Epizootic Group" E.E. Shutov and Director of the Public Budget-Funded Institution of Leningrad Region "Station for the Fight against Animal Diseases of Luga District" A.I. Serikov for active personal participation and contribution of the institutions to containment, elimination and further prevention of African swine fever in Federal Reserve Mshinskoe Swamp in 2018–2020.

¹⁴⁵ On introduction of restrictive measures (quarantine) due to African swine fever on the territory of Leningrad Region: Order No.386–rg of the Governor of Leningrad Region dated June 22, 2018 [Electronic resource]. URL: <https://login.consultant.ru/link/?req=doc&base=SPB&n=203529&dst=1000000006> (date of access: 12.02.2021).

were secondary foci of infection, in particular, two cases in the territory of Federal Nature Reserve "Mshinskoe Swamp" of Luga District, Leningrad region (hereinafter "Mshinskoe Swamp")¹⁴⁶.

To remove quarantine, veterinary legislation requires in particular certain measures in the wild fauna, including regulation of the wild boar number to population density of 0.25 individuals per 1000 ha¹⁴⁷. Such measures must be taken since there are no specific means of infection prevention (vaccines, sera)⁴ and the only effective measure to combat the virus is to deprive it of its biological model (susceptible animals: domestic pigs and wild boars), by scattering the number of animals and thereby minimizing their contact¹⁴⁸.

This is the issue where regional executive authorities in charge of protection, control and regulation of the use of wild animals, as well territorial bodies of the Federal Service for Supervision of Natural Resource Usage /Rosprirodnadzor/ have literally no powers to initiate measures aimed at reducing the number and migration activity of wild boars in federally protected natural areas (hereinafter PNA; that means any attempts to ensure such activities independently will be regarded as poaching. The situation was aggravated by no local management of the reserve, that is, all urgent issues had to be resolved directly with the Ministry of Natural Resources and Environment of the Russian Federation (hereinafter the Ministry of Natural Resources of Russia), which greatly delayed the measures.

This topic is relevant since epizootic well-being of the territory of the Russian Federation must be maintained in order to protect health of the public and animals, in particular, by competent and prompt measures aimed at localizing and eliminating episodes of infectious diseases in the wild fauna.

The object of the study was social relations in specially protected federal natural areas, regulated by veterinary and environmental laws of the Russian Federation; the subject of the study was legal regulation of organizing veterinary prophylactic and anti-epizootic measures in federally protected areas.

The goal of the paper is to study aspects of legal regulation of organizing and performing veterinary prophylactic and anti-epizootic measures in federally protected areas using the evidence of ASF episodes in Mshinskoye Swamp of Luga District, Leningrad Region in 2018–2019.

To achieve the goal, the following tasks were set:

1. Study the procedure for organizing and performing veterinary prophylactic and anti-epizootic measures in the wild fauna using the evidence of an ASF episode.
2. Study aspects of planning and performing activities in federally protected using the evidence of a state nature reserve.
3. Analyze introduction, implementation and cancellation of ASF restrictive measures (quarantine) on the territory of Mshinskoe Swamp.

The article reviews veterinary and environmental legislation actual in 2018–2020, with an emphasis on contradictions in documents that were found during elimination of ASF episodes in Leningrad region.

The paper will also explain to how problem can be solved (bureaucratization of decision-making about regulation of the number of wild animals in specially protected federal natural areas and practical implementation of regulation measures) simultaneously with elimination of infection in a federal nature reserve; also the paper describes documents developed by the researcher, legitimacy of such documents was recognized by the Ministry of Natural Resources of Russia; thanks to those documents the quarantine measures were completed. This problem-solving procedure and the documents constitute novelty of the work; the issue of ASF elimination in a federal reserve in Leningrad Region was discussed at the Government of the Russian Federation, the solution has been worked out for over a year.

Also, the work provides, as we believe, reasonable proposals for amending the veterinary and environmental legislation in order to prevent occurrence of the same legal conflicts and promptly eliminate episodes of infectious diseases in the wild fauna, in particular in federally protected areas.

Considering that the practical example described in this article relates to 2018–2020, I will rely primarily on Order No.213 of the Ministry of Agriculture of the Russian Federation of 31.05.2016 "On approval of veterinary rules for preventive, diagnostic, restrictive and other measures, establishment and abolition of quarantine and other restrictions aimed at preventing spread and elimination of African swine fever" (registered with the Ministry of Justice of Russia on August 24, 2016, registration No.43379). The document was adopted in 2016 and expired on March 1, 2021 due to new veterinary rules on ASF, approved by Order No.37 of the Ministry of Agriculture of the Russian Federation of 28.01.2021.

