

## Article

# Regulation of Interaction between Hunters and Land Users: A Comparative Legal Study

Natalia Lisina <sup>1</sup>, Aleksandra Ushakova <sup>1</sup>, Svetlana Ivanova <sup>2,\*</sup> and Alexander Prosekov <sup>3</sup><sup>1</sup> Law Institute, Kemerovo State University, Kemerovo 650000, Russia<sup>2</sup> Department of TNSMD Theory and Methods, Kemerovo State University, Kemerovo 650043, Russia<sup>3</sup> Laboratory of Biocatalysis, Kemerovo State University, Kemerovo 650043, Russia

\* Correspondence: pavvm2000@mail.ru; Tel.: +7-384-239-6832

**Abstract:** Hunting is a complex type of nature management. In its process, objects of the animal world and the earth are used. Obviously, the relationship between hunters and other land users should be clearly regulated by legislation. The purpose of this work was to identify common and specific problems for different systems of interaction between hunters and land owners and to assess the possibility of spreading the existing experience of solving problems faced by the hunting sector to different countries. Three main models of the relationship between hunters and land users (direct interaction, cooperation, and division of rights) are considered. Each of the models performs its tasks and has its own degree of efficiency. The interaction organization model adopted in a country depends on the specifics of the conditions in which the hunting farm develops including economic, property, legal, social, and state aspects. It is established that the availability of hunting is best ensured within the framework of the cooperation model, the observation of the rights of owners—within the direct interaction model, the convenience of management within large territories of wild animal habitats—within the division of rights model. At the same time, it is incorrect to single out the best model by all criteria or to designate a model that is universally suitable for different conditions. In the hunting farms of Russia, the described problems of interactions are not related to the potential of the division of rights model as such, but to a lack of understanding that this particular model requires increased attention of the state. The proposals aimed at improving the practice of developing and applying models of relationships between hunters and land users are represented.

**Keywords:** law; hunting grounds; land use; wildlife management; rights and duties



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## 1. Introduction

Traditionally, hunting is based on the consumption of wildlife resources, which are restored based on the natural possibilities of nature for self-restoration. However, in modern hunting farms, the practice of managing wild animal populations in which hunters themselves become “game producers” in some way, is gaining pace. Technologies are actively used to increase the number of animals by improving the food supply and combating diseases of wild animals. Such strategizing is actively conducted to manage the populations of those big game species that are most in demand by hunters (deer, boars, etc.) (Ginelli 2012; Ivanova et al. 2022a). Carrying out such measures amidst the spread of sport hunting becomes an economic necessity determined by the commercial service provided by hunting clubs and organizations to customers. The most advanced hunting farms are gradually moving to a broader management concept, which implies maintaining the optimal number of a whole complex of wild animal species<sup>1</sup>. As a result, in many countries, the hunting economy acquires the importance of an effective tool for wildlife management used along with state hunting licenses and wildlife conservation (Allgood et al. 2022).

<sup>1</sup> This concept has been called “green hunting”, “ecological hunting” or “sustainable hunting” (Ginelli 2012).

No less significant is the role of hunters in financing activities for the conservation of wildlife. Thus, in the USA, the decline in the number of hunters is considered a serious problem, since 65% of the state wildlife agency budget revenue depends on hunters and fishermen. “Hunters generate conservations funds via hunting license sales and permits, in addition to taxes levied under the Federal Aid in Wildlife Restoration Act of 1937, via an excise tax of 11% on firearms, archery equipment, and ammunition, and a 10% tax on handguns” (Price Tack et al. 2018). The American Model of Wildlife Conservation relies precisely on hunters and fishermen, practically ignoring the role of other categories of the population in wildlife conservation, showing one-sidedness in this regard (Fedpausch-Parcer et al. 2017).

Nevertheless, for the full use of the potential of hunting and hunting economy in the field of nature protection, it is necessary to create a number of legal and organizational prerequisites. In our opinion, one of the most important prerequisites is the formation of incentives for maintaining active interaction between hunters and landowners and coordinating their actions.

Hunting is one of those activities that are based on the simultaneous use of several natural resources with different management modes. On the one hand, hunters use the resources of the animal world, and on the other, those objects that make up the habitat of wild animals (lands, forests, water areas of rivers and lakes). The impact of hunters on the habitat can vary from minimal—the movement of hunters and hunting dogs—to purposeful management of the state of the population and habitat, involving the placement of aviaries, feed fields, feeders, and other hunting facilities. Therefore, when regulating hunting, not only issues related to the extraction and breeding of wild animals should be resolved, but also the procedure for the use of lands, forests, or water areas that make up the habitat by hunters should be determined.

Like most other natural resources, the animal world is located on a certain territory and its location is determined based on spatial landmarks. Each population of wild animals has its own habitat. Usually, the area of the habitat of a population is much larger than the area of land used for agriculture and/or forestry. In this sense, D. Lueck (2018) refers wildlife to landscape assets, as opposed to land plots that form the small-scale assets level. In the absence of specially organized management at the landscape assets level, the quality of the wildlife habitat should naturally deteriorate, since users of small-scale assets often have neither the opportunities nor the incentives to improve it (Lueck 2018).

One of the most effective options for managing the wildlife habitat is the organization of the coordinated use of a group of land plots simultaneously by owners and hunting tenants. Hunting management can be combined with many types of land use. For example, in the USA, agricultural areas that are temporarily not used for agriculture and included in the Conservation Reserve Program are often used for hunting activities (Ferris and Siikamäki 2009, p. 15). With proper organization of interaction between hunters and the main land users, such joint use of land can be beneficial not only for hunters, but also for land users. Firstly, an additional land use option can be a source of additional income for the land user. Secondly, hunting activities can have a positive impact on the economic efficiency of the main type of land use. Thus, hunters are able to control the number of herbivorous wild animals, as well as manage their movement by placing feeders, licks, plots sown with forage grasses, and other objects that attract animals. The benefits of hunting farms for reforestation are significant. Herbivorous wild animals cause serious damage to forest sites without their management (for example, in France, there is a problem of damage to saplings of young trees in areas of reforestation by deer and wild boars (Office National des Forêts 2022)). Special measures are being taken to manage wild animal populations in such areas.

This work presents a comparative study of the law of some countries conducted in order to identify and compare various options for organizing the interaction of hunters and land users. The purpose of the work is to identify common and specific problems

for different systems, and to assess the possibility of spreading the existing experience of solving problems facing the hunting industry to different countries.

## 2. Results

Hunting legislation should take into account the peculiarities of hunting as a complex type of nature management, including the simultaneous use of at least two natural resources: wild animals and land. Therefore, hunting should be understood not only as a type of wildlife use, but also as a type of land use. At the same time, as a rule, hunting use occurs simultaneously with other types of land use. This circumstance determines the need for a clear regulation of the relationship between hunters and other land users in terms of sharing the same piece of land.

The relationship between hunters and land users can be built on the basis of direct contractual relations between them (direct interaction model), by combining them into a cooperative that becomes a link (cooperation model), and by organizing interaction between hunters and the state-owner of wild animals with the assignment to land users of the obligation to undergo the use of their lands for hunting purposes (division of rights model).

The applied model depends on many factors, such as the ratio of private and public ownership of land, the size of land holdings, historical traditions of understanding hunting as an elite or publicly available type of activity, and the peculiarities of the legal system of a particular country. In some legal systems, the models we identify can be combined with each other (for example, the model of direct interaction is well combined with the model of cooperation).

### 2.1. Direct Interaction Model (Using the Example of the USA)

#### 2.1.1. Organization of Interaction between Hunters and Land Users

The key feature of the direct interaction model is the presence of direct legally significant connections between hunters and land users. To organize the use of private land, such connections are secured by using mainly private legal means (conclusion of an agreement). However, public legal mechanisms can also be used to organize the hunting use of public lands. In both cases, hunters and land users interact directly with each other. Let us consider ways of organizing direct interaction between hunters and land users on the example of the USA, where this model is dominant.

The legal basis for the use of private land by hunters is stipulated in the legislation of individual states. At the same time, the specific legal requirements are very different from state to state. Mark R. Sigmon identifies two main variants of state legislative decisions (Sigmon 2004):

- (1) the legislation of about half of the states requires that hunters receive explicit landowner's permission if they need to cross the borders of *any* private property (such permission can be issued using a hunting lease agreement, the terms of which will be discussed in the next section);
- (2) the legislation of another part of the states requires obtaining a landowner's permit only for the hunting use of posted lands<sup>2</sup>. In the specialized literature, there are proposals on the transition from physical posting to centralized posting by using the property database and GPS system (Hynes 2013).

If the lands are unposted, hunters and other recreational users can freely stay on such lands without the need to obtain permission from the owner. In the judicial practice and legal doctrine of such states, it is considered that "the public has an implied license to use unposted land for recreation" (Hynes 2013). Mark R. Sigmon examines this presumption

<sup>2</sup> The term of posted lands in the legislation of the states refers to lands which the owner has indicated, with the help of special signs, that the presence of unauthorized persons on their site is not allowed. The legislation of each state establishes detailed requirements for the content, size, placement, and other parameters of such signs.

in detail. If the owner has posted their land, then the stay of third parties on their site is possible only with the direct permission of the owner. At the same time, posting statutes usually allows the owner to issue such a permit to individual hunters, still excluding the possibility of all other hunters staying on their land (Sigmon 2004, p. 563). In this case, a hunting lease agreement will also be concluded.

