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To the question about trade of bobac in soviet and post-soviet periods

In the article information on main objectives of production of groundhog, kinds that was obtained equally with a steppe marmot, and in places replaced production of a bobac with other species of groundhogs. According to the available data it is considered its number in various habitats, also distribution of a steppe groundhog in territories of the former Soviet Union is considered taking into account anthropogenic action on the places of the inhabiting of the steppe marmot for example: such as a pasture of cattle or virgin land development. We are affect the theme of active trade of marmot, that is a major factor, leading it to the decline, because of what hunting for a steppe groundhog was forbidden several times during existence of the Soviet Union, and in some territories of population of a bobac disappear completely, despite the introduced restrictions on trade. We draw conclusions about influence of trade on population of a baybak during the Soviet and Post-Soviet periods in territories of his habitation, and the impact of the development of virgin lands and pasture of large and small cattle.

Keywords: bobac, steppe marmot, trade, groundhog, bobac in the Soviet, bobac in the post — Soviet periods, USSR, trade in the Kazakhstan, territory of trade, marmots hunting.

Relevance of the work is that, presently because of illiterate trade activity person and rough intervention on territory of dwelling of kinds, there is a disappearance of various populations of animals. The purpose of article is there is a report of information about the rational use of resources of steppe marmot, competent trade case for the purpose of preservation of a look as one of the main components of steppe ecosystems of Kazakhstan.

Bobac or steppe marmot (*Marmota bobak* Muller, 1776) — this large representative rodent of the squirrel family. Steppe marmot is most large gnawer submitted family, length of an adult individual makes 60 centimeters, and the weight before sleep can reach 10 kilograms. Bobac has dense body, short, but strong legs with high claws, big flattened head, short neck and ears, tail is 12–15 centimeters in length, tip of tail dark brown color. Wool has a predominantly sandy yellow color, upper color of head dark, muzzle has sandy ginger shade. Hair tips are dark, because of it seems black rippling on the back. Moulting passes in summer period [1].

Steppe marmot is burrow rodent, they live in colonies. It dwells in steppe zones, prefers open space, for the purpose of supervision over the territory and warning of family of approaching of predators. At danger, at the expense of wool increases a tail in sizes, noise shrill shout and go to into burrow. On the thrown out earth it stand it stands directly and almost motionlessly, controls the situation. It is a day species of rodents. Bobac always is near the asylum and doesn't depart from it further 100–150 meters. Burrows are the system of difficult entrances and exits. In burrows there is a nest on the depth of 2 meters. Bobac before sleep cover the bottom of the burrow with dry grass, in a burrow from 5 to 20 groundhogs are situated on a winter. Burrows of the marmot are divided on summer and winter. In summer family feeds and is collected weight before the hibernation, for the hibernation is used the wintering burrow, which on the whole comprises about 10 meters. During the construction of burrow the steppe marmot ejects to the surface of approximately 10 cubometers of the deep layers of ground. The earth which is taken out on a surface forms an observation deck or marmot's burrow, which height can reach 50–100 cm, and length of 10 m. Usually, marmot's burrow on a background the steppe are sharply allocated in lighter color [2, 3]. The soil is rich with nitrogen, chlorides of potassium and magnesium here. A vegetable cover is different from steppes, most frequently on marmot's burrow grows flora of the predominantly arid and salt localities. The microfauna of marmot's burrow differs from other territory of the steppe. Waste products: excrement, urine, wool, epidermis and so on, promote formation of a microrelief of the steppe [3, 4].

The family of a bobac consists of the only pair of adult individuals, which can reproduce on their territory — they are residents; leverets — young bobac which was born less than a year old, they are dependent on the parents; lodgers — are the adult groundhogs who didn't enter puberty, they live in a general burrow to the offensive of puberty, they live in a general burrow to the offensive of puberty, then leave on searches of the couple and the family section, then they become groundhogs — migrants. The species, who didn't man-

age to find the place after an exit from a parental nest, often come back. Accepts daughters — females of steam of groundhogs — residents practically at once, and males — sons some time live next to a general burrow, feed on one family location, gradually coming nearer to the main burrow. The father of family after the long sniffing around allows to the grownup young animal to go back into a burrow and overwinter in the general nest. There are cases that the family accepts others steppe marmots [5].