¹⁴⁶ On introduction of restrictive measures (quarantine) due to African swine fever on the territory of the federal nature reserve "Mshinskoe Swamp" within administrative boundaries of the municipal unit Luga District of Leningrad Region: Order No.144–rg of the Governor of Leningrad Region dated March 1, 2019 [Electronic resource]. URL: <https://login.consultant.ru/link/?req=doc&base=SPB&n=209882&dst=1000000007> (date of access: 12.02.2021).

¹⁴⁷ On approval of veterinary rules for preventive, diagnostic, restrictive and other measures, establishment and abolition of quarantine and other restrictions aimed at preventing spread and elimination of African swine fever: Order No.213 of the Ministry of Agriculture of Russia dated 31.05.2016 [Electronic resource]. URL: <https://login.consultant.ru/link/?req=doc&base=LAW&n=203905&dst=1000000003> (date of access: 12.02.2021).

¹⁴⁸ Specific veterinary and sanitary microbiology and virology: textbook/R.G. Gosmanov, R. Kh. Ravilov, A. K. Galiullin et al. M.: Lan, 2019. 316 p.

It should also be noted that orders No.386–rg and No. 144–rg of the Governor of Leningrad Region dated June 22, 2018 and March 1, 2019, respectively that introduced restrictive measures (quarantine), also ceased to be effective on April 2, 2020, due to Order No.279–rg of the Governor of Leningrad Region on abolition of restrictive measures (quarantine).

Procedure for organizing and conducting veterinary and prophylactic and anti-epizootic measures in wild fauna, evidence from the episode of African swine fever

It should be noted that the veterinary rules, approved by Order No.213 of the Ministry of Agriculture of the Russian Federation dated May 31, 2016, give no clear distinction between measures for identification of ASF among domestic pigs and wild boars; the list of with necessary measures is “mixed”, some of them are inapplicable to episodes among pigs, and others, in turn, are inapplicable to wild boars. Therefore, this paper will only specify measures applicable to ASF in wild fauna.

Such measures are listed in paragraphs 20–42 of the Rules¹⁴⁹. In a nutshell, they come down to the following:

1. As soon as information about a proven ASF diagnosis has been received, within 24 hours, a report shall be sent the head of the region claiming quarantine, with an attached a draft legal act about introduction of quarantine; the document shall approve an action plan to eliminate the ASF source and prevent spread of the pathogen. The quarantine resolution shall establish the epizootic focus, the infected object, the first threatened zone (the territory adjacent to the epizootic focus, with the radius at least 5 km from its borders), the second threatened zone (the territory adjacent to the first threatened zone, with the radius up to 100 km from the borders of the epizootic focus), a list of restrictive (quarantine) measures (for all territories) and the period of quarantine.

2. Immediately after the above documents have been approved, quarantine measures shall be implemented. They can be divided into two main groups:

- restrictions in certain territories, that is, prohibited actions during the quarantine period in order to prevent spread of infection, for example, exit and entry of vehicles not involved in elimination of the disease, all types of hunting, except for hunting in order to regulate the number of game resources, any activities related to movement and accumulation of animals;
- mandatory measures in certain territories, such as: destruction of animal corpses in all territories, bloodless euthanasia and destruction of all susceptible animals in the epizootic focus and the first threatened zone, creating disinfection barriers at the entrance and entry to the epizootic territory; disinfection of any vehicles leaving the epizootic territory; ensuring no stray animals on the epizootic territory; disinfection, dissection and deratization; measures to reduce the number of wild boars to a population density of 0.25 individuals per 1000 hectares by bloodless methods; organization of round-the-clock checkpoints at the entry to the epizootic territory, conducting mass laboratory tests for ASF of all detected corpses and hunted wild boars, as well as pigs in the second threatened zone, and other measures.

3. Even after all quarantine measures have been performed, and the quarantine has been removed, the head of the region shall issue a resolution prohibiting breeding of wild boar and their import into hunting farms on the territory of the former threatened zones and into specially protected natural areas for a year, after which breeding and import is only allowed, if there are no ASF foci within a radius of 100 km throughout this period (within a year).

