

BALKAN CHAMOIS STATUS AND ACTION PLAN IN BULGARIA

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ABSTRACT

The Balkan chamois (*Rupicapra rupicapra balkanica*) is included in Annex 2 and Annex 4 of Habitat Directive and was strictly protected under Bulgarian Biodiversity Act in 2007. It is distributed in the mountains of the Balkan Peninsula. In Bulgaria it is found in the rocky complexes of Rila, Pirin, Stara planina and the Rhodope Mountains. At present it is being reintroduced in Vitosha Mountains. The total number is between 1,700 and 2,300 individuals in 2005. In 1977 in Kormisosh hunting reserve introduction of chamois from the Alpine subspecies was made, and after mixing with the local population of Balkan subspecies it reached up to 300-400 individuals in 2005. The poaching is the most important limiting factor. The main target of the Plan is restoration and conservation of the Balkan chamois in Bulgaria and reaching number of at least 5,000 individuals until 2015. Different activities are foreseen in the Plan: legislation, policies, direct measures for habitats and species conservation, scientific studies, international cooperation and awareness rising. It will be possible to receive hunting permits as special exclusion of the protection of the species for hunting reserves which are involved in conservation of the chamois. The quotas are allowed only according to the IUCN Manual on Sustainable Use. National working group will assist Ministry of Environment and Waters and will monitor the implementation of the Chamois Action Plan in Bulgaria. The plan can be downloaded from http://www.bbf.biodiversity.bg/files/doc/Balkan_Chamois_Action_Plan_en_low.pdf.

Key words: *Rupicapra rupicapra balkanica*.

RESUMEN

Plan de Acción para el Rebeco de Bulgaria

El rebeco de los Balcanes (*Rupicapra rupicapra balkanica*) está incluido en el Anexo 2 y el Anexo 4 de la Directiva 92/43/CEE y está estrictamente protegido en Bulgaria en virtud de la Ley de Biodiversidad desde 2007. El rebeco de los Balcanes es una subespecie que se encuentra distribuida en las cadenas montañosas de la Península de los Balcanes. En Bulgaria se encuentra en lugares con una altitud entre 600 y 2.900 m.s.n.m. en los complejos rocosos de Rila, Pirin, Stara Planina, Slavyanka y las montañas Ródope. Actualmente está siendo reintroducido en las montañas Vitosha. El tamaño de la población total se sitúa entre 1.700 y 2.300 individuos (2005). En 1977 se introdujeron rebecos de la subespecie alpina en la reserva cinegética de Kormisosh,

donde el número de ejemplares aumentó hasta 300-400 ejemplares en 2005 después de mezclarse con la población local. La caza furtiva es el principal factor limitante, ya que sólo es relativamente baja en las reservas cinegéticas estatales y privadas, que venden trofeos de rebeco a precios elevados (1.000-3.000 euros por trofeo). La protección total del rebeco de los Balcanes ahora que Bulgaria es miembro de la Unión Europea puede dar lugar a que se pierda interés por la conservación de la especie en el país. Es crucial recibir el apoyo de la comunidad de cazadores para la conservación del taxón. El objetivo principal del Plan es la restauración y conservación del rebeco de los Balcanes en Bulgaria, con la meta de que la población alcance el tamaño de al menos 5.000 individuos en 2015. El Plan prevé distintas actividades: legislación, políticas, medidas directas para la conservación de los hábitats y la especie, estudios científicos, cooperación internacional y sensibilización. Las reservas cinegéticas implicadas en la conservación del rebeco podrán obtener permisos de caza como exención especial a la protección de la especie. Los cupos sólo se concederán de conformidad con el Manual de Uso Sostenible de la UICN. El Plan puede obtenerse en el siguiente enlace http://www.bbf.biodiversity.bg/files/doc/Balkan_Chamois_Action_Plan_en_low.pdf.

Palabras clave: *Rupicapra rupicapra balkanica*.