The area of a bobac represents insignificant part of once extensive area, covering steppe zone Europe and West Siberia from South Germany and Podoliya in the West to Irtysh coast in the east. To the middle of 20 centuries steppe marmot disappeared from the larger part of the represented territories as a result of the anthropogenic action on the population [6].

On territory of the USSR this kind was saved longer, than in other European countries. However, in European part of the USSR, the population of steppe marmot was similarly undermined. The downsizing process could reach a critical point, if didn't impose a ban on trade. This help to a bobac leads to that the small animal appears in the territories which are earlier not belonging to a place of its distribution.

Today the bobac can be met in the territory of the southern part of Chelyabinsk region, in the Kustanay area, in North — Kazakhstan area in the Zhambylsky district, the border reaches to almost Irtysh in the east. Meets also in 200 km from Pavlodar, the southern border passes the left bank river Nura (V.I. Kapitonov) abundant in Akmolinsky area, it is observed in the Karaganda region and it is noticed near area of the Urals [7].

It is widespread unevenly meets on roadsides of roads, on the edges of the fields, singular on crops, because of vigorous activity of the person it was compelled to leave from places of plowing to hills and flood gullies, not uncommon on territories of moderate pasture.

Steppe marmot a trade small animal of the flat territory of the former USSR. Trade of a groundhog this traditional ancient occupation of the population in habitats of this kind. Ways of its getting changed and improved in time.

1. Method with the use of «lure» — hunters use a fluffy tail of a dog, they rapidly revolve it, what compels the curious of animal to accept a pose upright. at this moment the hunter stands up and quickly shoots to an animal at the head, on purpose not to damage a skin.

2. Method of smoking out or outpouring by water of animals from burrows, two entrances remain open: one for a smoke or infusing of water, the second as the only exit for an animal, where it is waited by the hunter, other exits are blocked.

3. A method is application of burrow dogs, which expel a small animal on a surface where he is waited by the hunter.

4. Method of shooting the animal, by the entrance to the burrow by car, motorcycle or horse.

5. Method of establishment of loops or traps near an entrance.

In the 70's the catching by traps was by the most widespread method of booty of bobac. Since the beginning of the 90th years the preference was given to hunting from a carbine or a small-bore rifle, because was considered as more sparing method in a difference from a trap where the marmots who aren't representing any interest for hunters, today there are no ideal ways of production of a groundhog, which will take into account not only their economic efficiency, but also the sparing impact on trade population [8, 9].

Steady and rapid reduction of number and area of marmots in the USSR, analysed in different decades. The main factor influencing this process, is a lack of organization of the use of resources of representatives of this kind, which were exposed to broad development of their illegal trade and use of its production. The second factor it becomes the ploughing of the earth, and other actions having an effect on a change in the landscape [10].

The hunt for groundhogs practiced long since in all plain and mountainous areas of the USSR. Marmots possess useful properties for a man. In traditional medicine fat, brown fat, bile are considered curative, meat as the easily assimilable, and the skin is warm and easily imitated under other types of fur animals. Studies of physicians he speaks about the fact that, the fat of marmot actually possesses a number of the useful properties. Fat of a groundhog is well emulsified, also we will combine with cosmetic raw materials. It has no irritating factor and allergic influence, it is noted bactericidal properties, well promotes healing of wounds and burns.

In different times, in different regions used all products, a difference was only in preferences. Today in Mongolia actively practices the Tibetan medicine and a popular national traditional dishes are from groundhog. The Mongolian shepherds during the season on average consume about 110 marmots (Kolesnikov Brandler, Badmaev, 2009) [11].

According to «Malavskim» (2000) and Addis-Abebskim (2004) principles of the retention of the biological variety of the planet reasonable use of resources local population admits an important factor of steady existence of the types relating to objects of hunting today. Therefore this studying is an actual task not only for management of populations, but also for rational use of resources.