Contradictions between veterinary and environmental legislation when planning measures for ASF prevention and elimination in the wild fauna

The main contradiction relates to regulation of the number of game resources (i.e. wild animals, in case of ASF wild boars). Appendix 2 to Order No.138 of the Ministry of Natural Resources of Russia dated 30.04.2010 (was valid until 01.01.2021, after which Order No.965 of 25.11.2020 came into force) states the following.

The minimum number of game resources shall only be established for the resources that can be hunted under game exemptions, and for the wild boar.

The minimum number of game resources at a certain hunting ground (a hunting farm) establishes the minimum stock of wild animals which allows a hunting quota of at least one wild animal in accordance with the effective standards, and is determined by the formula: $N_{\text{minimum number of animal}} = 1 \text{ animal} \times 100\% / N_{\text{additional capture}}$, where $N_{\text{minimum number}}$ is the minimum number of game resources in one hunting area, $N_{\text{minimum number of animal}}$ is the standard for permissible hunting, hunting amount of at least one animal is 100%.

¹⁴⁹ On approval of veterinary rules for preventive, diagnostic, restrictive and other measures, establishment and abolition of quarantine and other restrictions aimed at preventing spread and elimination of African swine fever: Order No.213 of the Ministry of Agriculture of Russia dated 31.05.2016 [Electronic resource]. URL: <https://login.consultant.ru/link/?req=doc&base=LAW&n=203905&dst=1000000003> (date of access: 12.02.2021).

When calculating the minimum number of wild boar in generally accessible hunting grounds, the standard for permissible hunting of wild boar is 10% of its total number at a hunting ground¹⁵⁰.

A calculation shows that, in accordance with environmental legislation, until the end of 2020, regulation of the number of wild boars in a hunting farm (hunting ground) was only possible if at least ten animals remained.

In other words, for the hunting ground to have 0.25 individuals per 1000 hectares, its area should be over 400 km². But what if the hunting farm is only 200 km²?

That is, the order of the Ministry of Agriculture of the Russian Federation obliged to have 0.25 individuals per 1000 hectares, and the order of the Ministry of Natural Resources of Russia did not allow doing so.

Another contradiction is calculation of the number of hunting resources (wild boars).

Any hunter, hunting provider, specialist from the executive authority in charge of protection, control and regulation of the wildlife will say that the only data that can be relied on are results of the so-called winter route registration in accordance with Order No. 1 of the Ministry of Natural Resources of Russia of 11.01.2012, in simple terms the number of wild animals "under the tracks on the snow cover." The winter route registration is over by March 1, then the executive authorities collect results from hunting providers and calculate the population density of wild animals in the hunting area, municipality and, finally, region¹⁵¹ by the formulas and coefficients under Order No. 1 of the Ministry of Natural Resources of Russia of January 11, 2012.

In our opinion, there are three drawbacks here.

First, updating and relevance of the data: The description above shows that updating happens once a year. That is, having established quarantine, for instance, in May, on the territory where the density is 0.8 animals per 1000 hectares, we will have to wait until April to make sure that the measures to reduce the number of wild boar were enough to remove the quarantine.

Secondly, reliability of the data: The description above shows that the counting method is very approximate. The boar could stamp on the spot, leaving several tracks and making a deceptive impression that traces were left by several animals.

Third, the counting process: The documents do not specify whether the calculator should take into account the area of buildings, reservoirs, mountains, etc. on the territory of the hunting grounds, or only take into account the habitat of the wild boar. Accordingly, if the calculator wants to get a higher density, they do not include these territories, and if the calculator wants to get a lower density, such territories are included, thereby significantly reducing the figure¹⁵².

On top of this, hunting farms are mostly private facilities, which means that any prohibition of amateur and sports hunting, as well as hunting for number regulation (when carcass is destroyed by burning) means a loss of money for the owner. And the latter will prevent this in every possible way — by underestimating the number of wild boars, encouraging poaching and illegal sale of carcass products, which can contribute to spread of the disease. Looking ahead, we believe that it would be possible to support such facilities from the budget and by purchasing pigs and slaughter products. Let's consider it in more detail in the conclusions.

Planning and implementation of activities in federally protected areas, evidence from the state natural reserve

In order to understand what activities and to what extent can be organized at federal nature conservation areas, including the state natural reserve, it is necessary to analyze regulatory documents governing operations of federal nature conservation areas.