INTRODUCTION

The Action Plan for the Balkan chamois in Bulgaria examines the questions on the conservation of the species on national level.

The terrain work on the present Plan includes 11 counts of the minimum population estimations in the Rhodope Mountains and one in Rila National Park carried out in December 2005 and July 2006 using the route method with participation of independent observers. Additional observations on the species sex and age structure in the Rhodope have also been carried out. Information on the distribution of the species outside the territories of the censuses has been gathered.

In the process of preparation of the plan six workshops and public hearings were carried out where the Plan targets and activities were discussed and complemented.

Status of the different populations and subpopulations. Trends and history of the conservation and management action taken. Information of the status of the whole subspecies, distribution, etc.

Today the chamois is found on the steep slopes of rocky complexes in Rila, Pirin, Stara Planina (Central Balkan) and the Rhodope mountain ranges at altitude of around 600 to 2,900 m. a.s.l. The species has been reintroduced in Vitosha Nature Park. The total number is between 1,700 and 2,300 individuals. The population in Central Balkan is divided by all other populations for more

than one hundred years. The exchange of genes between the populations in Vitosha, Rila, Pirin and Rhodopes is extremely low.

Until the mid 19th century the Balkan chamois had wider range of distribution in Bulgaria, as it inhabited almost all suitable habitats in Stara Planina and the Rila-Rhodopian mountain range. After the introduction of long-range rifles at the end of the 19th century the species disappeared from many of its ranges. Despite the shortening of the hunting season and the hunting prohibition in many places the chamois number still remained unsatisfactory. According to Hristovich (1939) there were around 1,000 chamois in Bulgaria: Rila 600-700, the Rhodopes 150-200, Pirin 80-100 and in Stara Planina around 100. After the Second World War the control on the illegal hunting was strengthened and the populations slowly began to increase. According to annual censuses data of Forest Agency (figure 2) the number of chamois started steadily to increase by 1965. The data from 1960, 1961, 1970 and 1971 was interpolated due to incomplete available data. The fluctuations between 1954-1957, 1959-1963 and 1969-1973 are due to the lack of censuses in many of the chamois inhabited places and the lack of unified census methodology. The chamois reached their highest number at the beginning of the 90ties, although according to the official information the peak was at the end of the 90ties when in conditions of exceeded “maximum permissible stock number”, in many places the theoretically calculated permissible stock was reported. During this period for Stara Planina around 270 chamois were reported but their number was higher and in many places herds of 40-50 animals were seen (Ganchev 2001).

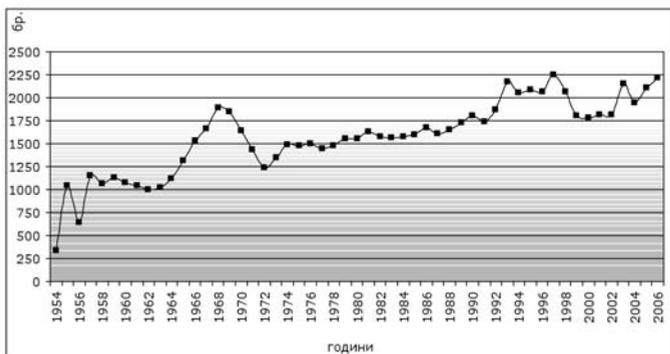


Figure 1. Dynamics of the Balkan chamois number 1954-2004 (Statistic of State Forest Agency).

