



The Wolf in Russia – situation and problems

Russia has one of the largest wolf populations in the world - according to official data 45,000 animals at the present time.

There is no law to protect wolves; they may be hunted all year round and by all methods. The use of aircraft, motorized vehicles and poison is permitted. Methods most commonly used are shooting, traps and poison.

The Soviet Government carried out nationwide campaigns to exterminate the wolf from its territory. Around 1.5 million wolves were killed in these operations. With the breakdown of the USSR, the campaigns ended. It is now the responsibility of regional administrations to manage their hunting grounds and pay bounties.

The annual conference of the Russian State Game Department took place in March 2003. The head of the department, A.I. Saurin, informed the public about the present situation of game management in Russia.

Among other topics, the wolf question was dealt with along with the presentation of official data. Saurin stated that the wolf density in Russia is still too high (45,000 animals in 2002, the number in 2001 was estimated at 54,360 animals).

Year	Wolf numbers	Wolves killed	Cost of wolf control (US\$)	Cost of damage (US\$)
2001	54,360	11,500	570,000	5,200,000
2002	44,900	11,500	550,000	4,800,000
9 months of 2003	43,400	8,998	280,000	2,400,000

According to this data, in 2002 one living wolf cost 107\$ (2001: 96\$) per year, whereas the cost for every dead wolf was 47\$ (2001: 50\$). The cost of damage was calculated to be 3,180,000\$ for game animals and 1,620,000\$ for livestock (or per wolf: 71\$ and 36\$).

However, it is open to question how these figures were calculated, as we are not aware of any official research work that could provide data about wolf depredation on either domestic or wild animals. It is also doubtful if predation on wild animals should be included in the damage total at all.

During the last few years approximately 550,000\$ was spent annually on wolf control, around 50\$ per wolf. This means that wolf damage per wolf to domestic animals costs less than the bounty paid to the hunters for each dead wolf, including those poisoned.

The State Game Department positively referred to the fact that in 2002 poison was used in 22 regions of Russia (16 in 2001) and further encouraged its use as a means of reducing wolf numbers as much as possible.

Wolves occur in various habitats throughout Russia. There is a large difference between the highly populated south of European Russia and the wilderness of Eastern Siberia.

The wolf can be a problem for the inhabitants of rural regions of Russia where its numbers are still relatively high. In the European part of Central Russia this includes the regions of Tver, Smolensk, Pskovsk and others. 10- 20 million people live in the countryside of these regions, about 10% of the Russian population.

The government has made no efforts to solve the wolf problem other than by lethal control. No government-funded studies on wolves have been undertaken, although some scientific work has been carried out in several reserves or national parks. Viktor Bologov started research on wolves as a scientist of the Central Forest Biosphere Natural Reserve in the western part of Tver region in 1973 without any funding. By continuing his work we are able to show some of the problems relating to wolves.

Wolf-Human Conflict

The Tver region is one of the few regions in the Central part of European Russia that still has a high density of wolves, which we have monitored for the last 30 years.

During the last ten years, the wolf population in the region was between 350-850 animals, or from 4 to 10 per thousand sq. km. The population has remained relatively stable despite the exercise of the same control measures to reduce it as elsewhere in Russia.

The drive to exterminate the wolf is based on three unconvincing claims:

- 1) Attacks on livestock.
- 2) Predation on game animals.
- 3) Spread of rabies and threat of attacks on people.

Attacks on livestock: Wolf depredation on livestock and dogs is considered a big problem. However, there is no official data about the number of livestock killed by wolves in Russia.

In the middle of the last century wolves killed up to 15,000 domestic animals per year in the Tver region. Nowadays the damage on livestock seems to have decreased. For example in the Nelidovskiy district only one sheep and two goats were killed in 2000, compared to 220 domestic animals in 1950. The wolf density was comparable. This fact could be explained by socio-economic changes during those years, when around 70 percent of villages were abandoned and 90 percent of the human population moved to towns.

According to reports from 20 of 36 districts of the Tver region, during 1999 wolves killed 28 cattle, 32 sheep and two horses. According to unpublished data by Viktor Bologov, collected during the period 1975-1990 (the period of the highest wolf numbers in the course of the last 30 years), in 21 inhabited localities there was on average 1 attack on livestock in five years.

To some extent this fact can be explained by the development of a highly effective system to protect livestock against wolf attacks, which is not widely used.

By contrast, depredation on dogs has increased. Whilst in 1950 there were ten attacks, 59 dogs were killed in 2000.

Most dogs are kept on a chain near the house and are not able to escape in the event of an attack. Their owners would rather like to see the wolf extinct than take any precautionary measures to protect their animals against depredation.