Each federal nature conservation area is governed by regulations on protected areas, which determine the possible use of territories within the boundaries of protected areas, and the regime for their protection. State nature reserves under consideration are mentioned in section V of the Federal Law No. 33-FZ on protected areas. Further the paper will consider some of its provisions, primarily Articles 22 and 24.

In fact, state natural reserves are lands that preserve and restore nature and its components in order to maintain an ecological balance. Looking ahead, we can note that the wild boar inhabiting the territory of the state natural reserve is a natural resource, that is, a component (element) of the environmental complex to be preserved and maintained in the nature conservation areas.

Federal state natural reserves are managed by federal public budget-funded institutions newly created / appointed by the document of the Ministry of Natural Resources of the Russian Federation. Looking ahead, we can say that in case

¹⁵⁰ On approval of standards for permissible hunting and standards for the number of game resources in hunting grounds: Order № 138 of the Ministry of Natural Resources of Russia of 30.04.2010 [Electronic resource]. URL: <https://login.consultant.ru/link/?req=doc&base=LAW&n=212334&dst=1000000005> (date of access: 28.02.2021).

¹⁵¹ On approval of Guidelines for executive authorities of the constituent entities of the Russian Federation related to federally delegated powers of state monitoring of game resources and their habitat using the winter route accounting method: Order No. 1 of the Ministry of Natural Resources of Russia of January 11, 2012 [Electronic resource]. URL: <https://login.consultant.ru/link/?req=doc&base=LAW&n=130789&dst=1000000004> (date of access: 28.02.2021).

¹⁵² Samylin, V. G. Nature Management in the European North of Russia: monograph. Vologda State University, 2016. 213 p.

of Mshinskoye Swamp Reserve (Luga and Gatchina districts of Leningrad region), at the end of 2019 its management was assigned to the Nizhne-Svirsky State natural

Reserve", which also manages the federal reserve of the same name in Lodeinoe-Pole district of Leningrad Region and the federal protected area "East of the Gulf of Finland" (Vyborg and Kingisepp districts of Leningrad Region).

On the areas of the nature reserve, any activities are permanently or temporarily prohibited if they run counter to the goals of the creation of the reserve and / or cause harm to its nature, including animals. We pay attention to the word "temporarily", that is, hypothetically such activity is possible (again, in the case of the problem studied in this paper, we are talking about the need to reduce the number of wild boars in the state nature reserve due to an outbreak of infection)¹⁵³.

Studying the document of the Ministry of Natural Resources of Russia dated 13.01.2011, we will learn how the issue of regulating the number of wild animals, including in specially protected nature areas, is being resolved, and what documentary procedure is provided for this.

If we talk about federal specially protected nature areas, the decision to regulate the number of wild animals within their borders is made in writing by the Minister of Natural Resources and Ecology of the Russian Federation. Naturally, such a decision requires good reasons, and one of these may be the threat of the introduction and spread of infections of animals living in federal protected areas.

If there is such a threat, the Ministry of Natural Resources of Russia should study data on it, on the number of affected animals and the permissible /necessary number of their removal, the timing and methods of carrying out these measures within three days. After that, considering this information, an appropriate document is adopted (a decision on the need to regulate the number of wild animals), which is signed by the Minister and published on the official website of the ministry¹⁵⁴.

Paragraph 5 of the order of the Ministry of Agriculture of Russia dated 11/24/03 No.1500 approved the Regulation on Federal Nature Reserve "Mshinskoe Swamp". This provision has been agreed with the regional administration.¹⁵⁵ In our opinion, here is the key excerpts from the document for this paper.

One of the main functions of this state nature reserve is the preservation of hunting animals, their habitats and migration routes. Naturally, when organizing and carrying out measures to reduce their numbers, the number of animals logically decreases as well as the ways of their natural migration are disrupted: due to stress (fright), animals fight off the herd and are randomly distributed throughout the territory, especially if regulation is carried out by shooting¹⁵⁶.

The document prohibits carrying out activities in "Mshinskoe Swamp" that may harm the animals living in it. Naturally, we are also talking about their elimination by hunting. In addition, the document clearly states the obligation of all persons to observe the regime of special protection of "Mshinskoe Swamp" and it says about responsibility for its violation in the eyes of the law.