According to Bedrov (1999) in Kormisosh State hunting reserve (Rhodopes Mountain) 15 female and 1 male Alpine chamois from Switzerland were introduced in 1977 and in 1978 two Balkan Chamois male from Devin were transported but one of them died. According to Genov and Massei (1989) eight Alpine chamois were imported from Austria and later 2 Balkan chamois male were transported from the Devin population. In accordance with an official letter from Regional Forest Board of Plovdiv to State Forest Agency in 1978 eleven female and two male Alpine chamois were imported from Switzerland. Due to sterility of the introduced male chamois (from Switzerland), 2 male from Devin breeding farm and 1 from Rila mountain were transported. Although there are serious differences in the data, it is a fact that at the end of the 1970's one group of 13-15 chamois from the alpine subspecies with domination of the female were introduced in this part of Rhodopes. There was local population of Balkan Chamois in the region which size is unknown. After the introduction and following the very strict control measures in this hunting reserve the total number of these animals reached 230-250 Chamois in 1994 (Bedrov 1999). Additional studies are needed in order to find out what is the real extend of hybridization with the alpine subspecies of the Kormisosh population.

The political and socio-economic changes at the beginning of the 1990's lead to political instability, unsatisfactory control and upholding of legislation. As a result the chamois decreased from above 270 individuals to around 100 in Stara Planina, from 400 to around 200 in Pirin and from 650 to around 300 in Rila.

The most important negative factor for chamois is the poaching. The poaching is wide spread outside the network of specialized game reserves - the three Bulgarian National Parks - Pirin, Rila and Central Balkan, as well as on the territories of the usual hunting grounds. According to Michailov (1999) poaching happens all year long in almost all chamois habitats in Rila National Park in 1990's. Chamois are illegally chased and shot by legal hunters as well as by people working on the Park's territory using legal or illegal weapons. The chamois is illegally hunted also by the chalet hosts and staff from the spheres of tourism, sport and guarding, employees of Beli Iskar Dam and Mountain

Sport bases and resorts, using even machine rifles. Poaching is the main reason for the considerable decrease of numbers and human induced changes in the chamois sex and age structure within the national parks during the last 15 years (Mihailov 1999). The reasons for poaching are the meat, trophies, illegal hunting tourism etc. There is a case of annual shooting of around 30 chamois in Rila National Park by two local people - confirmed by independent source from Kostenets village. There are cases of illegal hunting on chamois using dogs - beagles in the region of the Rila National Park (pers. eng. Dzhabazki from Beglika Forestry). The data from the questionnaires confirm poaching done by the guards of Belmeken Dam, chalet hosts and the administration staff - Sport base Belmeken, holiday homes etc in Rila National Park most of them with illegal guns (Mihailov 1999). The host of Belmeken chalet has even made special food offers, including chamois specialties. There is similar information for Pirin and Central Balkan National Parks. According to the local people from the surrounding of Rila National Park, chamois hunting in the park could be organized for around 300 BGL/150 euro for a chamois and this is only if the hunting is successful. Illegal hunting in Rila National Park was advertised in 2003 on an internet home page of a safari club (in English) offering dumping prices. Not rare are the cases of organized inroads of poachers even from Sofia - staff of Ministry of Internal Affairs and Ministry of Defence accompanied by local guides - according to the questionnaires filed by hunters living around Rila National Park. It is a popular practice in public places (restaurants, taverns etc.) to exhibit illegal trophies of game and protected species. This is an additional motivation for the local hunters who know the chamois habitats well and their typical characteristics.

At the end of the 1990's the chamois density in certain ranges decreased so much that the poachers lost interest towards it. This coincides with the establishment of the National Park Directorates, approval of their Management Plans, strengthening the guarding control etc. Even though the level of illegal hunting in the protected territories is still high, during the last 5 years a slow increase of the chamois number in the National Parks is noticed.