Trade fur-bearing animal, was active in the period of imperial Russia, but trade of a bobac gains intensive development at the end of the 19th century. Skins, fat, liver, bile were always in demand at fairs. Because of active trade there was considerable reduction of population of marmot. With the offensive of the First World War the active booty of marmot was slowed, that gave the chance of restoration of populations in Kazakhstan, but on the European part of the USSR the groundhog couldn't be restored [11, 12].

After the First World War in greater part of countries there is an increase of demand on fur wares from the hides of marmot, in this connection the price of furs increases. For example, for the skin of the Kazakhstan bobac gave to 3 dollars.

In 1920 the got groundhog was estimated at 3 million., that was the overpriced data, according to the provided Table M.I. Koganov (Table 1), and in 1925 in a total cost of furs of a skin of groundhogs took the 12th place. Because of great demand and rapid growth of the prices again reviving population of groundhogs was undermined and its growth sharply went down. So in 1920–1930 in Kazakhstan prohibition is entered on this type of trade, in 1932 prohibition spreads to European part of the USSR. This prohibition entailed by the sharp slump of acting products, so if in 1929 about 600 thousand skins of a groundhog were prepared, that in 1932 preparation made 141 thousand, and such jumps were observed several times [13].

In time the Second World War the booty of marmot begins to go down, so in a 40–50 years production made no more than 200 thousand groundhog. In 1963 trade reaches almost 300 thousand, this connected with increase in prices for fat groundhog, owing to what production of a marmots increase in Kazakhstan.

Since 1965 across all areas USSR demand for skins of groundhogs falls, because of low-quality trade and drop in prices on furs.

Table 1

Preparations of skins of groundhogs in Asian part of the USSR, thousand (by M.I. Koganov, 1931)

| Areas | Year | | | | |
|------------------------------|---------|---------|---------|---------|---------|
| | 1924/25 | 1925/26 | 1926/27 | 1927/28 | 1928/29 |
| Ural area | 2,7 | 2,8 | 1,9 | 0,3 | 0,1 |
| Western and Eastern Siberia | 201,5 | 52,8 | 49,1 | 88,4 | 98,4 |
| Buryat - Mongolian ASSR | - | - | 5,4 | 0,9 | 10,5 |
| The Kazakh ASSR | 273,3 | 272,3 | 225,2 | 189,3 | 131,7 |
| The Kirghiz ASSR | 109,6 | 145,0 | 2105,7 | 209,8 | 195,3 |
| Uzbek ASSR (with Tajik ASSR) | 32,1 | 25,9 | 17,3 | 21,4 | 10,5 |
| In general | 619,2 | 498,8 | 514,6 | 509,8 | 446,5 |

Since 1920 Kazakh the Soviet Socialist Republic is one of the chief suppliers of curative fat and skins of marmot. Preparation of hides made from 40 to 682 thousand a year. One hunter got to 500 groundhogs during the season [14].

Trade is mainly conducted by predatory methods and mainly by an early spring, that doesn't give the chance to new generation grow up, and to adult individuals to gather fat. Stocks of a groundhog are sharply reduced and almost completely disappear in the Western Kazakhstan [14].

At the end of 19 and the beginning of 20 centuries Northern Kazakhstan was a place of intensive trade of a steppe marmot. Sale was carried out at fairs in Akmolinsky and Turgaysky provinces (Table 2).

Table 2

Data with Akmolinsky and Turgaysky province

| Area | Year | | | | | | |
|---------------------|-------------------|------|------|-------|------|------|---------|
| | 1890 | 1891 | 1893 | 1894 | 1895 | 1897 | 1911 |
| Akmolinsky province | Thousand of skins | | | | | | |
| | 150 | 150 | 185 | 120 | 50 | 111 | 65 |
| Turgaysky province | Year | | | | | | |
| | 1906 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914/15 |
| | Thousand of skins | | | | | | |
| | 200 | 200 | 92,4 | 220,9 | 37,2 | 1,3 | on 0,5 |

From the beginning of World War I the number of a steppe groundhog in Kazakhstan starts being restored. The price for skins increased in the twenties, which contributes to the resumption of trade, but because of strong trade, to 30th to the years the quantity of population falls quickly, that leads to delay of preparations. So in 1925 277,3 thousand was prepared skins, that in 1931 a purveyance made 92,3 thousand skins [15, 16].