The use of public lands by hunters is regulated by federal law. According to a study by Jan G. Laitos and Thomas A. Carr, since the 1960s, federal acts have been targeting agencies managing federal lands to consider recreation and conservation as the dominant uses of public lands (Laitos and Carr 1999, pp. 162–66). The purposes of using different types of public lands are stipulated in federal legislation, and the order of use is established directly by the agency that manages this or that type of land<sup>3</sup>. There are many varieties of public land regimes: hunting is usually allowed on some of them, while hunting is prohibited on others. As a rule, hunting is allowed on lands managed by the Bureau of Land Management (BLM)<sup>4</sup> (10.6% of US lands), lands managed by the Forest Service<sup>5</sup>, including National Forests (8.4% of US lands), and lands managed by the Wetland Management Districts<sup>6</sup>. The regime of lands classified as National Parks, State Parks, and National Wildlife Refuges does not allow hunting.

The regimes of some types of federal lands assumes free public access, and for some it is allowed to charge a fee by the land management agency (as a rule, the fee is more affordable for the public than hunting leases). To organize the use of federal lands by different groups of users, federal agencies can use both private law and public law means.

### 2.1.2. Hunting Lease

As already noted, in the case of using private lands (except unposted lands), hunters are required to obtain permission from the land owner. As a rule, such a permit is issued using a hunting lease agreement.

A hunting lease is an agreement between a landowner (lessor) and hunters (lessees) that grants the hunter access rights for hunting game animals (and other specified activities) on the landowner's property for a specified time period (Miller 2016, p. 2). The parties are free to determine the terms of this agreement. Therefore, different variants of hunting leases have become widespread. So, the contract can be short-term (from one day to several weeks, but less than a season) or long-term (for one season, one year, several years); paid or free; allow hunting for any kind of game or only certain game; allow hunting by any means or only specifically defined (for example, only hunting with rifles without using traps) (Miller 2016; Fambrough 2015).

Despite its name, hunting lease, American lawyers do not consider it a type of land lease agreements. So, Judon Fambrough (2015) from Texas writes: "The so-called Texas hunting lease is not, in fact, a lease but rather a license. Technically, a lease is a contract that conveys exclusive possession or control of land to another for a specified period. A license, on the other hand, grants permission to do something that otherwise would not be allowed or would be illegal". Such a legal structure allows the use of land simultaneously by both the owner of the land and hunters, for different purposes. It is no coincidence that in the economic practice of the United States, a hunting lease is considered as an additional source of income for owners of farms or ranches and logging companies, which does not imply the termination or restriction of the main type of activity or the disposal of the plot from the ownership of the owner. From this point of view, the possibility of concluding

<sup>3</sup> A detailed analysis in relation to different types of federal lands is published in the article (Laitos and Carr 1999).

<sup>4</sup> Bureau of Land Management. Hunting. Available online: <https://www.blm.gov/visit/hunting> (accessed on 23 January 2023).

<sup>5</sup> Forest Service. Recreation Fees and Passes. Available online: <https://www.fs.usda.gov/visit/passes-permits/recreation-fees-passes> (accessed on 23 January 2023).

<sup>6</sup> U.S. Department of the interior. Blog. Available online: <https://www.doi.gov/blog/everything-you-need-know-about-hunting-public-lands>; Windom Wetland Management District. Facility Rules and Policies. Available online: <https://www.fws.gov/refuge/windom-wetland-management-district/visit-us/rules-policies> (accessed on 23 January 2023).

several hunting lease agreements on the same plot with different groups of hunters is also interesting—in this case, none of the tenants receives the plot in exclusive possession. So that the interests of different groups of hunters do not collide, various solutions are used, for example, the conclusion of an agreement with different groups of hunters for hunting different types of game, a separate contract for hunting waterfowl, and a separate contract for hunting deer (Miller 2016), which usually involves different hunting dates.

The fact that the land plot, in respect of which hunting leases are concluded, remains in the possession and use of the owner, has another important consequence—unless otherwise stipulated in the contract, it is the owner of the land who must take measures to organize the hunting economy (improvement of the forage reserve, arrangement of feeders and licks, creation of pebble beds and flutter grounds for birds and, finally, the creation of infrastructure for the hunters themselves—hunting bases, towers, places for training dogs, and target shooting, etc.) (Miller 2016). The owner of the land can run a hunting farm independently or conclude a contract with a company specializing in the wildlife management. In cases where hunting leases are concluded for a long time, their terms can include the wildlife management obligations of hunters. For example, in exchange for a reduction in fees under the contract, hunters can undertake to fight poaching, organize animal feeding, or take over all the work on organizing proper hunting (Miller 2016; Fambrough 2015). The possibility of redistributing responsibilities in wildlife management is especially relevant when the tenant is not a single hunter or a group of hunters, but a hunting club.

### 2.1.3. The Relationship of the Hunting Right with the Right of Ownership of Land and the Right to Wild Animals as a Resource

At the conclusion of the contract, not only the right of access to the land plot is granted, but also the full or partial transfer of the right to hunt on the land plot to the tenant. The transfer of the right in this way is legally possible since the US law proceeds from the connection of the hunting right to the ownership of the land plot. This is manifested, for example, in the fact that the landowner can set not only conditions regarding access to the land plot, but also conditions that determine the parameters of hunting itself (hunting methods: any types, only with guns, only with bows, and other variations), types of hunted game (any types of animals; only deer, only waterfowl, etc.). Finally, they can limit the amount of game they obtain. Moreover, the owner of the land may provide a condition under which they retain the right to hunt on their land plot (partial transfer of the right to hunt) for themselves and their relatives.

What is the theoretical significance of this provision? We are convinced that consideration of the right to hunt on a land plot as an element of the right of ownership of a land plot is one of the key conditions for the application of direct interaction or cooperation models of organization of interaction between hunters and land owners. In those countries where the ownership of a land plot is separated from the right to hunt (for example, in Russia), the division of rights model naturally dominates. Moreover, other models in such countries are unacceptable, since the owner of the site is legally not authorized to make decisions on the use of wildlife on the site. They can only grant the right of access to the site, but not the right to hunt on the site.

It should be noted that for legal hunting, obtaining the right to hunt on a land plot is not enough, in addition to this, it is necessary to have a state hunting license for the game species being hunted, as well as a permit for the use of firearms. A hunting license is one of the most universal tools of public administration used in many countries. In the USA, licenses for hunting most animal species are issued by authorized state authorities (Arnosti and Randolph 2019), with the exception of some species of waterfowl, for the extraction of which it is necessary to obtain a federal license (the USA participates in the Convention on Wetlands (Ramsar Convention)). The license defines one or more types of animals allowed for hunting and the permitted number of hunted animals. Licenses can be sold to hunters, both directly by public authorities, and through a system of specialized stores. In case of a shortage of licenses, lotteries are held in many states to distribute them.



The key management principle remains unchanged—the number of licenses is limited by an indicator that supports the desired population of regulated wild animal species (Arnosti and Randolph 2019). Funds from the sale of licenses are one of the main sources of financing of state measures in the field of wildlife protection (Price Tack et al. 2018).

The powers of the state for licensing, as well as public administration in the field of hunting are based on the fact that currently the animal world is recognized in the United States as a Public Trust resource (Organ et al. 2012). Public Trust Doctrine has been developing for two centuries and has been widely recognized in the judicial practice and legislation of the United States (Sagarin and Turnipseed 2012). According to this doctrine, wildlife resources are not recognized as objects of private property, but are in the trust management of the country in the interests of present and future generations. The main responsibilities of the state as a trustee are to achieve a balance between ensuring the availability of the use of resources by citizens and the preservation of the resource itself. American authors often compare the responsibilities of a public trustee to manage a Public Trust with the responsibilities of a private trustee under a Fiduciary Trust agreement, allowing analogies to be established between these concepts (Sagarin and Turnipseed 2012). This approach is not typical for the legal thought of the countries of the Romano-Germanic system<sup>7</sup>.

#### 2.1.4. Additional Elements of the Direct Interaction Model in the USA: Mechanisms for Ensuring Hunting Assessment and Cooperation of Land Owners

The direct interaction model of interaction between landowners and hunters can be considered the most flexible and accurate in terms of determining the mutual rights and obligations of the parties. It protects the interests of both sides well and provides many opportunities for organizing a hunting business. However, it is accompanied by two significant problems: poor accessibility of hunting for the general population and difficulties in implementing unified management of the habitat of wild animals at the landscape level. Let us consider how these shortcomings are compensated in the management practice of the United States.

The first vulnerable point of the direct interaction model is ensuring access of hunters from the general population to game habitats. The direct interaction model is based on the maximum consideration of the will of the owners of land plots. The owner independently decides whether to allow other persons to hunt on their site or not. Very many owners do not want to let strangers into their plots for security, economic, and even ideological reasons. Moreover, the owner is free to determine the price of the contract, they are limited only by the laws of supply and demand. As a result, there are problems of high cost of hunting, and extreme limitations of opportunities for free or budget hunting<sup>8</sup>. In the conditions of the dominance of private ownership of land, the transformation of hunting into an elite type of activity is natural. In the USA, about 28% of the land is federally owned (Congressional Research Service 2020). In different states, the ratio of land in private and public ownership is very different (the share of federal-owned land ranges from 0.3% (Connecticut) to 80.1% (Nevada)) (Congressional Research Service 2020). Most of the public lands are located in the less populated western states<sup>9</sup>. Without taking special measures, hunting in the eastern states remains inaccessible to financially less well-off segments of the population.

Nevertheless, in order to ensure the concept of accessibility of hunting for the general population (Organ et al. 2012), the United States is taking measures to make additions to the direct interaction model. There are two directions: free or inexpensive access of hunters to publicly owned land, and Walk In Hunting Assessment programs that provide free access to private land for hunters.

