

BALKANI Wildlife Society

Wolf Study and Conservation Program
Wolf Analysis and Education about Large
Carnivores

annual report, 2003



Bulgaria, 2003

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Introduction

The year 2003 was devoted to public awareness and education activities. The school education program, which was implemented during the 2002/2003 school year, was finalized in June by organizing the Large Carnivore Day. In May we took a wolf puppy from one of the Bulgarian zoos, the Zoo of Varna. He is being socialized with humans, with the purpose to be our ambassador wolf, to make bridge between wolves and people. The other significant progress is that we purchased a building, which we intend to transform to a Large Carnivore Education Center.

A lot of good data was collected from the field. Scat analysis was made and significant results about the wolf diet came out.

This year was our second year of attempts to trap wolves with the purpose to radio – collar them. Unfortunately, it was unsuccessful again, although several trap lines were set. The efforts are continuing, since nobody is giving up.

Monitoring of wolf activity to livestock was continued and comparison is made with the last years.

Acknowledgments

Our team would like to express its gratitude to Bernd Thies Foundation, the European Natural Heritage Fund - EURONATURE and the Anglian Wolf Society, for their financial support and for their confidence. We are thankful to the Ecovolunteer Program, which presents our project to the ecovolunteer website and attracts volunteers visiting the project assisting us and supporting us.

Thanks to our Polish colleague the biologist Malgorzata Pilot, we have results of DNA analysis on Bulgarian wolves. These results will be one of our strong arguments in our efforts to lobby for species better legal status.

Our team is grateful to our friends and colleagues, the volunteers, who participated in the alternative wolf number counting in Kraishte.

We are thankful to the Varna Zoo and the Sofia Zoo, which were so kind to provide us with the wolves for our public awareness and education activities.

Thanks to the big voluntary help of our colleagues from SEMPERVIVIA Society, we managed to build the wolf enclosure. They also helped us with very valuable advice how to make the construction.

We are very thankful to SEMPERVIVA Society and especially the Karakachan breeds conservation project team, for their kind permission to use their project base in Pirin Mts. And last but not least we thank to our wolf puppy Vucho that since his very early age he already helps us a lot in our education and public awareness efforts.

Main priorities of the Wolf Study and Conservation Program

- Analysis of the species status and population trends, data collection about wolf biology and ecology;
- Improve the conditions for co-existence of wolves and humans, decreasing the conflict between them;
- Public awareness and education about large carnivores of Bulgaria;
- Lobby for improvement of species legal status.

Project infrastructure

The Wolf Study and Conservation Program still doesn't have its own station, as the funds have always been directed to the practical work and the most needed activities. As already mentioned in the "Acknowledgments" the wolf project team uses the house built by SEMPERVIVA Society for the needs of their Karakachan breeds conservation project. The station is located in the village of Vlahi, which is in the foots of Pirin Mts. The teams of the two projects work in cooperation and help one others in the activities.

The wolf project team owns an off road car, purchased with the support of Bernd Thies Foundation, however we are looking for possibilities to supply the project with another vehicle, as the intensive field work and the very bad mountain roads, amortized our present car. Second car is also needed with the purpose to work more effectively, but not to wait each other.

Our team consists of five persons:

Alexander Dutsov - PhD student in the Institute of Zoology. He is working on wolf analysis and participating in the implementation in the school education program.

Kamen Krastanov - student in law. He is assisting in data collection and also participating in the implementation in the school education program.

Nina Kirova - student in the Sofia University, Biology Faculty. She is involved mainly in the field work.

Kalina Tzvetkova - MSc biologist. She organized main part of the implementation of the school education program for 2002/2003.

Elena Tsingarska - Sedefcheva - MSc biologist. The project coordinator with the hard task to be on several locations at the same time.

Study areas

Since last year wolf analysis are made in two model areas. In the last project report it was explained that this is needed with the purpose to have data from at least two different types of wolf inhabited areas in the country. Thus comparison of the collected data can be made and the species status in different areas can be observed. The main differences of the two study areas Kraishte and Pirin Mts. Are the following:

- Kraishte is low mountainous area, consisting of number of small mountains with large valleys between them. Pirin Mts. is steep, high mountain of alpine type.
- Kraishte is unprotected area, hence there is intensive hunting and the wolf is hunted all year round. Big part of Pirin Mts. is a National park, where no hunting is allowed.
- Kraishte is located in Middle West Bulgaria, while Pirin is located in South West Bulgaria. Therefore, there are differences in climate, vegetation and wildlife in the two areas.