The main part of skins arrived from Akmolinsky and Dzhetyysuysky provinces, the number of a bobac and in the Kostanay region was quickly reduced, in which the number of purveyances in 1925 made 34,4 thousand, in 1926 their number made 2510 pieces. In Semipalatinsk area it was observed the same sharp reduction of population, with further reduction of trade.

In this regard, in 1930 on the territory of Kazakhstan introduced a ban on cropping bobac, in certain regions trade stopped much earlier, for illegal buying up of skins the penalty was imposed.

So, with closing of trade on a steppe groundhog, production of gray and red groundhogs actively starts developing, and also Menzibir's groundhog [17, 18].

The restored population of a bobac again starts decreasing because of plowing of virgin lands, since 1954. During this period is observed the great demand on fat groundhog that leads to the restoration of the uncontrolled hunting for them. On many areas the groundhog dies out or to become rare, active the fishery continued until 1964. The size and distribution of skins of a groundhog in Kazakhstan from 1966 to 1976 is presented to R.P. Zimina (Table 3).

Table 3

Preparations of skins of a groundhog in Kazakhstan from 1966 to 1976

| Areas | 1906 y. | 1967 y. | 1968 y. | 1969 y. | 1970 y. | 1971 y. |
|-------------------|---------------|-------------|-------------|-------------|-------------|---------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Aktyubinsk | 0,2 | 0,6 | 0,3 | 0,3 | 1,0 | 0,1 |
| Alma-Ata | 18,0 | 14,3 | 14,8 | 10,4 | 9,10 | 6,3 |
| East Kazakhstan | 11,3 | 10,8 | - | 6,8 | 7,7 | 12,4 |
| Dzhambul | - | - | - | 0,4 | 8,5 | 0,3 |
| Karaganda | 15,1 | 23,9 | 17,7 | 19,5 | 17,2 | 27,1 |
| Kokchetav | 3,0 | 3,8 | 4,0 | 0,6 | 0,1 | 0,1 |
| Kustanai | 26,1 | 25,8 | 28,2 | 21,1 | 16,1 | 10,5 |
| Pavlodar | 2,9 | 1,6 | - | 1,3 | 0,9 | 1,0 |
| North Kazakhstan* | 36,7 | 1,3 | 1,3 | - | - | - |
| Semipalatinsk | 4,6 | 4,8 | 3,9 | 1,6 | 2,1 | 1,3 |
| Turgay | Not extracted | | | | | 23,4 |
| Tselinograd | 23,8 | 39,4 | - | 41,2 | 38,9 | 28,2 |
| Chimkent | 1,5 | 0,6 | 0,7 | 0,5 | 0,4 | 0,4 |
| Areas | 1972 | 1973 | 1974 | 1975 | 1976 | The marmot species |
| Aktyubinsk | - | - | 0,6 | - | 0,1 | Bobac |
| Alma - Ata | 4,7 | 7,5 | 8,1 | 6,7 | 7,1 | Gray |
| East Kazakhstan | 9,8 | 13,8 | 11,3 | 11,0 | 9,5 | * |
| Dzhambul | 0,2 | - | 0,1 | - | 0,1 | Red |
| Karaganda | 24,8 | 23,5 | 26,3 | 26,0 | 14,0 | Gray |
| Kokchetav | 0,6 | 2,6 | 4,6 | 4,8 | 3,6 | Bobac |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------------------|------|------|------|------|------|-------|
| Kustanai | 13,4 | 11,2 | 11,8 | 8,5 | 8,3 | * |
| Pavlodar | 1,3 | 2,0 | 2,0 | 2,0 | 3,0 | * |
| North Kazakhstan* | - | - | - | - | - | * |
| Semipalatinsk | 2,0 | 1,4 | 1,8 | 1,2 | 0,9 | Gray |
| Turgay | - | 6,0 | 3,8 | 4,8 | - | Bobac |
| Tselinograd | 24,8 | 20,2 | 18,6 | 14,7 | 11,3 | * |
| Chimkent | 0,1 | 0,1 | 0,1 | - | 0,1 | Red |

• In North-Kazakhstan region of the marmot no. These years hunters from this area traded it in the Central Kazakhstan, and handed at the place of residence.