<sup>7</sup> The famous French comparatist René David noted that the concept of trust is the brainchild of the law of justice and is unknown to the law of the countries of the Romano-German legal system (David 1988).

<sup>8</sup> In the USA, these problems are very acute and have already caused a decrease in the number of hunters (Eliason 2021).

<sup>9</sup> Federal lands. [https://en.wikipedia.org/wiki/Federal\\_Lands](https://en.wikipedia.org/wiki/Federal_Lands) (accessed on 23 January 2023).

As part of the Walk In Hunting Assessment (WIHA) programs, the state administration pays participating landowners a certain amount to fully open the holdings to licensed hunters (Niedermier 2019). The pioneer of the introduction of this program is considered to be the state of Kansas, where more than a million acres of private land have been opened in this way for free access by hunters (in Kansas, only 0.5% of the land is federally owned, the share of land in private ownership is approaching 99% (Congressional Research Service 2020)).

The second direction of state regulation with the dominance of the direct interaction model of interaction between land owners and hunters is the wildlife habitat management system at the landscape assets level. The need to create such a system is due to the peculiarities of wild animals as a natural resource (the boundaries of the habitat of populations are often much wider than the limits of individual landholdings, as a result, wildlife is relatively poorly manageable by the owners of individual land plots) (Lueck 2018). The direct interaction model itself does not create any mechanism for combining the efforts of owners of different land plots. That is why, currently, contracts between hunters and landowners are usually supplemented with measures specifically aimed at solving this issue.

In the USA, the wildlife habitat management system at the landscape assets level is formed by the efforts of state wildlife agencies in close cooperation with public organizations<sup>10</sup>. The greatest attention is paid to the management of the deer population—the most popular type of game animals in the USA. The system is based on the participation of land owners and hunters in Deer Management Assistance Programs and their association in deer management cooperatives. Deer Management Assistance Programs are organized by state wildlife agencies and involve providing information, scientific and organizational assistance to land owners, their training, and coordination of their actions<sup>11</sup>. To participate in the program, the owner of the land must have a plot of a certain minimum area, or participate in the program by teaming up with other owners (Matzenbacher 2022). This encourages the association of various persons interested in improving the habitat of deer in deer management cooperatives. It is worth noting that in the USA, the association of landowners and hunters takes place on a voluntary basis and is not regulated at the legislative level. Deer management cooperatives “are simply collections of landowners and hunters who agree to abide by similar deer management guidelines over a larger area” (Adams and Ross 2017, pp. 27–29). Such cooperatives make it possible to plan a single set of measures to improve the habitat of wild animals on a large territory, combine the labor efforts of owners, and conduct their training and information sharing. A group of researchers led by Pruitt et al. (2022) analyzed various activities of cooperatives and found that the areas directly related to the conservation of deer habitat were the most popular<sup>12</sup>. Cooperatives also contribute to informing owners about government cost-share programs (Conservation Reserve Program, Environmental Quality Incentive Program); however, according to the Pruitt study (2022), not all owners are willing to participate in such programs. This is quite understandable—personal labor efforts are often simpler and more accessible than co-financing mechanisms.

Deer management cooperatives perfectly fit into the direct interaction model, since they allow owners to voluntarily improve the properties of the wildlife habitat to generate more income. Despite their name, such cooperatives have little in common with those that are characteristic of the cooperation model of interaction between hunters and land

<sup>10</sup> The participation of hunters and landowners in specialized public organizations, such as the National Deer Association, is widespread. <https://deerassociation.com/> (accessed on 23 January 2023).

<sup>11</sup> Deer Management Assistance Programs are implemented in 22 of 46 US states. Deer Management Assistance Programs are most common in the southern and eastern states, that is, where there is a maximum percentage of land in private ownership. In none of the western states, where public ownership dominates, are such programs organized. The distribution map of the program is published on the following resource: (Matzenbacher 2022).

<sup>12</sup> According to the study, the following areas were the leading ones: (1) increasing days per year spent on habitat management (e.g., food plots, timber stand improvement, prescribed fire), and (2) specifically managing habitat for species other than white-tailed deer (Pruitt et al. 2022).

users. In particular, deer management cooperatives are not a link between land owners and hunters, since membership in them does not grant the right to hunt on the lands of all owners belonging to the cooperative. The cooperative does not receive income from the hunting use of land, but exists at the expense of contributions from its members. It also does not bear legal responsibility for the state of the wildlife on the lands of individual owners.

## 2.2. Cooperation Model (Using the Example of France)

### 2.2.1. Municipal Hunting Associations as the Basis of the Cooperation Model of Interaction

The main criterion for distinguishing the model of cooperation is the interaction of land owners and hunters organized through a cooperative, which members are both land owners and hunters at the same time. This model fits well with the direct interaction model. The legislation may provide for the use of a model of cooperation in some cases (as a rule, for organizing hunting on small land plots) and at the same time a model of direct interaction in other cases (for organizing hunting on large-area private lands or on public lands). It is this division that can be seen in the law of France.

The possibility of sharing the two models mentioned above is connected with the fundamental unity of their basic basis—in both cases, the right to hunt on the site initially belongs to the owner of the site.

As in the USA, wild animals cannot be privately owned in France, but while wild animals are considered a public trust in the USA, in France they belong to *res nullius* (Jeangène Vilmer 2008). The concept of *res nullius* (ownerless things) came from Roman law and means those things that can become part of the property of a particular person as a result of an act of acquisition (occupation), and until that moment remain ownerless. Acquisition (occupation) refers to the initial methods of acquiring property rights based not on the rights of the previous owner, but directly on the actions of the person acquiring the right. The acquisition is based on the right of appropriation by the unilateral will of the occupier, which is granted by law to certain categories of persons in relation to *res nullius*<sup>13</sup>. As for hunting, the condition under which the acquisition of wild animals is allowed is: (a) the right to hunt in a certain place, and (b) the availability of a license for hunting this type of animal. The act of acquisition is both trapping and shooting a wild animal.

Thus, the owner of the land plot does not have the right of ownership of wild animals located on the plot. However, they have the right to hunt on their site, which is one of the conditions for the legality of hunting. The right to hunt on a plot of land in France is considered an attribute of ownership, one of the rights to use the property included in the ownership right (Domas-Descos 2012). The owner may reserve this right for themselves or transfer it to a third party (for example, under a special lease agreement, to a tenant of a rural building or a municipal hunting association). For many departments of France, as a general rule, the free transfer of hunting rights to the municipal hunting association is provided. This is what the cooperation model of interaction between land owners and hunters is based on.

The legal basis for the establishment of hunting associations and federations in France is provided by the Code on the Environment (Code de l'Environnement). The corresponding articles were introduced into the Code in 1964 by the Loi Verdeille Law (in French-language literature, these articles of the Code are defined as Loi Verdeille). The Code prescribes the mandatory establishment of municipal hunting associations (Association Communale de Chasse Agréée, hereinafter ACCA) in some departments of France, in other departments ACCA can be created on an initiative basis. According to the National Hunting Federation of France, ACCA have been established in 70 out of 101 departments, of which 29 departments have associations in all municipalities, and in 41 selectively<sup>14</sup>. The structure

<sup>13</sup> The theoretical provisions of *res nullius* and occupation are set out in the work of the famous Russian civil law theorist Boris Borisovich Cherepakhin (2001).

<sup>14</sup> L'Association Communale de Chasse Agréée (A.C.C.A.) [http://www.fedechasseurslandes.com/IMG/pdf/plaquette\\_acca.pdf](http://www.fedechasseurslandes.com/IMG/pdf/plaquette_acca.pdf) (accessed on 23 January 2023).



of hunting associations and federations in France is a complex multi-level system. ACCA are united into hunting federations of departments, and those into the national hunting federation. It is possible to form additional links in the form of inter-municipal associations.

By their legal status, hunting associations in France very little resemble American hunting clubs or deer management cooperatives. The main difference is that hunting associations in France are entrusted with a number of public functions, despite the fact that they are subjects of private law and are not part of the system of state bodies. In this regard, ACCA in the judicial practice of France are recognized as public services (*service public*) (Gervasoni 2012). Public services may be subjects of public law and some authorized subjects of private law who are engaged in generally significant activities, the main purpose of which is public benefit. In relation to ACCA, such functions are the following: ensuring high technical organization of hunting, promoting game breeding in compliance with agro-forest-hunting balance, regulating the number of harmful animal species, and compliance with hunting plans (article L 422-2 Code de l'Environnement).

ACCA members are divided into official and external. The right to be an official member of the ACCA legally depends on the facts of residence or possession of real estate on the territory of the municipality (article L 422-21 Code de l'environnement). The permissible percentage of external members is approved by the general meeting of each ACCA, in pursuance of this decision; the ACCA board accepts external members (their membership lasts one year). Any ACCA member can hunt on the entire territory of the association (article L 422-22 Code de l'Environnement).

The main source of funding for ACCA activities is membership fees. Among the official members, membership fees are paid only by those persons who have a hunting permit. Owners of land plots who are not hunters do not pay contributions; although, they have the right to vote at the general meeting. Official ACCA members pay dues in a smaller amount than external members, which ensures the availability of hunting for the local population (the right of official membership is granted to local residents and persons with real estate in the area).