In the same time according to the census carried out in the Rhodopes in the 1990's the chamois increased its number and its range. The Rhodopes population inhabits mainly the territories of the game reserves. This population is more vulnerable than the ones within the national parks due to the presence of many settlement areas, road network and the fragmentation of the separate habitats. But the population in the Rhodopes increased from 2-3% in the 1960's to above 50% of the species population in Bulgaria in 2006. The censuses carried out in December 2005 show that in the game-breeding station even though there is hunting, the density of the species is 10-15/100 ha, which is the highest density in the country. The regulated hunting is compensated with the measures against poaching and for protection of its habitats. The Balkan chamois is an expensive game species. This motivates the local structures to sustainable management of the population of chamois and to conserve its habitats (of which many other species benefit). In Izvora State Game Breeding Station with an area of around 6,000 ha, for the last 10 years the incomes only from the chamois licenses come up to 130,000 € and the total income from the same hunters who hunted on chamois with the included service taxes and other game species is around 250,000 €. In spite of the harvest, the chamois density here is the highest in the country. The poaching level is low and in practice it does not affect the population growth. In the last 15 years chamois dispersed in territories of the neighbouring forestry units and hunting societies.

At this stage the habitat degradation and deterioration is not the most important negative factor.

Legal status. Conservation status, implemented activities for conservation of the species and its habitats

The Chamois is strictly protected since 01.01.2007. Half of the Bulgarian Chamois population is in the National Parks of Rila (81,046 ha), Pirin (40,332 ha) and Central Balkan (71,669.5 ha). All of them are II category of IUCN. The hunting is prohibited there and both Chamois and their habitats are officially fully protected. The National Park Directorates organize regular censuses of the chamois on their territories since 1999-2002. There are rangers at the National

parks who are responsible for the guarding of the parks. The chamois is also protected in the reserves of Kupena (1,761.1 ha), Dupkata (1,210.8 ha) and Chervenata stena (3,029 ha) in Rhodopes mountain, all of them are I category of IUCN, and in the Nature Parks Vitosha (26,606.6 ha) and Rila Monastery (27,370.7 ha). The hunting is strictly prohibited in these protected areas.

Chamois habitat is included in the Natura 2000 sites – Rila (81,046 ha), Rilski manastir (25,833.53 ha), Pirin (40,356 ha), Middle Pirin and Alibotush (68,408.26 ha), Western Rhodopes (271,909.21 ha), Middle Rhodopes (154,845.53 ha), Central Balkan (71,669.50 ha) and Vitosha (27,360 ha).

In the past chamois was found in Vitosha Mountain but the species got extinct. Only few individuals have been reported very rarely seen, most probably coming from neighbouring Rila Mountain (Petrov 1965). Reintroduction of the species in the mountain have been carrying out since 2003 and now there around 30 chamois (Valchev *et al.* underpress).

The full protection of the species can lead to lost of interest towards species conservation and reintroduction on the territories of the hunting reserves, which shelter half of the Bulgarian population and where there are one running and a few proposed reintroduction projects.

ACTION PLAN

The plan contains:

- Taxonomy, distribution, biology and ecology of the species;
- Threats and limiting factors;
- Conservation status, implemented activities for conservation of the species and its habitats;
- Aims and activities of the action plan for chamois;
- Frame for monitoring and control of the implementation;
- Time table and budgeted.

The main target of the Plan is restoration and conservation of the Balkan chamois and its habitats in Bulgaria and reaching number of at least 5,000 individuals until 2,015.

Activities needed for the conservation of the species and its habitats

Legislation activities

- It includes registration of all trophies obtained until now with proven origin, criminalisation of the illegal chamois hunting in the Criminal Code and prohibition any import of other Chamois subspecies in Bulgaria.

Policies

- The National Action Plan for chamois should be adequately integrated in the National Plan for Biodiversity Conservation.
- Creating an institutional working group with Decree by the Minister of Environment and Water with representatives of State Forest Agency, Ministry of Environment and Waters, Bulgarian Academy of Science, hunting and nature conservation NGOs for monitoring the Plan. On implementation, planning and approving the annual shooting quotas, accepting the annual reports and preparing annual programmes based on the present Action Plan including:
 - Planning annual monitoring activities connected to determining and accounting the main population indicators.
 - Planning annual activities on habitats conservation and restoration.
 - Annual activities on the species use.
 - Annual activities connected to the species reintroduction.
 - Activities connected to the preservation of the genetic purity of the Balkan subspecies.
 - Time limits and institutions responsible for development of the annual programme.
 - Time limits and institutions responsible for reporting the implementation of the annual programme.
 - Other priority activities.
- The annual programmes should guarantee the implementation of the present Plan.
- Integrating measures for decreasing the illegal chamois hunting within the whole strategy and the annual plans for controlling activities of State Forest Agency and Regional Forest Directorates.