Also preparation of skins of a groundhog in Kazakhstan of that time is characterized by Bibikov's work which it represents by years (Table 4).

Table 4

Preparations of skins of groundhogs in Kazakhstan according to Bibikov D. from 30 to 80

| Year | The number | Year | The number | Year | The number |
|------|------------|------|------------|------|------------|
| 1934 | 19,9 | 1952 | 26,7 | 1970 | 102,0 |
| 1935 | 31,1 | 1953 | 43,6 | 1971 | 111,1 |
| 1936 | 17,0 | 1954 | 41,0 | 1972 | 81,7 |
| 1937 | 15,6 | 1955 | 39,9 | 1973 | 87,7 |
| 1938 | 15,2 | 1956 | 42,0 | 1974 | 89,0 |
| 1939 | 13,4 | 1957 | 55,7 | 1975 | 79,7 |
| 1940 | 12,3 | 1958 | 60,8 | 1976 | 58,0 |
| 1941 | 8,0 | 1959 | 66,5 | 1977 | 69,92 |
| 1942 | 18,0 | 1960 | 90,8 | 1977 | 99,8 |
| 1943 | 16,7 | 1961 | 116,6 | 1977 | 71,7 |
| 1944 | 31,2 | 1962 | 118,6 | 1978 | 70,6 |
| 1945 | 36,4 | 1963 | 149,0 | 1979 | 68,1 |
| 1946 | 59,6 | 1964 | 166,7 | 1980 | 62,3 |
| 1947 | 31,0 | 1965 | 146,8 | 1981 | 42,8 |
| 1948 | 18,5 | 1966 | 113,2 | 1982 | 49,5 |
| 1949 | 16,3 | 1967 | 126,9 | 1983 | 62,9 |
| 1950 | 17,2 | 1968 | 70,9 | 1984 | 51,1 |
| 1951 | 16,9 | 1969 | 103,7 | 1985 | 70,5 |

In the 60th years I.G. Choubin estimated high quantity of groundhogs in the territory of the Central Kazakhstan, the same data were confirmed by Sludsky, which spoke about big population of a bobac and in other regions. In 1964 Kapitonov carried out the accounting of a bobac in the Central Kazakhstan, then the was defined total quantity trade stock bobac, about 1.9 million. In the same year a hunt on marmot became on a license, but it didn't make success in the organization of trade and in restoration of population of a bobac. Licenses were granted taking into account production of last years, but not taking into account the remained stocks, that was the wrong organization of hunting [19, 20].

In the 70th years the special accounting of groundhogs in territories of trade by qualified specialists wasn't carried out. According to collected with fairs approximate trade in the eighties made about 97 thousand from the territory of Kazakhstan [21].

Nowadays trade according to license coupons remained, but trade already does not have goals on the booty bobac, which was earlier, a hunt purchased the tint of entertainment.

Getting permissions is possible in the territorial inspections of every area of our country. In Kazakhstan opening of a season of hunting for a groundhog begins since June 15 and proceeds to their bedding in hibernation. The territory of carrying out trade considerably decreased in comparison with that, what is practically in all Kazakhstan hunting was conducted actively [22].

Today the group of hunters during the season can get to 600 groundhogs, on their words the all obtained quickly comes true, as has a great demand among local population [23].

Conclusions

Bobac — one of the main fur-bearing animals occupied the leading positions in the period of the Soviet Union. The groundhog possesses curative fat, easy and well assimilable meat, and warm skin because of what was and is object of hunting.