Kraishte area

The whole area of Kraishte is about 1000 sq. km. Natural forests in the area are deciduous (beech and oak trees). However, these forests have been cut in a big part of the area and have been replaced by pine plantations (*Pinus nigra* and *Pinus sylvestris*). There are also large natural open or bushy territories, between the forested parts. The macromammalian fauna consists of martens, badger, hare, otter, golden jackal, wild cat, wild boar, roe deer. In March 2003, our team discovered that the lynx *Lynx lynx*, which has been extinct from the country since 1940s is recovering the area most probably from Eastern Serbia, where reproduction of a small population was proved. Until now we could say that the wolf is the only large carnivore species in Kraishte, but if this winter we confirm that the lynx is populating the area there will be second large carnivore, which would be wolf competitor for food.

Human population and wildlife in Kraishte share almost same areas, since villages are located everywhere in the valleys or the slanting slopes. However, human activities in the forests are slightly decreasing, because number of people in those villages is decreasing.

Pirin Mts.

The west part of the mountain was chosen as a study area (about 700 sq. km). The natural forests in the area have richer diversity of tree species. Deciduous forests cover the low mountain parts. Main species are oak, plane tree. Higher up the beech forms large forests. Gradually, these forests turn to mixed, while in the high mountain zones natural coniferous forests are present (spruce, fir, Macedonian and Balkan pine tree and silver pine). Above the forest zone only dwarf pine and juniper are present and there are large meadows used for pastures. Outside the National park some of the natural forests are cut and replaced with coniferous plantations (*Pinus nigra* and *Pinus sylvestris*). The macromammalian fauna is the same as in Kraishte. One of the differences is that some of the species inhabit only some altitudes and the second difference is that here the other large carnivore species, the brown bear, is present.

Settlements here are only in lower mountain part. Up in the mountain there are only mountain hostels. But, in summer time human activities in the mountain increase, since the livestock is brought up for grazing and a lot of tourists visit the mountain.

Wolf analysis

By: Elena Tsingarska – Sedefcheva, Alexander Dutsov, Kamen Krastanov and Nina Kirova

In the winter 2002/2003 the field work was intensive in Kraishte and some new data about the wolf number, home-ranges use and species diet was collected.

Alternative wolf number counting

After long discussions with the official institutions about the reliability of methods they use for determination of wildlife numbers and about the estimated number of some species including wolves, we decided to organize alternative counting of wolf numbers on a model area. We conducted it on 15th of January.

Method

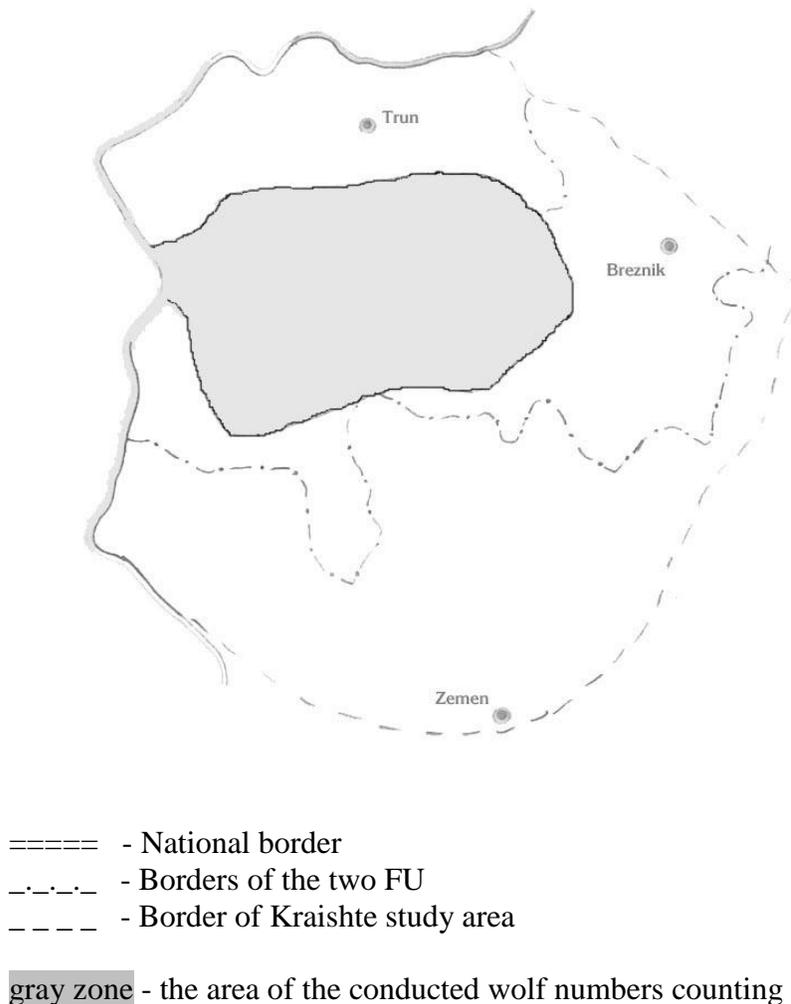
As we did not have capacity to cover the whole territory, it was done in part of Kraishte study area, on the territory of Trun and Breznik forestry units (FU) taking as borders of our activity the natural borders of the mountains in the area. About 3/4 of the territories suitable for wolf inhabitation were covered.