Thus, it is prohibited not only to "eliminate" (reduce the population) of animals (in our case, wild boars), but also to import vehicles into the territory of the state nature reserve in order to take out the extracted corpse (or to destroy it). If it is possible to carry out these activities without the above decision, in fact, they will be regarded as poaching, and the individuals who organized and carried out them will be brought to appropriate responsibility in the eyes of the law.

Detection of ASF and introduction of quarantine in State Nature Reserve "Mshinskoe Swamp"

Orders of the Governor of Leningrad Region No.734–rg dated 17.10.2018 and No.144–rg dated 01.03.2019

The first case of ASF was detected on June 13, 2018 in Luga district on the territory of the hunting farm "Rancho-Okhota". Six corpses of animals were found and the virus was detected in laboratory conditions by polymerase chain reaction. By Order of the Governor of Leningrad Region No.386–rg dated June 22, 2018, an infected object was introduced at the site of the discovery of corpses, the boundaries of the first and second threatened zones around it were designated¹⁵⁷.

¹⁵³ On Specially Protected Natural Areas: Federal Law No.33–FZ of March 14, 1995 (as amended on December 30, 2020) [Electronic resource]. URL: [https://login.consultant.nj/link/?Req=doc&base=LAW&n=372890&dst=100006\(date of access: 30.03.2021\)](https://login.consultant.nj/link/?Req=doc&base=LAW&n=372890&dst=100006(date of access: 30.03.2021)).

¹⁵⁴ On approval of Procedure for making a decision on the regulation of the number of hunting resources and its form: order of the Ministry of Natural Resources of the Russian Federation of 13.01.2011 No.1 (registered with the Ministry of Justice of the Russian Federation on 16.02.2011 No.19857) [Electronic resource]. URL: [https://login.consultant.ru/link/?req=doc&base=LAW&n=110812&dst=1000000006\(date of access: 30.03.2021\)](https://login.consultant.ru/link/?req=doc&base=LAW&n=110812&dst=1000000006(date of access: 30.03.2021)).

¹⁵⁵ On approval of Provisions on state federal nature reserves: order of the Ministry of Agriculture of the Russian Federation of November 24, 2003 No.1500 [Electronic resource]. URL: [https://login.consultant.m/link/?Req=doc&base=EXP&n=329442&dst=100003\(date of access: 30.03.2021\)](https://login.consultant.m/link/?Req=doc&base=EXP&n=329442&dst=100003(date of access: 30.03.2021)).

¹⁵⁶ Zhavoronkova, N. G., Shpakovsky, Yu. G. Legal Support of Environmental Safety in the Context of Economic Integration of the Russian Federation: monograph. M.: Prospect, 2017. 160 p.

¹⁵⁷ On introduction of restrictive measures (quarantine) due to African swine fever on the territory of Leningrad Region: Order No.386–rg of the Governor of Leningrad Region dated June 22, 2018 No.386–rg [Electronic resource]. URL: [https://login.consultant.ru/link/?req=doc&base=SPB&n=203529&dst=1000000006\(date of access: 30.03.2021\)](https://login.consultant.ru/link/?req=doc&base=SPB&n=203529&dst=1000000006(date of access: 30.03.2021)).

Subsequently, in the period from June 19 to September 28, 2018, a number of successive changes were made to this Order in connection with the identification of more and more dead animals, in particular on September 6, 2018 on the territory of State Nature Reserve "Mshinskoe Swamp" near the village of Gobzhitsy, Luga district¹⁵⁸.

The latest detection of the ASF virus in animals of Leningrad region dates back to February 24, 2019. It was detected on the territory of State Nature Reserve "Mshinskoe Swamp" near the village of Pelkovo in Luga district. By Order of the Governor of Leningrad Region No.144–rg dated March 1, 2019, restrictive measures (quarantine) for ASF were introduced on the territory of Nature Reserve "Mshinskoe Swamp"¹⁵⁹.

The impossibility of organizing and carrying out measures to regulate the number of wild boars in the state nature reserve "Mshinskoe Swamp" by regional and territorial federal services and departments.

Solution to the problem

On the territory of the established epizootic foci and ASF-infected facilities, measures were taken in a timely and rapid manner to eliminate and prevent the spread of the virus in accordance with Veterinary Rules approved by Order No.213 of the Ministry of Agriculture of the Russian Federation dated 31.05.2016. Prompt and thorough approach to the elimination of each focus (infected object), as well as the competently established boundaries of the first and second threatened zones (a strong-willed decision was made not to limit the minimum radius of the zones, but to expand the territory of restrictive measures to the administrative boundaries of the Luga, Slantsy, Volosovo and Kingisepp municipal districts, thereby reducing the number of pigs and wild boars in a large area), prevented the spread of infection to the rest of the region, and also to prevent the virus from entering the industrial pig farms of Leningrad region¹⁶⁰.