Compliance with the interests of landowners in the process of using their plots is legally guaranteed through several mechanisms. Firstly, the owners are official members of the ACCA with the right to vote at the general meeting and with the right to be elected to senior positions in the ACCA. In addition, annual participation in the general meeting allows the owner to receive information about all planned actions of ACCA concerning its property and hunting infrastructure, as well as establish personal contacts with members of the ACCA board. Secondly, the placement of any objects of hunting infrastructure is allowed only with the prior consent of the owner of the site (Article 4 of the ACCA Standard Internal Regulations<sup>15</sup>). Thirdly, in the standard internal regulations of ACCA, much attention is paid to the establishment of special rules related specifically to the interests of agriculture (prohibition to pass through arable land, vineyards, vegetable and fruit crops or nurseries, as well as through areas where the harvested crop or work sites are located, the obligation to clean up garbage, and many others). Violation of these rules entails calling the guilty hunter to the ACCA board with an oral examination of the case, as a result of which a fine (up to EUR 150) may be imposed on them, and for repeated violations, suspension of the right to hunt or expulsion from the ACCA (the second of these measures applies only to external members of the ACCA). Finally, fourthly, land owners who are not engaged in hunting and do not have a hunting permit are not required to pay membership fees to ACCA.

<sup>15</sup> The standard regulations of the ACCA are published by the departments of hunting federations (the middle link of the French system of hunting associations and federations). On their basis, the ACCA approves its internal hunting regulations (minor additions are allowed). Monitoring of the websites of different departments of federations has shown that the standard regulations are almost identical. We quote the version of the Department of the Hunting Federation of the Rhone and the metropolis of Leon. *Modèle-type-règlement-intérieur-et-de-chasse // La Fédération Départementale des Chasseurs du Rhône et de la Métropole de Lyon*. [https://www.fdc69.com/wp-content/uploads/A\\_2.4-Mod%C3%A8le-type-r%C3%A8glement-int%C3%A9rieur-et-de-chasse.pdf](https://www.fdc69.com/wp-content/uploads/A_2.4-Mod%C3%A8le-type-r%C3%A8glement-int%C3%A9rieur-et-de-chasse.pdf) (accessed on 23 January 2023).

The example of France shows that the cooperation model of interaction between hunters and land users provides well for the interests of hunters. On the one hand, such a system allows representatives of all segments of the population to hunt—hunting in France is very accessible and affordable (Le Goffe 2012). On the other hand, a multi-level system of hunting associations and federations allows for the rational management of wildlife and its habitat. The unavoidable insufficiency of labor, and intellectual and financial resources of individual ACCA is compensated by assistance from the hunting federations of departments, and the presence of a nationwide link of the system—the national federation of hunters—allows for planning and coordinating the activities of associations on a wide territorial scale.

The main drawbacks of the French cooperation model are related to the compulsive transfer of hunting rights to the ACCA and the lack of economic mechanisms to create hunters' interest in maintaining the game that do not harm agriculture or forestry. Let us consider how these two issues are reflected in French law.

### 2.2.2. The Problem of the Compulsory Transfer of Hunting Rights to the ACCA

Despite the fact that ACCA is considered a legal entity of private law, it is created not as a result of the will of the owners of the plots, but on the basis of an administrative decision taken by the Ministry of Environment on the recommendation of the prefect of the department. This decision determines the list of municipalities in the territory of this department where ACCA should be established. If a municipality is included in this list, then the owners of land plots in the municipality are legally obliged to transfer their hunting rights to the created association free of charge, with the exception of certain cases established by law (articles L 422-10–L 422-14 Code de l'Environnement). These exceptions are based on: (a) security considerations and the interests of agriculture (plots within a radius of 150 m from housing and plots surrounded by a fence); (b) a special regime of public ownership (plots within the *domaine publique*); (c) the will of the owner of the plot, namely:

- land plots that are privately owned by the state in case the competent authority decides to exclude them from the ACCA territory;
- plots which owners have objected to the inclusion of the site in the ACCA—provided that the plot is larger than the minimum established size, which is, as a general rule, 20 hectares, but may be smaller (areas with undried marshes, isolated ponds) or larger (in mountainous areas);
- plots of any size which owners have renounced the right to hunt in accordance with the established procedure.

In this case, the most important legal problem of the cooperation model arises—a strong restriction of land ownership. The rights of owners of small plots of land to object to hunting on their land are seriously limited, and until 1999 their disagreement had no legal significance at all. This issue became the subject of consideration by the European Court of Human Rights in 1999 during the well-known *Chassagnou vs. France* trial (Harpum 1999). At the time of the case examination, the entry into the association was legally obligatory for small owners. The Court found that the relevant provisions of French law violated two articles of the European Convention on Human Rights: article 11 (right of freedom of association) and article 1 of Protocol 1 (right of free use of property) (Harpum 1999). As a result, the law *Loi n° 2000-698 du 26 juillet 2000* was adopted, which gave owners of small plots the right to object to the inclusion of their land in the ACCA due to their personal beliefs. This right is of a personal nature. If the land is sold, the new owner must also file an objection, otherwise after 6 months their plot will be attached to the ACCA territory (Domas-Descos 2012).

To exercise this right, two conditions must be met. First, by objecting to the inclusion of their land in the ACCA territory, the owner must simultaneously refuse to exercise their right to hunt on the ACCA territory. The second is that the owner's objection does not take effect immediately, but only when the boundaries of the ACCA territory change according

to the plan (this happens once every five years) (Domas-Descos 2012). At first glance, these two conditions seem quite strict, but a closer look shows how necessary they are to ensure a balance of interests of the parties. The first condition protects against possible abuses (the owner should not be able to prohibit ACCA members from hunting on their land plot, citing personal beliefs, but at the same time continue to hunt on the plots of other ACCA members). The second condition allows ACCA to plan long-term hunting activities without the risk of unexpected changes in the boundaries of the territory.

Owners of large land plots (more than 20 hectares) are freer. They may object to the inclusion of the site in the ACCA for any reason, including for the purpose of organizing an independent hunting farm on the site in order to generate income. After that, such an owner can prohibit hunting on their site, independently conduct a hunting farm, or transfer their hunting rights to lease (*bail de chasse*) to a hunting club or an individual hunter. This shows the elements of the direct interaction model in France.

The direct interaction model is also used in France to organize the hunting use of state forests (*forêts domaniales*), where there is a serious need to reduce the number of herbivorous wild animals, especially in areas of reforestation (Office National des Forêts 2022). The reasons for the problematic nature of this issue are, among other things, of a legal nature—national forests are not part of the territories of hunting associations, as they belong to the *domaine public*. To solve this problem, the National Forest Administration (L'Office National des Forêts) concludes hunting rights lease agreements (*bail de chasse*) with hunting organizations (including ACCA). The procedure for concluding and executing such contracts is regulated by articles R213-45–R213-59 of the New French Forest Code (*Code forestier (nouveau)*). Contracts can be concluded both at auction and directly for up to 12 years. The most important obligation of the lessee under such an agreement is to comply with the hunting plan, which determines the minimum and maximum number of animals that must be removed from the habitat (for forestry purposes, it is the minimum production figures that are more relevant).

### 2.2.3. Agro-Forest-Hunting Balance

In France, the problem of causing damage to agriculture and forestry by wild animals is acute. The economic mechanisms of organizing modern hunting do not sufficiently stimulate hunters to maintain an optimal number of game (Le Goffe 2012)—hunting farms are interested in maximizing the number of game. Modern methods of hunting allow them to act as “game producers”, which they successfully cope with (Ginelli 2012). However, in the conditions of relatively small and widely developed areas of France, this causes significant damage to agriculture as a result of constant damage to crops and plantings by wild animals. A similar problem is relevant for reforestation.

These problems have given rise to the legal consolidation of the concept of agro-forest-hunting balance (*l'équilibre agro-sylvo-cynégétique*), which means ensuring compatibility, on the one hand, the long-term presence of rich and diverse wild fauna, and, on the other hand, the sustainability and economic profitability of agricultural and forestry activities (article L 425-4 *Code de l'Environnement*). The main management tools for ensuring the balance are the national hunting plan, the hunting management schemes of departments, and individual big game hunting plans approved for specific holders of hunting rights (for example, ACCA or a tenant of hunting rights under a hunting rights lease agreement). However, compliance with the agro-forest-hunting balance cannot be maintained only by administrative measures without creating an economic interest of hunters in keeping the optimal number of large game. To solve this problem, a special procedure is provided for the compensation of damage caused to agriculture and/or forestry by wild animals, at the expense of compensation funds of the middle level of the system of hunting federations and associations—hunting federations of departments. Since it is hunters who are interested in maintaining a certain number of game and benefit from it, the economic principle of “beneficiary pays” has been extended to them in order for them to compensate for the damage caused to other sectors of the economy. According to economist Philippe

Le Goffe (2012), over the past 20 years, there has been an increase in expenses for compensation for hunting damage, which sometimes reach such proportions that they can jeopardize compensation funds.

The agro-forest-hunting balance can be disrupted not only by hunters, but also by farmers and logging organizations. In France, there is a continuous degradation of habitats of small plains game and waterfowl as a result of agriculture (Le Goffe 2012). Unlike in the USA, farmers in France do not receive any income from the hunting use of their land and, as a result, they are not at all interested in preserving and improving the habitats of game typical of rural areas.

Thus, the cooperation model of organization of interaction between hunters and land users creates prerequisites for artificially overestimating the population of ungulate animal species popular among hunters with simultaneous degradation of habitats of birds and small plains game. These processes are a consequence of the diametric opposition of the economic interests of hunters and land users, which is not characteristic of the direct interaction model.

### 2.3. The Division of Rights Model (on the Example of Russia)

The key feature of the division of rights model is the separation of hunting rights on a land plot from land ownership rights. Under this model, the right to hunt follows from the ownership of wild animal stocks, not land. The owner or lessee of the land does not have hunting rights “by default”, they must receive them from the wildlife owner on an equal basis with other hunters. This division is seen even more clearly if we take into account that wild animal stocks cannot be privately owned, their owner is the state.