14 persons were involved, as everyone had to cover different route. The routes were defined in a way that allows the whole chosen area to be covered. Each participant was intended to pass on his/her route, recording all the signs of wolf activity in the area. In case wolf trail is found, the participant is obliged to follow it as much as possible and to determine the number of individuals, which had moved together on the trail. Thus if certain wolf trail passes through the routes of two or more participants it can be caught out.

Results

From the 14 participants only 4 observed and followed wolf tracks. Eight individuals were counted in the whole examined area (see Fig.1).

Fig.1



In March 2002 according to the official wolf number estimation, 23 individuals were counted on the territories of Trun and Breznik FU. This is the time when puppies are still not born. It means that after puppies are born in May, there should be more than 23 wolves. The fact that the packs inhabiting these territories reproduced in 2002 was proved by the killed pup in July 2002 and a yearling in April 2003. The two killed animals were from two different packs. Hence, at least two packs in the area reproduced for sure. According to our observations there are four or five packs on the territory of Trun and Breznik FU. Hence, more than those two packs possibly reproduced. Following the official wolf number estimations, if there are 23 wolves before puppies are born, theoretically we can accept that the next winter the number should be at least about 30 – 35 wolves, or even more. Until January 2003, five wolves were killed in the area. Therefore at least about 25 - 30 wolves should be left in the area. Taking into account that we covered about 3/4 of the habitats suitable for wolves in Trun and Breznik FU, we should expect to count about 15 - 20 animals. However, our results show only 8 individuals counted. By this result we can consider that the official estimation methods are not reliable enough and the official wolf number given in many FU is not exact.

Field collection of data

By means of intensive field work we managed to localize the approximate home-range of another pack in Kraishte and the number of its members. The pack size final determination was disturbed, when wolves from that pack were killed.

A pack home-range in Pirin Mts. study area was also approximately determined. This is the first pack in Pirin, which home-range is getting known to us. Our big success with this pack was that we could localize the rendezvous site by simulated howling. I would say “big success”, because our experience shows that wolves in the areas we work usually do not respond to our howling.

Trapping efforts

We set several trap lines in 2003 and activated the pan trap once, but wolves were trapped.

The first trap line was set in March in Kraishte. We had the traps set for 15 days. On the sixth day, a wolf had passed along the forest road where the trap line was, but had not stepped in a trap...

On 15th March we activated the pan trap, this time putting a young goat in it. On 18th March we discovered that the goat had escaped from the trap. We could not believe it, because the trap is 2,50 m high. We investigated the area around the trap. There was still some snow, already melting on some places. Although, it was hard to believe it we found nothing else than goat tracks going away from the trap. We searched for the goat in the mountain and in the close villages, but we did not find any other signs of it.

In May the second trap line for this year was set, this time in Pirin. We pulled out the traps on the ninth day as the preparation of the Large Carnivore Day turned to be more time consuming than we expected.