Some of the wolves involved in attacks on dogs are young or injured animals. Out of 87 carcasses of wolves killed by hunters, 11 were seriously injured (2 females with snares around their necks, 2 males with one paw missing, and 7 wolves bearing old wounds from fire-arms).

Predation on game animals: One reason why the wolf is regarded as harmful is its reduction of the numbers of ungulates, which are regarded as precious meat by hunters.

According to the article "*The inhabitants of Novgorod region spare no expense to fight wolves*" published in the "Russian Hunting Newspaper" 29th of October 2003, there are around 130-150 wolves in Novgorod region. Fifty of them were killed during the first nine months of this year, at a cost of 1,068,000 Rubles (3,500US\$). The total wolf damage for the region was estimated as 2,809,000 Rubles (9,300 US\$). This was the price for 12 moose, 11 wild boar, one roe deer and 8 dogs.

Many hunters and rangers think that numbers of ungulates depend on numbers of wolves. However, few special works aiming to determine to which extent wolves have influence on ungulate populations were carried out.

Unlike domestic animals, game animals have no owners who depend on them for a living, and no one pays for their rearing. Therefore, the wolf predation on wild animals cannot be counted as a real loss of money like livestock damage. It only represents a hypothetical sum, which could have been the hunter's profit, had he been able to kill the animal himself.

Spread of rabies and threat of attacks on people: Wolves often are accused of attacking and killing humans. According to the data of the Tver Regional Sanitary Inspectorate of Epidemics there were 370 registered cases of people contracting rabies during the last 10 years. In three cases (0.8%) the source of infection was wolves. More commonly dogs, foxes or raccoon-dogs are responsible for spreading the rabies infection.

Between 1987 and 1997, 133 rabid animals were registered in the Tver region. 67 of them were foxes, 50 dogs, 10 raccoon-dogs and 6 wolves. Feral dogs are likely to be infected, and they, unlike the wild virus carriers, pose a considerable danger to people. They can only survive where the ecological niche of the wolf is vacant. Therefore wolves play an important role in controlling these reservoirs of rabies by preventing the formation of wild dog packs and keeping numbers of small carnivores in check.

However, cases involving wolves remain the centre of public attention. At the time of the attack by a rabid wolf on a shepherd at September of 1999 in Staritskiy district of Tver region, articles were published in several local and regional papers as well as in the central newspaper (Komsomolskaja Pravda).

Poison

In Russia, which is the only country where the use of poison is still allowed and even encouraged by the government, the substance most commonly used is fluorine acetate barium. Regional governments distribute it to local hunting authorities, free of charge. Use of poison is in theory limited to killing wolves during winter, but this is not enforced.

Poison has proved to be a very inefficient method for killing wolves in Russia, from 1987 to 2001 only around 6.5% of the wolves killed in the Tver region were poisoned. Sometimes there are more wolves killed accidentally than by poison. Furthermore, many more baits are distributed than are eaten by wolves - to poison one wolf about 20 baits are needed. Other animals eat the remaining baits, including endangered species such as the golden eagle, which often feed on kills made by wolves.

The main potential danger of poison is the impossibility of controlling its use. Poisoning is not selective, and there is no official data about the kill rate of non-target species.

Additionally, there is no data to suggest any relationship between the numbers of poison baits distributed and the total number of wolves killed in various ways. The total number of wolves killed within one year in the Tver region was in no way connected with the number of distributed doses. To support this conclusion we can outline several time periods.

Year	Doses used	Wolves killed
1981	430	429
1982	50	450
1983	751	473
1984	1460	483
1987	230	372
1988	637	267

In the period of 1989-1995, the number of doses distributed diminished from 393 to 20, while the number of wolves killed increased from 143 to 513. In 1996 26 times more doses of poison were distributed than in the previous year, while the number of wolves killed was slightly lower.

Bounty

In many regions of Russia (Tver, for instance) the Environment Protection Committees pay a bounty (~50US\$) for each dead wolf, irrespective of the method of killing. This is supposed to encourage wolf hunting and is considered an important means to reduce the wolf population. Usually the money for it is taken from the Ecology Foundation, which is supposed to be spent only on protecting the environment. The bounty is the same for pups and adults, so in spring hunters take wolf pups from their dens and turn in the whole litter.

We have several reasons to doubt the effectiveness of the bounty system.

1) According to data of the State Game Department in 2002 wolf damage on domestic animals cost less than the bounty paid to the hunters.

2) Usually the bounty doesn't cover the hunter's expenses and it is more profitable for him to sell the animal's fur. The winter pelt of an adult wolf is worth about 100 US\$, comparable to those of such valuable animals as otter and lynx (*Lynx lynx*).

3) Wolf control costs more or less 500,000 US\$ of public money every year (with 11,500 wolves killed in 2002). The Regional Game departments receive money for bounty payments from different state sources. In some regions the local hunting clubs pay the bounty or, as in Tver, another department, the Committee for National Protection, has covered the expenses.