This model of organization of interaction between hunters and land users was developed in the Soviet Union in close connection with the entire land fund and all hunting reserves being in state ownership. Many countries that were part of the Soviet Union inherited this model, despite the legislative reforms that allowed private ownership of land<sup>16</sup>. Let us consider the structure of this model in more detail with the example of Russia.

In Russia, hunting resources are<sup>17</sup> recognized as an independent object of ownership and right of use. All animals in a state of natural freedom are in state ownership. At the same time, the right to hunt (referred to in the legislation as the “right to extract hunting resources”) follows from the ownership of hunting resources, and not from the ownership of land. Therefore, only the state as the public owner of hunting resources and other objects of the animal world or a person to whom such an opportunity has been transferred by the state under a hunting agreement, can grant individuals the right to extract hunting resources. If the owners or tenants of the land want to hunt on their plots, they must obtain a permit for the extraction of hunting resources or conclude a hunting agreement with the state on general terms.

#### 2.3.1. Hunting Grounds and Hunting Agreements

The legal basis for conducting a hunting business in Russia is a hunting agreement. As a general rule, it is concluded by a competent regional public authority with an organization or individual entrepreneur who has won a bid for the right to conclude a hunting agreement (article 28 of the Hunting Law). Sometimes such an agreement can be concluded without an auction—for example, when concluding a new agreement to replace a previous similar agreement. Having obtained the right to extract hunting resources under such an agreement, an entrepreneur (referred to in the legislation as a “hunting user” or “hunting

<sup>16</sup> Public ownership of land still dominates in Russia—according to the state report on the state and use of land, as of 1 January 2022, 92.2% of the land fund of the Russian Federation was in state or municipal ownership (Federal Service for State Registration, Cadastre and Cartography 2022).

<sup>17</sup> Hunting resources are not considered to be all types of wild animals, but only those listed in Article 11 of Federal Law No. 209-FZ of 24 July 2009 “On Hunting and on the Conservation of Hunting Resources and on Amendments to Certain Legislative Acts of the Russian Federation” (hereinafter referred to as the Hunting Law).

organization”) may further grant this right to individual hunters, also for a fee (article 27 of the Hunting Law).

When concluding a hunting agreement, the state grants the hunting user two rights: (a) the right to extract hunting resources on a “large” territory called a hunting ground and (b) the right to lease a “small” land plot or several plots within the boundaries of a hunting ground. It should be noted that the hunting user is not provided with all the lands within the boundaries of a hunting ground for rent—in Russia such lands can amount to hundreds of thousands of hectares. For example, the largest hunting organization in the Kemerovo region (Western Siberia, Russia) has the right to extract hunting resources on the territory of 3861,000 hectares (or 38,610 km<sup>2</sup>)—and this is about 1/8 of the area of Italy or a third of the area of Portugal<sup>18</sup>—but Russian hunting organizations are by no means such large landowners. The boundaries of a hunting ground indicate only the boundaries of the distribution of hunting rights. The vast majority of lands within these boundaries do not belong to a hunting organization. These lands can be both in public and private ownership, they can also be provided to third parties for use under land- or forest plot lease agreements, or for other reasons (Vasilyeva 2016; Ushakova 2016). Inside the territory of the land, there is also a “small” plot of land leased by the hunting organization itself, where hunting bases, aviaries for breeding animals, parking equipment, and other necessary economic facilities are located.

The law provides for the division of hunting grounds into publicly accessible and fixed. If a hunting ground is classified as publicly accessible, then hunters must obtain a permit to hunt within its borders directly from a state body, a hunting agreement will not be concluded. Such hunting grounds are sometimes referred to as a “reserve”, since measures to increase the number of game animals are poorly implemented within their borders. According to official statistics, the area of publicly accessible hunting grounds is 46% of the total area of hunting grounds<sup>19</sup>. If a hunting ground is classified as fixed, then a hunter can legally hunt within its borders only after receiving a “permit” from a hunting organization that has concluded a hunting agreement with respect to this land. Such hunting is no longer free, but the amount of game in the fixed lands is much higher.

The procedure for determining the boundaries of hunting grounds in Russia has some features of zoning. By adopting an act of law enforcement, the boundaries of the territory with a special legal regime are determined. Both types of hunting grounds represent a territory within which restrictions on the rights of owners of land plots are administratively established in order to ensure the interests of hunters and/or hunting organizations. However, so far in Russian legislation it is very unclear what these restrictions should be. Are the owners of the plots included in the hunting grounds always obliged to let hunters on their lands? The basis for regulating this issue is paragraph 1 of Article 26 of the Hunting Law: “The right of ownership of individuals, legal entities to land plots and other rights to land within the boundaries of hunting grounds are limited in accordance with this federal law and other federal laws.” This norm can be understood as establishing an exception to the general rule of Part 2 of Article 262 of the Civil Code (CC) of the Russian Federation, which provides that access by third parties to a land plot is possible provided that the plot is not fenced or its owner has not otherwise clearly indicated that entry to the plot is not allowed. If this is the case, then by approving the boundaries of hunting grounds, regional executive authorities establish for hunters the possibility of access to the relevant lands, and for owners, the obligation to undergo hunters’ access to their lands (Vasilyeva 2016; Iutin et al. 2011; Ushakova 2016). The management practice of Russia is based precisely on this interpretation of the norm of article 26 of the Hunting Law. However, the Supreme Court did not recognize article 26 of the Hunting Law as a more special norm in relation

<sup>18</sup> According to the data of the “Scheme of placement, use and protection of hunting grounds on the territory of the Kemerovo region”, approved by the decree of the Governor of the Kemerovo region dated 8 November 2016 No. 80-pg.

<sup>19</sup> The strategy for the development of hunting in the Russian Federation until 2030: approved by the Decree of the Government of the Russian Federation dated 3 July 2014 No. 1216-R.



to the general rule of Article 262 of the Civil Code of the Russian Federation and did not support the practice of establishing restrictions on the rights of land owners by making a decision of regional executive authorities to establish the boundaries of hunting grounds<sup>20</sup>. So far, this has not led to amendments to the Hunting Law or to the procedure for establishing the boundaries of hunting grounds, and conflicting interpretations of the law remain.

Determining which lands or land plots can be included in the hunting grounds, Russian legislation is based on the purpose of the land, and not on the facts of their being privately owned or leased. The regime of certain categories and types (subcategories) of lands is of key importance<sup>21</sup>. The composition of hunting grounds may include those lands in which legal regime allows the implementation of activities in the field of hunting (part 1 of Article 7 of the Hunting Law). In particular, hunting grounds may include forest fund lands (Article 36 of the Forest Code of the Russian Federation), agricultural lands (paragraph 3 of Article 78 of the Land Code of the Russian Federation), defense and security lands temporarily not used for their intended purpose (paragraph 5.1 of Article 93 of the RF CC), and reserve lands (paragraph 2 of Article 103 RF CC). At the same time, the procedure for developing a scheme for the placement of hunting grounds does not provide for the coordination of land boundaries with the owners of land plots in their composition<sup>22</sup>. If their land plots are assigned to such a category of land on which hunting is allowed, then they are usually included in the hunting grounds without the consent of the owner. This is similar to the automatic entry of land plots into the territory of the municipal hunting association in France. However, if in the cooperation model the lack of consideration of the will of the owner is mitigated by the introduction of a special procedure for renouncing hunting rights, then in the Russian system a similar function is performed by the possibility of a judicial challenge to the inclusion of the site in the hunting grounds<sup>23</sup>. The Supreme Court of the Russian Federation in the appeal ruling (No. 38-APG17-13 of 28 February 2018) indicated that the inclusion of the site in the hunting grounds entails restriction of the rights of the owner and cannot be carried out without concluding an agreement with them or without establishing a public easement. This allows the owners of land plots to count on a positive outcome of the trial in other similar cases, since the position of the Supreme Court is of great importance for the formation of a unified judicial practice of the country. Nevertheless, while such claims have not become widespread, the approaches of the courts have not changed the traditional administrative practice of forcibly including all sites with a suitable purpose in the boundaries of hunting grounds.

Russian experts rightly draw attention to the lack of elaboration of the rules for assigning lands or land plots to the territory of a hunting ground. However, the prospects for improving legislation are in the possibility of clarifying the composition of those categories or subcategories of lands that can be included in the hunting grounds, and not in the introduction of a procedure for approval with the owner (Gorokhov and Shunaeva 2019). It seems that such an approach reflects the realities of Russian management practice and makes it possible to mitigate the problem without abandoning the division of rights model of organizing interaction between hunters and land users. Choosing a different way of developing legislation seems to be very difficult for Russia. After all, in order to coordinate the inclusion of each plot in the composition of the land, it is necessary to provide for the conclusion of a contract with each owner of the land, and this will

<sup>20</sup> Appeal Ruling of the Supreme Court of the Russian Federation No. 38-APG17-13 dated 28 February 2018.

<sup>21</sup> Each category of land has a specific purpose, which must be observed by all persons using land plots assigned to this category. At the moment there are seven categories of lands: lands of settlements, industrial lands, lands of specially protected territories, lands of the forest fund, lands of the water fund, and reserve lands. Most land categories are divided into types (subcategories) by conducting several types of zoning. The boundaries of types (subcategories) change in a simpler order than the boundaries of land categories. The zoning system in Russia is "two-tier".

<sup>22</sup> On approval of the procedure for drawing up a scheme for the placement, use and protection of hunting grounds on the territory of a subject of the Russian Federation, as well as requirements for its composition and structure: Order of the Ministry of Natural Resources and Environment No. 335 dated 31 August 2010.