In July we set two trap lines in two different areas in Pirin. Exactly when we set the traps rain period started in Pirin. Strong summer rain was raining almost every day. The trap line, which was higher up in the mountain was no longer good after the fourth day of activating the traps. The other obstacle was that Kamen and Nina, who were supposed to check the traps stayed in a tent in that period and their living conditions became too hard and “wet”. On the fourth day after checking the traps they pulled them out.

The other traps stayed for 22 days. On the 20th day one of the traps was stolen. This trap line was set not on the main mountain road along a ridge, where we observed wolf track many times, but on a trail, which forked from the main one. We could not set them on the main road, because many people with their dogs pass there in summer time to go to an area with rest houses. This might be the reason for the unsuccessful trap line.

In September, the fifth trap line for this year was set. As there weren't a lot of suitable places on the chosen path only six traps were set. When Kamen and Vesso went to set the bait, there was a fox in one of the traps. Only five traps left. On the fifth day after activating them Alex, who was checking the traps found another fox. Four traps left. On the seventh day another trap was closed with nothing in it. There was some hair left in the trap. The hair was analyzed and it was defined that a calf had stepped and closed the trap. This was confirmed by the fact that one herd of cattle was brought down from the alpine zone the previous day. With only three traps we decided not to spend fuel and man power anymore.

Since 1st of October we could not set traps, because the hunting season started and there were hunters with dogs everywhere.

Wolf diet

By: Alexander Dutsov and Elena Tsingarska – Sedefcheva, Nina Kirova

More scats were collected from Kraishite and some from Pirin Mts. this year. All the scats were analyzed. We compiled all the results from the scat analysis from 2000 to 2003 and made some conclusions.

This analysis is an important part of our work. The received results are giving light on questions like wolf influence on other species, the availability of natural wolf prey in the country and the real diet of this species here.

Method

Wolf scats were collected in the period 2000 – 2003. Altogether 93 scats were collected, 86 scats from Kraishite area and 7 scats from Pirin Mts.

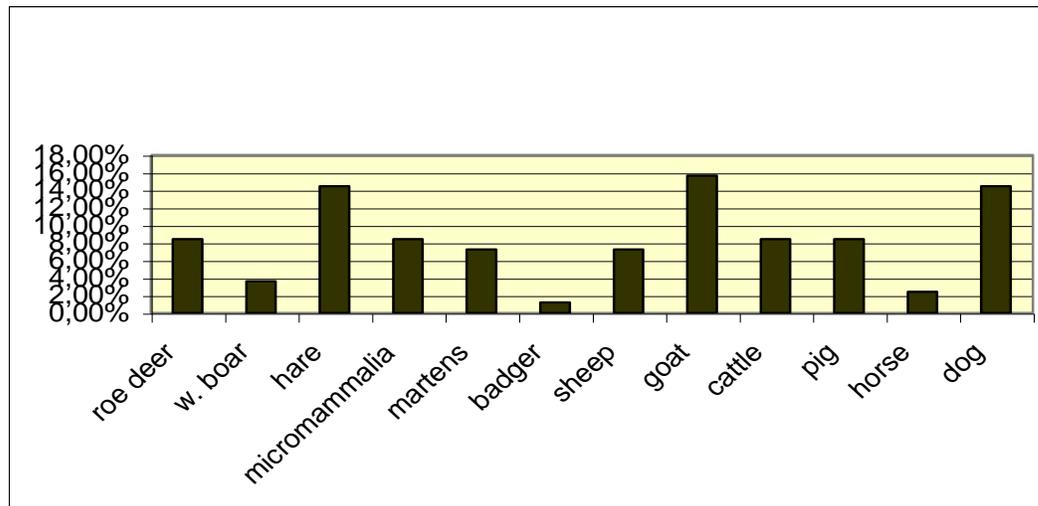
The wolf scats were prepared for analysis by washing, setting in 70% alcohol for 24 hours, drying out in 60 ° C. The next preparation phase is sorting different remains in each scat.

All the scats were analyzed by microscope analysis. Comparison with samples was also made.

Results and conclusions

After the last part of the collected scats was analyzed we compiled the data from all the scats and received the following results.