- Carrying out seminars in the risk regions with representatives of forest services, National and Nature Parks, Ministry of Environment and Waters and the prosecution.
- Including urgent and priority measures for chamois conservation in the annual plans of the National Parks, Nature Parks, Regional Inspectorates for Environment and Waters etc.
- Integration of the present Action Plan in the hunting and forestry management plans and programs as well as in the annual plans for use.
- Actualization of the regional action plans on the territory of the three national parks and creating such for populations in the Rhodopes.

Measures for habitats conservation

- Designating chamois habitats as Natura 2000 sites. Designating bio-corridors between key populations. Designating priority sites and chamois habitats as protected territories according to the Protected Areas Act

Direct measures for species conservation

- Organizing and carrying out of mandatory number of checks of the hunting societies operating within or close to the chamois habitats by the State organs. Organizing and carrying out mandatory number of checking of the tourist chalets, hydro technical equipments (the guarding of the dams) close to the chamois habitats.
- In case of proven genetic influence of the Alpine chamois subpopulation in Kormisosh HR, developing a programme for increased shooting of male of this subpopulation and distributing male from the local population aiming for gradual genetic absorption of the Alpine genes.
- Organizing regular joined checking of the illegal chamois trophies and other hunting and protected species in the public restaurants and private houses.
- Decreasing the number of feral dogs within the species key habitats including the National Parks.
- Restricting the grazing of domestic stock within the key habitats.
- Reintroduction of the species in suitable habitats in Vitosha, West and East Stara Planina, Vrachanski Balkan Nature Park and in suitable but uninhabited habitats in the Rhodopes etc.

- Reinforcement in small and isolated populations in cases of inbreeding by trans/relocating chamois.
- Establishing and management of a national database of State Forest Agency for the chamois trophies, registering all trophies of the species in the database including protocol for CIC evaluation and a picture.
- Establishing a mobility group of the three National Parks and reserves which performs sudden checks without the knowledge of the park authorities.

Monitoring and scientific studies

- Including methodology for chamois monitoring in the National Biodiversity Monitoring System.
- Carrying out census following the approved methodology and using independent observers every three years also in cases of doubts for incorrect data when planning the harvest/use. Training volunteers for carrying out censuses.
- Preparation and establishment of a GIS model for the inhabited and the potential chamois habitats in Bulgaria and national chamois database including number, distribution, density, investigations of the health and genetic status.
- Determining the level of hybridization by craniometrical examinations and DNA analysis of the subpopulation in the region of Kormisosh game-breeding station.
- Investigating the presence and the level of inbreeding within small and isolated populations using DNA tests.

International cooperation

- Exchange of information and coordinating the activities with international organizations and institutions working with the chamois. Transboundary cooperation on applying joint activities on conservation and management of shared chamois populations. Development of joined programmes on chamois conservation in the Rhodopes with Greece. Development of common programmes with Greece, FYROM and Serbia for potential reintroductions in Slavyanka, Belasitsa, West Stara Planina etc.

Awareness raising among the different target groups

- Development, printing and distribution of leaflets, posters, stickers on the chamois and popular articles in specialized edition for the different target groups.
- Establishment and maintenance of internet home page for the Balkan chamois containing rich information and education database.
- Organizing and carrying out campaigns for explaining the prohibitions for hunting and weapons carrying within the National Parks and the protected territories as well as within territories managed by the hunting associations out of the hunting season. Development and placing of information signs on the national parks entrances and within important habitats including short texts on the species conservation status and telephone for signals for reporting of noticed violation.
- Information campaign on advertising the “green” telephone line for reporting of noticed poachers by visitors of the national parks.
- Development of printed publication of the present Action Plan.