<sup>23</sup> The fact that the judicial system has assumed such a function indicates a weak elaboration of the legislative solution to this issue.

require not just the creation and implementation of a new administrative procedure, but a serious reform of the hunting economy of the country with the transition to the direct interaction model. Meanwhile, the division of rights model needs to introduce a procedure for excluding a land plot from a hunting ground on the initiative of the owner (as in France, to ensure a balance of interests of all interested parties, it is necessary to determine under what conditions the owner will be able to exercise this right).

In comparison with the direct interaction model, the division of rights model offers a simpler procedure for solving the land issue when organizing a hunting farm. Logically, this should lead *to* greater accessibility of hunting for the general population. However, in fact, the accessibility of hunting in Russia is quite low. On publicly accessible hunting grounds, the wildlife population is small, so the potential for commercial or amateur hunting is limited, and the cost of permits for hunting on fixed hunting grounds can only be paid by fairly well-off hunters. Thus, hunting expert Yu. E. [Vashukevich \(2020\)](#) provides data on the cost of one wild boar permit in the Irkutsk region—it is about RUB 50,000, which is close to the average monthly wage in the region (RUB 62,783, according to Rosstat data for July 2022<sup>24</sup>). “The high cost of game in farms that preach intensive biotech is only partially compensated by hunters, which leads to their unprofitability ([Vashukevich 2020](#)).” For example, in the Kemerovo region-Kuzbass (Western Siberia, Russia), many hunting farms have been unprofitable for a number of years ([Prosekov 2022](#)). The accessibility of hunting is also reduced by the low transport accessibility of many hunting grounds. In addition, there are contradictions in the legal regime for the use of forests for hunting purposes ([Prosekov and Lisina 2021](#)).

### 2.3.2. Coordination of the Activities of Hunters and Land Users

The assignment of a land plot to the territory of a hunting ground means that a hunting organization has the right to run a hunting farm on the entire territory of the land (at least until the owner of the land plot submits an administrative claim to challenge the scheme of hunting grounds in terms of the inclusion of its plot). However, this in no way means that hunters have the right to use someone else’s land at their discretion. The hunting user does not have the right to carry out any actions on someone else’s land that entail the transformation of a land or forest plot. Thus, it is permissible to create objects of hunting infrastructure (hunting bases, hunting cordons, or aviaries for animals) only on plots leased or acquired by a hunting organization in ownership<sup>25</sup>. It is possible to carry out biotechnical measures that improve the state of the habitat of hunting resources only in agreement with the owner or tenant of the site or in agreement with the executive authority of the subject of the Russian Federation<sup>26</sup>. Movement and stay for hunting purposes can be carried out on the entire territory of the hunting ground without the consent of the owners of land plots<sup>27</sup>.

Meanwhile, a number of issues related to the behavior of ordinary hunters in the Russian federal legislation were not disclosed. Thus, the hunting rules do<sup>28</sup> not provide for any features related to the movement and stay of hunters on agricultural land or reforestation sites. The Russian hunting rules do not at all raise the issues of movement on planned lands, orchards or nurseries, the order of use of gates, or the order of use of

<sup>24</sup> The Internet portal of the Territorial Body of the Federal State Statistics Service for the Irkutsk region. [https://irkutskstat.gks.ru/storage/mediabank/zar\\_plata\\_07\\_2022.html](https://irkutskstat.gks.ru/storage/mediabank/zar_plata_07_2022.html) (accessed on 23 January 2023) (In Russian).

<sup>25</sup> Article 53 of the Hunting Law, paragraph 5 of the Rules for the Use of Forests for Carrying out Activities in the Field of Hunting, as well as a list of objects related to hunting infrastructure (approved by the Decree of the Government of the Russian Federation No. 1409-r dated 11 July 2017).

<sup>26</sup> Clause 8.1.9 of the model form of the hunting agreement (approved By Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 93 dated 31 March 2010), as well as paragraphs 3, 10 of the Rules for the Use of Forests for Carrying out Activities in the Field of Hunting (approved By Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 661 dated 12 December 2017).

<sup>27</sup> Clause 8.1.1 of the Model form of the hunting agreement, p. 3, 10 of the Rules for the Use of Forests for the Implementation of Activities in the Field of Hunting.

<sup>28</sup> Hunting rules (approved by Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 477 dated 24 July 2020).

vehicles, which are given so much attention in the countries of the direct interaction and cooperation models. For example, in the case of hunters traveling by car through a plowed plot, the owner of the plot can bring them to civil liability and collect damages from them, but such behavior will not affect their right to continue hunting on this land, which is unthinkable for the direct interaction or cooperation models. In this part, the interests of agriculture in Russia are much less legally protected than in other countries studied by us.

No less a problem is the protection of the interests of the hunting industry from damage caused by the actions of forest or subsoil users. Mining and continuous logging of forest plantations can be carried out within the boundaries of the hunting ground. Such actions entail not only the destruction of the habitat of game animals in the territory where economic activity is directly carried out, but also reduce the living conditions of animals in significant adjacent territories. So, according to the field research of [Prosekov \(2022\)](#) and [Prosekov et al. \(2020\)](#) the population density of game animals in the zone of influence of coal mines was significantly lower than the average density in the area, the difference was from 1.2 to 5.4 times (for different types of animals).

The legislation does not provide for restrictions on the provision of forest plots for the extraction of wood or the development of mineral deposits<sup>29</sup> in connection with their location within the hunting grounds. Moreover, by virtue of the forest multi-purpose use principle, even “small” forest plots leased by a hunting organization can be leased by a state body to a third party for other purposes (subclause “b” of clause 3.2. a standard lease agreement for a forest plot<sup>30</sup>). In the event that a forest plot leased by a hunting organization is leased to a third party, the state body is obliged to notify of this fact in writing (subclause “b” of clause 3.2. a standard lease agreement for a forest plot<sup>31</sup>). However, if a plot of hunting land that is not leased by the hunting user (and there are an overwhelming majority of such plots) is leased to a third party, there is no obligation to notify. In this case, no legally significant ties are formed between hunters and forest or subsoil users, allowing them to mutually coordinate their actions. They may not have any contacts with each other at all and may not even know about the existence of other users before a conflict situation arises.

In the absence of direct interaction between hunters and forest and subsoil users, state management can be the mechanism for ensuring the interests of the hunting economy, but for this, it should be focused on the real provision of multi-purpose use of forests, taking into account and coordinating different directions of their use. In Russia, a multi-stage forest use planning system is used, within which the types of forest use are determined. Its main elements are forest plans of the subjects of the Russian Federation, regulations of forestry and forest development projects compiled by forest users. Each of these documents must correspond to documents of a higher level of the system. The possibility of using forests for hunting should be reflected in the forestry regulations of forestry, and specific measures for the protection of wildlife and its habitat should be provided for in the section “Measures for the protection and reproduction of forests” of the forest development project<sup>32</sup>. For non-

<sup>29</sup> If a mineral deposit is located on or under the lands of the forest fund, a license for the use of mineral resources and a lease agreement for a forest plot for the purposes of geological study, exploration, and mining are issued simultaneously for its use. The subsoil user, in such cases, is also a forest user at the same time. Such deposits are often located within the boundaries of hunting grounds.

<sup>30</sup> A standard lease agreement for a forest plot for carrying out hunting activities (Appendix 5 to the Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 543 dated 30 July 2020). The Supreme Arbitration Court of the Russian Federation confirmed the possibility of granting a forest plot to different persons under several lease agreements at the same time, if they use the plot for different purposes, the simultaneous implementation of which is possible (Resolution of the Presidium of the Supreme Arbitration Court of 27 July 2010 No. 2111/10). The implementation of the principle of multi-purpose use of forests is seriously hampered by the lack of approved criteria for compatibility of different types of forest use or a list of cases when simultaneous use of forests is impossible ([Zhavoronkova and Vypkhanova 2018](#)). This is also relevant for the use of forests for hunting purposes.

<sup>31</sup> A standard lease agreement for a forest plot for carrying out hunting activities (Appendix 5 to the Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 543 dated 30 July 2020).

<sup>32</sup> Clause 8 of the Order of the Ministry of Natural Resources No. 684 “Composition of the forest development project, the procedure for its development and modification, requirements for the format of the forest develop-

compliance with the project, the forest user is contractually liable and can bear substantial penalty payments<sup>33</sup>.

Designing the inclusion of measures to preserve the habitat of hunting resources in the process of planning the activities of other forest users can be an effective tool to ensure the interests of the hunting economy. However, at the moment this is hindered by two circumstances. Firstly, the forest development project can only provide for measures to preserve rare species of animals—and in this case, the content of the project will not violate the requirements of legislation and will not cause comments from the expert commission. Secondly, neither the procedure for designing forest development projects, nor the procedure for their state or municipal examination provide for any opportunities for hunting organizations to participate in this process<sup>34</sup>. Furthermore, when drawing up the relevant sections of the plans without the participation of hunters, it is impossible to take into account either the intensity of hunting use of different areas, nor the facts of biotechnical measures carried out on them, nor the presence/absence of unique characteristics of the habitat in these areas.

The hunting farm may apply to the court with a claim to the subsoil or forest user for compensation for losses (including lost profits) caused by their activities, according to the general rules of Article 15 and Chapter 59 of the Civil Code of the Russian Federation. However, the practical implementation of this right faces a number of procedural difficulties—the plaintiff will have to prove not only the existence of losses caused to the hunting farm as a result of the deterioration of the wildlife habitat, but also their exact size<sup>35</sup>. In Russia, there are a number of officially approved methods for calculating the harm caused to wild animals in their habitat by an environmental offense<sup>36</sup>. However, the possibility of their application to determine the amount of losses caused to the hunting business is questionable, since they were developed for other purposes, namely, to compensate for environmental damage (environmental harm). Unlike environmental damage, losses of hunting users will be compensated according to the rules of civil legislation, which means that their size will be proved by conducting an expensive forensic examination.