During the USSR bobac is exposed to the uncontrolled commercial hunting, that leads population into decline, prohibition is entered on their hunt almost of 20. In 50e years because of the begun virgin soil and the early hunting the population of marmots begins to be reduced.

Bobac is compelled to leave from the territories on which are once they lived. The prices of skins and fat considerably decrease, trade loses the relevance.

One of the main suppliers of products of a steppe groundhog was always Kazakhstan. Trade was entered practically everywhere, participated in it local population. Unfortunately, during development of virgin steppes the area of a ground of a groundhog it was sharply reduced, and from the remained large and earlier continuous massifs, many as a result of plowing of lands were shattered into small «islands», and for some reasons lost trade value, though the groundhog there in many places is and even quite often has considerable population density.

Now trade places were remained in some districts in Akmola, Karaganda and the Pavlodar regions. And hunters suitable responsibly to the your job remained a little, trade on a groundhog took rather a form of amateur hunting, without the huntsman in trade territories, without competent catching and with the subsequent leaving of carcasses on a place. With such unfair hunters has to be conducted tussle (deprivation of hunting licenses, overlaying of penalties).

Bobac is an important component of a steppe ecosystem, having the strongest impact on formation of a microtopography of plain territories. It is important to organize competent trade, in order to the population of the steppe marmot of that preserving in the large number in the territory of Kazakhstan, again didn't fall into decay.

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Кеңестік және посткеңестік кезеңдеріндегі байбак аулау мәселесі туралы

Осы түрдің аулау мақсаттары, дала суыр аулауымен қатар, басқа аңдардың түрлерін аулауы, ал кей жерлерде байбак аулауы басқа суыр түрлерімен ауыстыру туралы мәлімет келтірілген. Қолда бар әдебиеттер бойынша, әр түрлі мекендейтін жерлерде осы түрдің санын қарастырып, сонымен қатар байбактың мекендейтін орындарға антропогендік әсерін ескере отырып, бұрынғы Кеңес Одағындағы аумақта дала суырдың таралуы қарастырылды, мысалы, мал жаю немесе тың және тыңайған жерлерді игеру, антропогендік әсерілер сияқты. Суырды белсенді түрде аулануы — ол түрдің құрдымға әкелетін негізгі факторы, кейін Кеңес Одағының құрылғаннан бері бірнеше рет дала суырдың аулауға тыйым салынған. Енгізілетін шектеулерге қарамастан, кейбір аумақтарда байбак популяцияның толық жойылғаны байқалды. Авторларға кеңестік және посткеңестік кезеңдерде суыр мекендейтін аумақтарда осы түрдің кәсіпшілігі, тың және тыңайған жерлерді игеру әсері, ірі және ұсақ мал түрлерінің жаю ықпалы туралы қорытынды жасауға мүмкіндік берді.

Кілт сөздер: байбак дала суыры, аулау, кеңестік кезеңдегі байбак, посткеңестік кезеңдегі байбак суыр, КСРО, Қазақстандағы аң аулауы, аулау аумағы, суыр аулануы.

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К вопросу о промысле байбака в советский и постсоветский периоды

В статье даны сведения об основных целях добычи зверька, о видах, которые добывались наравне со степным сурком, а местами заменяли добычу байбака другими видами сурков. Рассмотрена его численность в различных местах обитания, также учтено распространение степного сурка на территории бывшего Советского Союза с учетом антропогенного воздействия на места обитания байбака, например, выпаса скота или освоения целинных земель. Затронута тема активного перепромысла сурка, что является основным фактором, приводящим его популяцию в упадок, из-за чего охота на степного сурка запрещалась несколько раз за время существования Советского Союза. Отмечено, что на некоторых территориях популяции байбака исчезают полностью, несмотря на вводимые ограничения по промыслу. Сделаны выводы о влиянии промысла на популяцию байбака в советский и постсоветский периоды на территориях его обитания, о воздействии на данный вид освоения целинных земель, выпаса крупного и мелкого скота.

Ключевые слова: байбак, степной сурок, промысел, байбак в советский период, байбак в постсоветский период, сурок, СССР, промысел в Казахстане, территория промысла, охота на сурка.

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