Hunting as community based conservation

The chamois is a protected species. For the long-term survival of the species the local communities and the interested parties (hunting societies, structures of State Forest Agency etc.) should be motivated and involved through a sustainable use of the species for trophy hunting (community based conservation). Quotas are allowed only according to the IUCN Manual on Sustainable Use. The harvest should be done according to the exclusions mentioned in the Biodiversity Act. The quota should be lower than the growth and should not exceed 8% of the population in cases of reached optimal density.

In order to allow sustainable use of chamois, the minimal stock number (the density of the subpopulation) should not be lower than 3-5 chamois/ 100 ha in the different capacity of the habitats. If results from additional studies using scientifically proven methods are available the requirements for minimal stock number could be changed by the working group but harvest under 2/100 ha is not allowed. According to the exclusions in the Biodiversity Act the hunting quota

are allowed for populations having density above the minimal stock number and has at least 15 % annual growth. In order the permit use in certain hunting region the minimal population size is 30 chamois. The relation in use is M:F 1:1. Use over 5-8 % of the population estimation is not allowed as the trophy male are not more than 30 % of the planned quota. The aim is maintaining the sex ratio M:F 1:1 and the distribution of the use in sex and age groups depends on the population structure and is corrected in cases of changing the real structure. The working group plans the quota on population level in carried out censuses using the monitoring methodology. The quotas in the separate administrative units are distributed by the working group, depending on the condition of the species in the respective units as the amount of all animals for hunting in the different units cannot exceed the determined population quota. The hunting season for male chamois is from 1 December to 15 January and from 10 April to 10 May. The hunting season for female chamois is from 15 September till 31 October. Chamois are hunted only in the presence of a qualified hunter as a guide who possesses the certificate for selective chamois hunting and the certificate for hunting guide. Only animals shown by the guide and allowed for the respective season (female, young and trophy adult male) are shot. The season for catching live chamois for reintroductions and reinforcements is from 15 September till 20 February.

INTERINSTITUTIONAL ACTION PLAN IMPLEMENTATION 2007-2009

The Action plan was voted signed by the Minister in March 2007. A hunting quota of Chamois was accepted as exclusion for first time in 2007. The Biodiversity Act was amended in 2007. All trophies had to be registered till 16.11.2008. The Minister received the right to ban the import of other subspecies of Chamois. The Criminal Code was amended in 2007 and the catching, killing and trade of Chamois is charged with fine from 500 to 2500 euro and till 5 years of prison.

The National Working Group was created but inter-intuitional conflicts almost block its functioning. Bulgaria succeeds to develop extensive Natura 2000 network. The sites of the Habitat Directive cover 29,5% of the Bulgarian territories. All key Chamois habitats were included in Natura 2000 network.

A few joint control actions against illegal trophies of Chamois and other protected species were organized in Rhodopes, and around Rila and Pirin National Parks. More than fifteen heads of Chamois were confiscated. A few trials started against some of the most famous poachers in Rila National Park. One of them was fined with a few thousand euro and a few years sentence in probation.

The developed in the Action plan methodology for Chamois monitoring was accepted in 2009 as official in the National Strategy for Monitoring of the Biodiversity in Bulgaria. The Ministry of Environment organized the first National Chamois counting in 2009. The counting was repeated in 2010.

GIS model of the distribution of the Chamois in Rhodopes Mountain was created. The chamois Action plan was translated in English. Bulgarian and Greek experts discussed a few times collaboration for Chamois conservation in the region of Greek Rodopi National Park. A poster for the Chamois conservation in Bulgaria was published. The control activities against illegal trophies were widely broadcasted by all Bulgarian TVs and printed medias. The exhibition of illegal trophies was significantly reduced and the owners of many restaurants and hotels removed the stuffed animals. This way the market for stuffed animals was significantly reduced.

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