What is the reason for such low attention paid to the ratio of the rights of hunters and other users of natural resources within the framework of the division of rights model? It is assumed that this is caused by three main reasons. First, historically, the division of rights model appeared as a result of the modernization of the Soviet system of natural resources use regulation based on the state ownership of natural resources and a planned economy. Within the framework of this system, nature users were not economically independent and their economic interaction was organized by the state. It is logical that the interaction of different types of users of natural resources in the development of the same territory was also provided by the methods of public administration. On the issue we are investigating, this system has not undergone fundamental changes, despite the transition to a market economy and the emergence of private hunting farms. The second reason is rooted in the peculiarities of Russian natural resource legislation: it is built according to the sectoral

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ment project in the form of an electronic document" (approved by Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 684 dated 16 November 2021).

<sup>33</sup> A standard lease agreement for a forest plot for timber harvesting (Appendix 1 to the Order of the Ministry of Natural Resources and Environment of the Russian Federation No. 543 dated 30 July 2020).

<sup>34</sup> A forest development project is compiled by a forest user or an expert organization commissioned by a forest user and passes state or municipal expertise. If the forest development project provides for the construction of buildings or structures, then it must be posted on the website of the state body organizing the examination for 15 days (part 6 of Article 89 of the Forest Code of the Russian Federation). If the construction is not provided for by the project, then the forest development project is not placed in publicly available sources of information. Public participation in the expert examination of the forest development project is based on the provision on the mandatory presence of two representatives of environmental associations in the expert commission (the Procedure for State or Municipal Expert Examination of the Forest Development Project: approved by Order of the Ministry of Natural Resources of the Russian Federation No. 513 dated 30 July 2020).

<sup>35</sup> An illustrative practical example is given by V.V. Velichenko (2019) by analyzing the attempts of one of the hunting farms of Yakutia to recover losses caused by the activities of oil companies.

<sup>36</sup> Methodology for calculating the amount of damage caused to hunting resources: approved by Order No. 948 of the Ministry of Natural Resources and Environment dated 8 December 2011.

principle: land use, forest use, and subsoil use are regulated by separate subsectors of natural resource law with relatively weakly elaborated issues of simultaneous use of several natural resources. Finally, the third reason is political in nature—hunting in the post-Soviet period was usually not considered by politicians as an independent branch of the economy (Vashukevich 2020). Accordingly, attention to its legal regulation and to public administration in this area has been reduced.

### 3. Discussion

A comparison of the legal solutions we found, of the issues discussed above, allowed us to identify three models of regulating the relationship between hunters and land users. It is proposed to designate them as the direct interaction, cooperation, and division of rights models.

The direct interaction model assumes the conclusion of agreements directly between landowners and hunters, according to which hunters are granted the right of access to land (usually by the type of lease of hunting rights, which does not exclude the simultaneous use of land for basic activities). If, according to the legislation of a particular country, the right to hunt is an element of the land ownership, this right is also transferred to the hunter. The presence of the hunter's obligations to conduct hunting is determined by the will of the parties to the agreement. This model is used in the USA, Finland<sup>37</sup>, Great Britain<sup>38</sup>, France (for large landholdings), and in a number of other states.

The cooperation model is based on the creation of a specialized cooperative organization of landowners; this organization is granted the right to hunt on lands owned by its members. As a rule, such an organization assumes obligations to run a hunting farm, or legislation establishes the running of a hunting farm as a duty of such an organization. This model is used in the legislation of<sup>39</sup> France (for smallholdings) and Germany (for smallholdings).

The model of division of rights separates the right of hunting from the right of ownership of land; hunters receive the right to hunt from the public owner of wild animals or a person authorized by him, bypassing the owner of the land. In this case, the hunting right is granted by a decision of a state authority, and land users are obliged not to interfere with hunting. The territorial boundaries of such restriction of the rights of landowners are determined administratively. The legislation provides the opportunity for hunters and land users to participate in the management decision-making process and file a lawsuit in court challenging the decision. This model is used in Russia, Belarus<sup>40</sup>, and Kazakhstan<sup>41</sup>.

However, the hunting legislation of the USA cannot be assessed as purely contractual (direct interaction); it contains elements of all three models: direct interaction, cooperation, and division of rights. Reliance on private landowners to achieve conservation goals is particularly important in regions such as the eastern United States (USA), where most of the land is owned and managed by private landowners with different and competing goals (Vincent et al. 2017).

One example of success over the past four decades has been the creation of hundreds of deer management cooperatives (DMCs) on private territories for collective land management to regulate the number of white-tailed deer in accordance with the recommendations on Quality Deer Management (QDM) (Adams and Ross 2017; QDMA 2005). DMC cooperatives are defined as groups of “landowners and hunters voluntarily working together to improve the quality of wildlife (white-tailed deer), habitat and hunting in their collective areas” (Adams and Ross 2017).

<sup>37</sup> The Finnish system of hunting organization is presented in the article (Doynikov 2021).

<sup>38</sup> The British system of hunting organization, presented in (The British Association for Shooting and Conservation 2022; Krassov 2014).

<sup>39</sup> The German hunting organization system is presented by Oleg Krassov (2014).

<sup>40</sup> The Belarusian system of hunting organization is presented in the article (Gorokhov et al. 2017).

<sup>41</sup> The organization of hunting in Kazakhstan is presented in the article (Gorokhov et al. 2017).



Although 15 US states have less than half a million acres of federal land, 11 western states and Alaska have more than 10 million acres of land managed, in addition to cooperative organizations and contractual schemes by five administrative agencies regarding the interaction of hunters with land users (Vincent et al. 2017). About 95% of all federal lands in the United States are controlled by the following five agencies: the Bureau of Land Management (BLM), 248.3 million acres; the Forest Service (FS), 192.9 million acres; the Fish and Wildlife Service (FWS), 89.1 million acres; and the National Park Service (NPS), 79.8 million acres. Thus, members of the cooperative realize environmental goals and increase the economic efficiency of land, which is crucial for federal and state agencies in achieving environmental goals at the level of interaction between hunters and land users (Pruitt et al. 2022).

In addition, an administrative body such as the US Department of Defense (DOD) manages 11.4 million acres of land, which is about 2% of all federal lands. The remaining area, approximately 3% of all federal lands, is under the jurisdiction of various administrative state agencies. According to Vincent et al. 2017, the division of rights model accounts for a significant part of the hunting legislation of the United States, and this model, along with models of direct interaction and cooperation, has an important environmental significance in the implementation of this complex interaction.

The key criterion for distinguishing these models was the answer to the question: “who has the right to issue a permit for the use of land for hunting purposes?” All other criteria for comparing the presented models were used only to obtain additional information. The relationship of the models to each other can be illustrated by the following scheme (Figure 1).

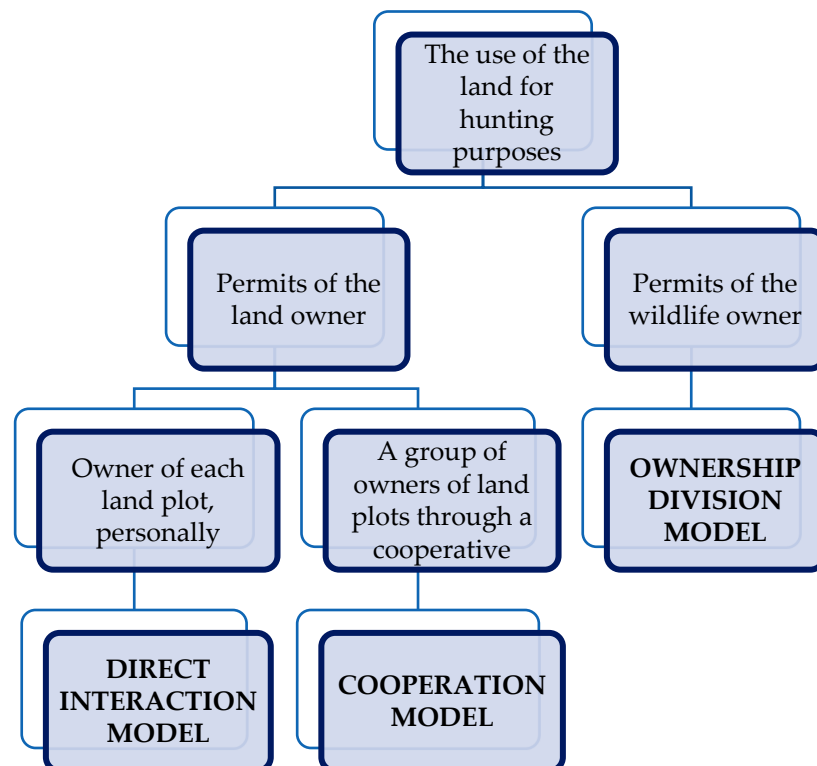


Figure 1. The scheme of interaction of the considered models.

The scheme clearly shows that the models of direct interaction and cooperation are fundamentally similar, which creates the possibility of their mixing with each other. The legislation base of some countries provides for a combination of models. For example, French legislation combines the cooperation model (for small landholdings) with the direct interaction model (for large ones). This is one of the options to overcome the shortcomings

of each individual model and increase the flexibility of legal regulation. It should be noted that the model of division of rights differs significantly more deeply from the other two models, which does not allow it to be mixed with other models.