Graphic 1. Percentage of occurrence of different prey species in wolf diet

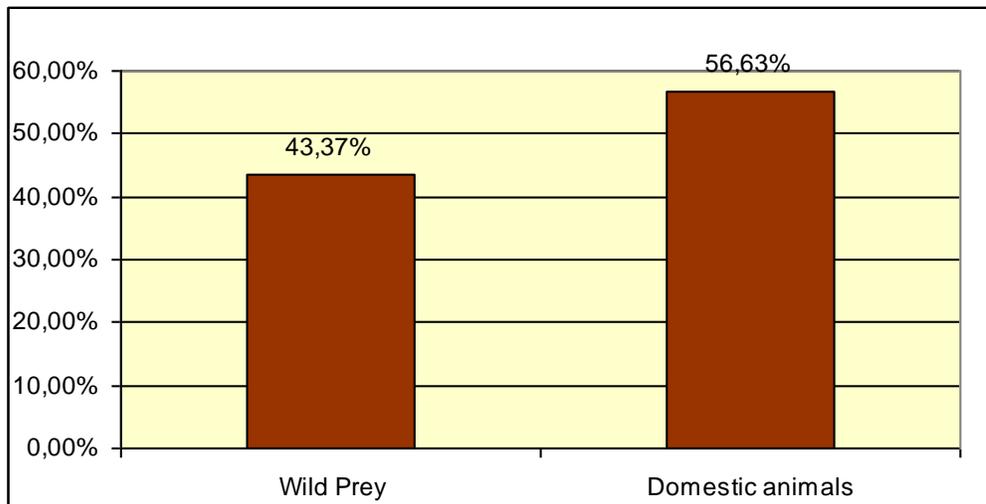


The above graphic clearly shows how diverse is the wolf diet in the examined areas and how big percent of it consists of domestic animals. Taking into account the whole situation sharply decreased number of wild ungulates populations, massive poaching, intensive wolf hunting, etc., the above picture is not surprising. Additionally, the fact that the use of the traditional livestock protection method, livestock guarding dogs, was destroyed during the Socialist time is another explanation for the high percent of domestic animals eaten by wolves.

The possible reasons of the diverse wolf diet in the studied areas are the following:

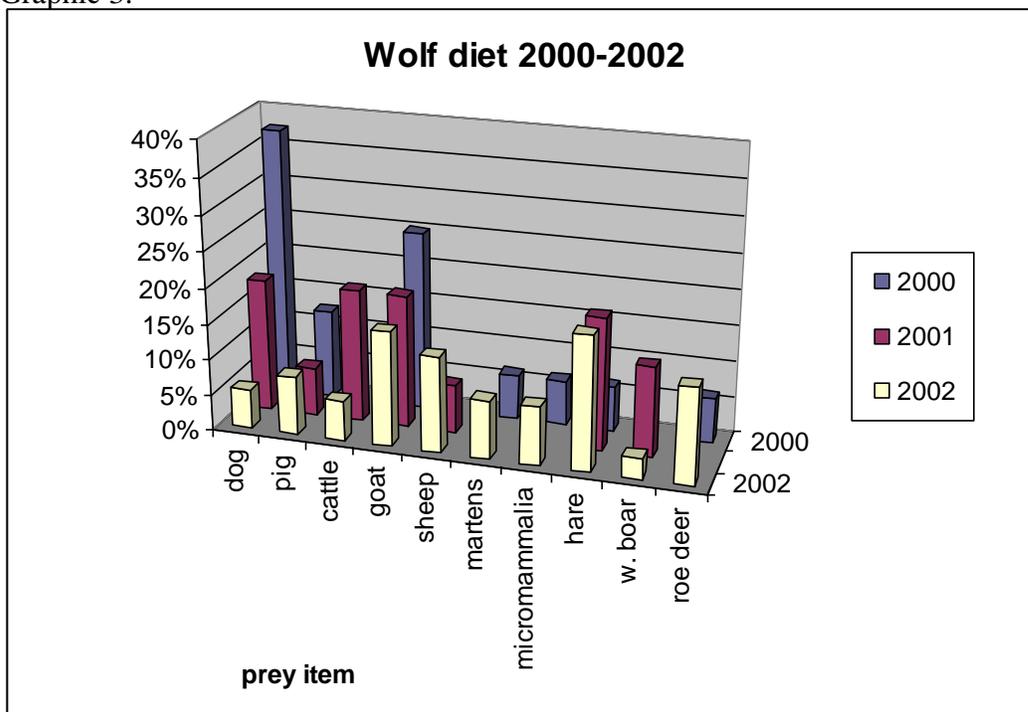
- Small packs (2 – 3 members in average). According to our field observations most of the packs are regularly brought to a minimum number or even destroyed killing one of the breeding animals. A pack with so small size or a pack with destroyed structure can't hunt effectively larger wild prey species.
- Sharp decrease of wild ungulates number in the country (mainly roe deer and red deer). None of the wolf natural prey species is in abundance. Only the wild boar shows some stability in its population numbers, however it doesn't appear as a significant part of the wolf diet at least in the studied areas.
- The Socialist regime destroyed the traditional practices of livestock protection. This is very typical for Kraishte, which is poor region, where people have very small number of livestock and hardly can afford to have a guarding dog. Therefore, grazing livestock is very easy prey.