The main measures came to thoroughly disinfect the places where corpses were found after their destruction and to prevent the spread of the ASF virus, including by taking measures to regulate (reduce) the number of wild boar to a population density of 0.25 animal unit per 1000 hectares.

The same measures were mandatory on the territory of the infected facility and the epizootic focus in Reserve "Mshinskoe Swamp".

According to the information of the Department of F-RPN for the North-Western Federal District dated 10.04.2019 No.06–25/3462, 40 wild boars were living on the territory of State Nature Reserve "Mshinskoe Swamp" during the quarantine period. Considering the fact that the area of Natural Reserve "Mshinskoe Swamp" is 60,400 hectares, in order to bring the population density of wild boars on the territory of the reserve to the target values of 0.25 animal unit / 1000 hectares, it was necessary to reduce their number by 25 units.

Due to the fact that the Committee for the Protection, Control and Regulation of the Use of Wildlife Objects of Leningrad Region and the Department of F-RPN for the North-Western Federal District are not authorized to carry out measures to reduce the number and migration activity of wild boars in specially protected natural territories of federal significance, the implementation of these measures has not been organized for a long time.

Considering that the failure to implement the above measures posed a threat to the industrial pig breeding of the region, and in order to prevent the further spread of the ASF virus, the Governor of Leningrad Region sent the appeals to the Minister of Natural Resources and Ecology, as well as the chairman of the Permanent Anti-Epizootic Commission of the Government of the Russian Federation with a request to take measures aimed at implementing quarantine measures at the specially protected nature areas of the "Mshinskoe Swamp". Drafts of these appeals were prepared by the Veterinary Department of Leningrad region¹⁶¹.

The situation was further aggravated by the fact that at that time no directorate had been created yet to manage Nature Reserve "Mshinskoe Swamp". That is, any events that were to be held on this territory, had to be directly coordinated with the Minister of Natural Resources and Ecology of the country and carried out only with his direct instructions¹⁶².

June 28, 2019 at a meeting of the Permanent Anti-Epizootic Commission of the Government of the Russian Federation chaired by Deputy Prime Minister of the Russian Federation Alexey Vasilievich Gordeev was reported about the current situation on the territory of State Nature Reserve "Mshinskoe Swamp".

¹⁵⁸ Prosvirnin, G. S. Epizootological Monitoring of Cattle Leukemia and African Swine Fever Using Geoinformation Technologies: dis. ... Cand. Sciences: 06.02.02/ G. S. Prosvirnin. SPb., 2019.430 p.

¹⁵⁹ On introduction of restrictive measures (quarantine) due to African swine fever on the territory of the federal nature reserve "Mshinskoe Swamp" within administrative boundaries of the municipal unit Luga District of Leningrad Region: Order No.144–rg of the Governor of Leningrad Region dated March 1, 2019 No.144–rg [Electronic resource]. URL: <https://login.consultant.ru/link/?req=doc&base=SPB&n=209882&dst=1000000007> (date of access: 12.02.2021).

¹⁶⁰ Report of Director of Veterinary Directorate of Leningrad Region Krotov L.N. at the Antiepidemic Commission in Vyborg on 19.12.19 [Electronic resource] URL: <https://veterinary.lenobl.ru/ru/o-komitete/rukovodstvo/> (date of access: 03.05.2021).

¹⁶¹ Report of Director of Veterinary Directorate of Leningrad Region Krotov L.N. at the Antiepidemic Commission in Vyborg on 19.12.19 [Electronic resource] URL: <https://veterinary.lenobl.ru/ru/o-komitete/rukovodstvo/> (date of access: 03.05.2021).

¹⁶² Berdinskikh S. V. Protection by the prosecutor of public interests in the use of lands of specially protected natural areas // Legality. 2018.No.2.P. 29–33.

Paragraph 2 of section IV of the Protocol of the meeting of the Commission dated 28.06.2019 № 2 ordered to consider assignment of operational management of Nature Reserve "Mshinskoe Swamp" to "Nizhne-Svirsky State Natural Reserve" for organization of anti-epidemic measures in the territory of Nature Reserve "Mshinskoe Swamp", and paragraph 3 of the same section ensures adoption of a package of measures for containment, elimination and prevention of spread of the virus on the territory of State Nature Reserve "Mshinskoe Swamp"¹⁶³.