The difference in the definition of a person who has the right to grant hunters the right to hunt on a land plot seriously affects the regulation of almost all other issues related to the use of land for hunting purposes. Table 1 shows the result of comparison of models using additional comparison criteria. The identified advantages and disadvantages of the considered models are shown in Table 2.

**Table 1.** Comparison of functional solutions of various models of interaction between hunters and land users.

Criterion	Model		
	Direct Interaction	Cooperation	Division of Rights
Correlation of hunting rights and land ownership rights (main criterion)	The right to hunt follows from the ownership of land.	The right to hunt follows from the ownership of land.	The hunting right is separated from the right of ownership of land.
The main tool for organizing the interaction of hunters and land users	Hunting leases: a hunting rights lease agreement.	Membership of both parties in the association.	Public administration, planning of hunters' and land users' activities.
Who runs a hunting farm and who receives income from the use of the site for hunting purposes?	The land owner or a person appointed by them.	The association of which the owner is a member.	A person who has received hunting rights from the state under a hunting agreement.
Ensuring hunters' access to the land	The economic mechanism: the hunter pays for the contract; the management mechanism: owners participate in state programs where the state pays for hunters' free access.	At a discounted price, its members—land owners or local residents—have access to hunting on the territory of the association; at the usual price—a limited number of other persons.	Imposing the obligation not to interfere with the hunting use of land by endowing land with a special legal regime on the owners; hunting grounds—as a result of a special type of zoning carried out by the state.
Ensuring compliance with the rights of owners when using their land for hunting purposes	Regulation of the rights and obligations of the parties in the hunting leases agreement, contractual liability, the possibility of early termination of the contract or the owner's refusal to conclude it for a new term, the damage recovery possibility.	The owner has the rights of a member of the association, including the right to vote at the general meeting, information rights, the right to be elected to governing bodies; strict rules of internal regulations for ordinary hunters; the damage recovery possibility.	Damage recovery possibility.
Coordination of economic actions related to the site use	The conformance rules are approved by the parties to the hunting lease agreement and are stipulated in the agreement's text.	Participation of the owner in the general meetings of the association, mandatory coordination of biotechnical measures with the owner.	Mandatory coordination of biotechnical measures with the owner.

**Table 2.** Advantages and disadvantages of models of organization of interaction between hunters and land users.

Model	Advantages	Disadvantages
Direct interaction	<p>Maximum protection of land owners' rights;  a large selection of possible options for organizing a hunting business;  easy organization of hunting use of the site as an auxiliary activity of land users;  the most flexible coordination of the actions of hunters and the land owner on the joint use of the site;  flexible possibilities of distribution of duties and responsibilities between hunters and land users.</p>	<p>The maximum complexity of the management organization at the level of the entire habitat of a certain animal species;  the complexity of coordinating the actions of different owners of land plots to improve the habitat and control the number of certain animal species;  weak compliance for areas with small land property;  facilitating the transformation of sport hunting into an elite type of activity due to the high cost of land use.</p>
Cooperation	<p>Coordinated management at the level of the entire habitat of a certain animal species due to a multi-level system of hunting associations;  a permanent source of income for the association thanks to membership fees, which partially compensates for the high cost of hunting;  ensuring the accessibility of hunting for the general public;  good adaptability to the conditions of small-land property.</p>	<p>Serious restriction of the right of private ownership of land;  the inability to combine hunting business with agriculture or forestry business (except fishing, tourism and similar activities);  unsuitable for large-scale land ownership (for large plots, a combination with a direct interaction model is required).</p>
Division of rights	<p>Easy management organization at the level of the entire habitat of a certain animal species;  easy coordination of actions of different hunting farms (due to the availability of contracts with the managing state body for all farms);  increasing the accessibility of hunting for the general public by minimizing land rent in the cost of hunting services.</p>	<p>Serious restriction of the right of private ownership of land or the right to lease;  weak enforcement of the rights of land owners in the process of using their plots for hunting purposes;  the inability to combine hunting business with agriculture or forestry business (except fishing, herborization, and similar activities);  contributing to the transformation of amateur hunting into an elite type of activity, hunting farms do not have additional sources of income in the form of the main use of plots (as in the direct interaction model) or membership fees of association members (as in the cooperation model).</p>

The criteria presented in the tables are selected based on a thorough analysis of world literature, world regulations and legal acts, state standards, federal laws, orders, state hunting rules, cadastral documents, land codes, environmental regulations, sanitary and hygienic requirements, and many other national laws regulating the interaction of hunters and land users. They make it possible to most clearly identify which model of relationships needs to be built in different countries on land and hunting grounds (FAO 2015). With the erasing of these shortcomings and the positive development of such important advantages as the protection of the rights of land owners, a large selection of possible options and rational use of the hunting area for land users, ensuring the availability of hunting for the general population, ease of coordination of the actions of various hunting farms and landowners, a combined model of the organization of interaction between hunters and land users can be formed, whose main indicator will be not only about preserving the number of hunting animals, but also increasing their number of landowners' plots with insufficient hunting resources (Kozlov 2014).

The table shows that different models perform specific tasks with varying degrees of efficiency. Thus, it can be said that the availability of hunting is best ensured within the framework of the cooperation model, the observation of the rights of owners—within

the direct interaction model, the convenience of management within large territories of wild animal habitats—within the division of rights model. However, it would be incorrect to single out the best model according to all criteria, and even more so to designate a universally suitable one for different conditions. The advantages of each model are manifested in certain conditions, in opposite conditions its disadvantages will increase.

The disadvantages of each model of interaction between hunters and land users can be successfully compensated by public administration (in the USA and France, options for successful implementation of such compensation have been used). It should be noted that the model that at first glance seems to be the simplest is the division of rights model.

The problems characteristic of the Russian hunting economy are not related to the potential of the division of rights model as such (in Soviet conditions, such a model was quite viable), but to a lack of understanding that this particular model requires increased state attention. It is impossible to expect that the problems of hunting will be solved only by the efforts of private individuals in the conditions of this model, since neither its economic nor legal foundations are adapted for this. Such expectations would be incorrect even with regard to the direct interaction model, which is maximally based on the initiative of individuals and contractual regulation.

The legislation base of some countries provides for a combination of models. For example, French legislation combines the cooperation model (for small landholdings) with the direct interaction model (for large ones). In the USA, the direct interaction model is the main one; however, the division of rights model is used for industrially undeveloped federal lands in western states. This is one of the options to overcome the shortcomings of each individual model and increase the flexibility of legal regulation.

#### 4. Materials and Methods

Any comparison should be based on some unchangeable element that serves as a comparison criterion. When applying the functional method, the function of legal institutions in solving a certain problem is taken as a criterion. Legal institutions are considered comparable if they are functionally equivalent, that is, they perform similar functions in different legal systems (Michaels 2005, p. 4). In this article, we investigate how the law of different states organizes the interaction of hunters and land users (the compared function).

The advantage of the functional method is the ability to determine the regularity and randomness of the content of the compared legal institutions. When conducting the research, it is important to take into account that both the social problems solved by law and the legal norms themselves form complex systems within which the mutual influence of their elements occurs. “Even if we understand legal institutions as responses to societal needs we need not ignore that they are not caused by these needs in the sense of logical necessity; rather, they are contingent responses to these needs that can be identified with reference to the other possible responses, the functional equivalents, that were not chosen” (Michaels 2005, p. 31). Therefore, in order to find the desired pattern or randomness, it is necessary to consider both the problems and the legal institutions that solve them in a fairly broad context. In our case, this means studying not only those institutions that directly regulate the relationship between hunters and land users, but also a number of related ones. In our opinion, in order to solve the research tasks set by us, it is necessary to study the answers by the legislation of various countries to the following questions:

1. In what form of ownership is the animal world?
2. How do the hunting right and the land ownership right relate?
3. What is the main tool for organizing the interaction of hunters and land users?
4. Who runs a hunting farm and who receives income from the use of the site for hunting purposes?
5. How is the hunters' access to the land ensured?
6. How is the observance of the rights of owners when using their land for hunting purposes ensured?

7. How should the economic actions for the use of the site be coordinated?

## 5. Conclusions

The model of organization of interaction adopted in a particular country depends not on the arbitrary choice of the ruling elite, but also on the specifics of the conditions in which the hunting economy of the country develops. Each model is focused on successful functioning in certain conditions. Therefore, the direct interaction model will be weakly effective for a country with small-land ownership, and the division of rights model—for a country with a predominance of private ownership of land. No less important is the historical development of the hunting economy and traditions in the field of hunting. For example, in France, since the Great French Revolution (1789–1799), the right to hunt has been regarded as the property of all people, which led to the desire of the state to ensure maximum availability of hunting for the general public.

The type of model of interaction between hunters and land users adopted in a particular country weakly depends on the form of wildlife ownership under the legislation of that country. This reflects some similarities between different regimes of wildlife ownership—in the sense that both Public Trust and *res nullius* and state ownership do not grant land owners the right to own wild animals. On the contrary, the ratio of ownership of a land plot with the right to hunt on a land plot is of critical importance. Since the direct interaction and cooperation models are based on a single solution to this issue, they are easily mixed together, as can be seen from the example of French legislation. The division of rights model that differs from other models by this criterion cannot be approximated to them or mixed with them without changing the position of the legislator on this issue.

As a rule, biotechnical measures to improve the habitat of wild animals are carried out by the person who profits from the hunting use of the land. Since hunting requires large expenditures, for the effective implementation of biotechnical measures, it is important that hunting farms have the opportunity to receive additional income, not just from the provision of hunting services (Ivanova et al. 2022b).

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