4) Between 1970 and 1980 there was extensive use of poison and the bounty for wolves was several times higher than at the present. Despite this there was an increase in the wolf population from 15,000 to 50,000. This shows that poisoning and the bounty system have no influence on wolf density.

5) 36.7% of land in Russia is privately owned. It is open to question if it is necessary to use public money to pay bounty on private land, as game management and wolf control is in the hands of the proprietors.

Wolf Population Dynamics

The Federal Hunting Game Survey Service of the Hunting Department of the Ministry of Agriculture estimates wolf numbers in Russia by distributing questionnaires to regional hunting services and analysing data from winter wildlife track surveys. Decisions on amount of funding for wolf killing programs and intensity of wolf control measures are made based on these estimates.

The total number of wolves in Russia today is around 45,000 (according to official data). The population density averages 2.5-animals/1000 km². Wolves live throughout the country, often in close vicinity to human settlements.

Since 1973 we have been carrying out wolf population research within an area of approximately 2,000 sq.km., situated in the region of the Central Forest Biosphere Nature Reserve (western section of the Tver region). From 1996 to 1999 wolf numbers in this area have declined from 10-11 to 5-7 wolves per 1,000 sq. km. According to official reports of the Hunting Department, wolf numbers in the Tver region for the same period of time have grown from 800 to 950 wolves. In other words, when our research shows that local wolf numbers have declined from 22 to 12 wolves (a 45% decline) within the research area, official reports for the entire region show 16% growth. The wolf population trend within the research area seems to be representative for the entire region. Thus, we believe that the number of wolves in the Tver region is overestimated by 30-35% in the official report. With such a margin of error in the official methodology, the number of wolves for the whole of Russia may be overestimated by 10,000-15,000 animals.

During the last 35 years wolf numbers fluctuated from a minimum in 1969 to a maximum at the end of 1979. The same trend was observed between 1940 and 1950. At present, the wolf density is rather low compared to past years.

It is possible that wolf population dynamics will follow the same patterns as in the previous time periods pointed out above. In which case we could expect a new maximum in wolf numbers in 2010 (every 30 years).

It should be noted that the hunting pressure on wolves did not slacken (there was a high bounty and extensive use of poison) between 1970 and 1980, but still the population increased.

Studies have revealed that an annual harvest of around 20-30% (as currently the case in Russia) does not affect the wolf population to any significant extent. Wolves adapt their reproduction to hunting pressure; pup mortality is reduced, maturation accelerates and two females per pack may produce a litter.

Therefore, we may conclude that long-term fluctuations in wolf numbers are indifferent to hunting as it is practiced at the present.

Wolf Management

The wolf in Russia is regarded as a problem and the Game Department states that wolf numbers are much too high. It is commonly thought that wolves are a danger for people, cause much damage to livestock and that a higher wolf density would lead to a noticeable decrease in populations of their prey species.

According to official data the number of wolves in the whole of Russia is around 40,000, which is approximately the same as in Canada. However, Canada is smaller than Russia and the government does not pay any bounty for wolves - the wolf is regarded as a game species, with a restricted hunting season, and hunters have to pay for permits to kill wolves. Also, the use of poison is prohibited

Poison has been proved to be a very inefficient method in hunting wolves. Only up to 10% of wolves killed by Russian hunters die from poisoning, but the government still encourages its use. Often more wolves killed accidentally than by poison. Furthermore many more baits are distributed than are eaten by wolves. To poison one wolf about 20 baits are needed. The remaining baits are eaten by other animals, including endangered species like the golden eagle, which often feeds on kills made by wolves.

The Russian government pays a bounty (50-100 \$) for every wolf killed, to encourage hunters to keep wolf numbers low. Between 1970 and 1980 there was extensive use of poison and the bounty for wolves was much higher than at the present. Despite this there was an increase in the wolf population from 15,000 to 50,000 wolves. This shows that poisoning and the bounty system have no influence on wolf density.

Even though the National Game Department receives more than 500,000 \$ of public money for wolf control every year (with 11,500 wolves killed in 2002), the local departments have no money for bounty payments in several regions, including Tver. In some regions the local hunting clubs pay the bounty or, as in Tver, another department, the Committee for National Protection has covered the expenses. In addition, the bounty for a dead wolf may sometimes not even cover the hunter's expenses and it is more profitable for him to sell the animal's fur.

For all other big game species like bear or moose, hunters have to pay a fee for a hunting permit for every individual animal, as well as for a general license required for the particular species. There is no reason to exclude the wolf from this law and we have reason to believe that members of the Game Department have an interest in claiming that there are many problems with wolves and in overestimating wolf numbers in order to receive state money for wolf control.

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