In compliance with the Protocol of the meeting, the reserve was transferred to the operational management of the Directorate of the Federal State Budgetary Institution "Nizhne-Svirsky State Nature Reserve" by order of the Ministry of Natural Resources of Russia dated October 16, 2019¹⁶⁴, and by the decision of the Ministry of Natural Resources of the Russian Federation dated November 27, 2019, the directorate was instructed to take measures to regulate the number of wild boar on the territory of the reserve.

In fulfillment of the task, the Veterinary Department of Leningrad Region in cooperation with the Directorate of the reserve, developed a plan for anti-epizootic and monitoring measures for ASF in the territory of Reserve "Mshinskoe Swamp" during 2019–2020¹⁶⁵, and also concluded an agreement on the procedure for interaction of Federal State Budgetary Institution "Nizhne-Svirsky State Nature Reserve" with the Veterinary Department of Leningrad Region. Within the framework of this agreement, specialists of the State veterinary Service of Leningrad region were given the opportunity to travel to the territory of the reserve to carry out anti-epizootic measures: monitoring the territory in order to detect the corpses of wild boars and other biological waste, in case of their detection — organizing and carrying out their destruction; sampling biological material from wild boars of the reserve for control laboratory tests for the presence of ASF virus; other measures provided for by veterinary legislation¹⁶⁶.

The draft of the agreement was developed by the Veterinary Department of Leningrad Region, and this is the first practice in the country of documented interaction between the regional veterinary service and the federal institution managing specially protected nature areas of federal significance in order to carry out anti-epizootic measures in protected areas.

Consummation of quarantine measures and cancellation of quarantine

Order of the Governor of the LO of 02.04.2020 No.279–rg

In accordance with the points of the above plan and within the framework of the agreement, from December 2019 to February 2020, measures were taken to reduce migration activity and prepare for the regulation of wild boar numbers in the territory of State Nature Reserve "Mshinskoe Swamp".

In order to control the epizootic situation in the nature reserve, specialists of the State Veterinary Service of Leningrad region took samples of biological material from wild boar for research on ASF. The result of laboratory tests is negative, the genome of the ASF virus has not been detected.

The territory of the reserve with a total area of 60,400 hectares was also monitored for the presence of wild boar clusters, traces of life activity and corpses of wild boars and other biological waste. At the same time, a winter route accounting of the number of wild boar was carried out. In total, as a result of the activities on the territory of the reserve, traces of the presence of two groups of wild boars with a total number of up to 14 animal units were found. According to the final calculations, the density of wild boar was 0.23 animals per 1000 hectares¹⁶⁷.

Thus, the complex of necessary measures provided for by veterinary and environmental legislation was finally carried out in full on the territory of State Nature Reserve "Mshinskoe Swamp",

which was reported on March 6, 2020 at a meeting at the Ministry of Natural Resources and Ecology of the Russian Federation. In accordance with the protocol of the meeting, the structures subordinate to the Ministry of Natural Resources and Environment were instructed to promptly inform the Veterinary Department of Leningrad region about the number of wild boar in the territory of Nature Reserve "Mshinskoe Swamp" and recommended to the Veterinary Department of Leningrad Region to prepare the necessary documents for the lifting of quarantine.¹⁶⁸

¹⁶³ Minutes of the meeting of the Standing Anti-Epizootic Commission of the Government of the Russian Federation dated 28.06.19 No. 2. 6 p.

¹⁶⁴ On amendments to the Charter of the Federal State Budgetary Institution "Nizhne-Svirsky State Natural Reserve": order of the Ministry of Natural Resources of Russia dated October 16, 2019 No.687, approved by order of the Ministry of Natural Resources of Russia dated June 27, 2018 No.294. 2 p.

¹⁶⁵ Plan for anti-epizootic and monitoring activities for African swine fever (ASF) on the territory of the state nature reserve of federal significance "Mshinskoe swamp" during 2019–2020, approved by Director of the Federal State Budgetary Institution "Nizhne-Svirsky State Reserve" November 1, 2019.

¹⁶⁶ Agreement on interaction between the veterinary medicine directorate of Leningrad region and Federal State Budgetary Institution "Nizhne-Svirsky State Natural Reserve".

¹⁶⁷ Letter from the Chairperson of the Committee for Protection, Control and Regulation of Use of Fauna of Leningrad Region No.I-767/2020 dated March 13, 2020.

¹⁶⁸ Minutes of 11.03.2020 No.15–17 / 26–pr of the meeting chaired by the Acting Director of the Department of State Policy and Regulation in the Development of Protected Areas and the Baikal Natural Territory A. I. Grigoriev March 6, 2020.

Having received official information about the achievement of the wild boar population density index of 0.23 animal units per 1000 hectares¹⁶⁹, Veterinary Department of Leningrad Region prepared a package of documents to the Governor necessary for the cancellation of quarantine from the reserve. The result of the performed work was the complete elimination of ASF in the region and the final abolition of quarantine by the Governor's Order of April 2, 2020.¹⁷⁰

Conclusion

We believe that we have fully studied the aspects of regulatory of the organization and conduct of veterinary-preventive and anti-epizootic measures in the specially protected nature areas of federal significance on the example of ASF outbreaks in State Nature Reserve "Mshinskoe Swamp" in Luga district of Leningrad region in 2018–2019. To do this, we have consistently solved all the tasks set in the introduction.

If we talk about the real results of the measures described in the paper to eliminate ASF in Nature Reserve "Mshinskoe Swamp", it is worth noting that their implementation has opened up a number of new prospects for veterinary medicine in Leningrad region. The procedure for imposing and removing restrictive measures (quarantine) on federal specially protected nature areas, which was developed by us and implemented in the period from autumn 2018 by the spring of 2020, it allowed to establish cooperation with the directorate of all federal protected natural areas of the region and to ensure, within the framework of the Cooperation Agreement developed and concluded during the quarantine period, permanent veterinary control in this territory. By the way, this is more than 115 thousand hectares of the region, which now hosts such events as vaccination of wild carnivores against rabies and monitoring studies of wild birds for influenza¹⁷¹.

Based on practical experience in the process of eliminating an outbreak of infection in specially protected natural areas of federal significance and deeply immersed in this problem, we want to announce the following proposals for amendments to veterinary and environmental legislation in order to prevent the occurrence of the same legal conflicts in the future and the prompt elimination of outbreaks of infectious diseases in wild fauna in protected areas of federal significance.

1. To vest the territorial bodies of F-RPN with the right to coordinate decisions on the introduction of restrictions on the use of wildlife objects, including those classified as hunting resources, in specially protected natural areas of federal significance in the subjects of the Russian Federation.

2. To determine at the federal legislative level the possibility of the directorate of protected natural areas to make independent decisions on the regulation of the number of wild animals in the event of an infection in the entrusted territory and an obvious threat of its rapid spread (subject to the coordination of such a decision by the territorial body of F-RPN and the regional authority in the field of veterinary medicine).

3. To consolidate the developed mechanism between managerial bodies of nature reserves and veterinary executive authorities in compliance with in the new edition of Federal Law 33–FZ dated 14.03.1995 (recommend to all managerial bodies of federal nature reserves to execute agreements with regional veterinary executive authorities).

4. To supplement the legislation in terms of competent interaction with the private sector, the impact on it and compensation for its costs during the elimination of infection (increase fines for non-compliance with requirements, establish compensation to hunting users for wild boars obtained under the regulation of the number of wild boars by analogy with the alienation of pigs in the threatened zone).

5. To establish a clear procedure for determining the population density of wild animals (prescribe whether to consider only the area of possible habitat when calculating, or to take into account the entire area of the territory with reservoirs, mountains, etc.).

I believe that these issues will be taken into account when making the next changes to the veterinary and environmental legislation of the Russian Federation, this will make a significant contribution to maintaining the epizootic well-being of the territory of our country and, as a result, strengthening and further development of its agro-industrial complex.

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¹⁶⁹ Letter from the Chairperson of the Committee for Protection, Control and Regulation of Use of Fauna of Leningrad Region No. I-767/2020 dated March 13, 2020.

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¹⁷¹ Antiepidzootic measures in specially protected natural territories of Leningrad region [Electronic resource]. URL: <https://veterinary.lenobl.ru/ru/protivoepizooticheskie-meropriyatiya-na-osobo-ohranyaemyh-prirodnyh-te/> (date of access: 03.05.2021).

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