Graphic 2. Correlation between wild prey and domestic animals



To follow out the differences in the wolf diet for the three examined years we divided the occurrence of different prey species remains in the scats in percentages for each year.

Graphic 3.

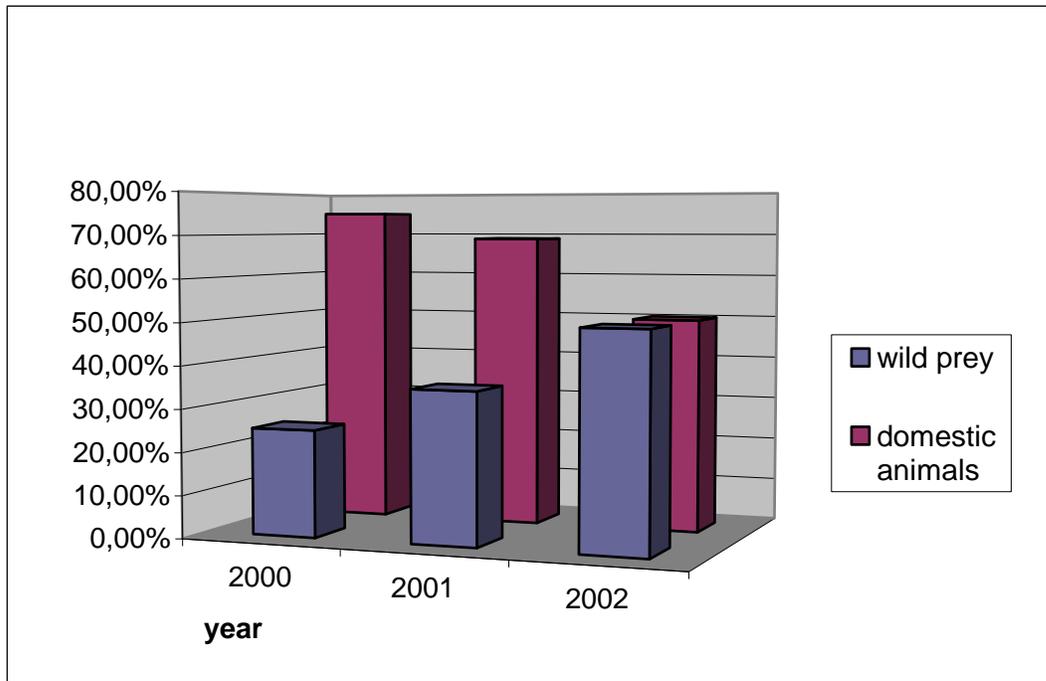


The very high percent of dog remains found in 2000 drops to very low in 2002. The percent of goat, which is the main victim of wolves among domestic animals also decreases significantly in 2002.

From the wild prey, the hare occurs to be the main component of the wolf natural prey. The species remains presence increases in 2001 and 2002. Partly the reason may be the slightly increasing number of hares in the area. The wild boar has comparably significant part in 2001, but almost nothing in the years before and after that. The roe deer remains are slightly increasing in 2002.

That's how the correlation of wild and domestic prey percentage moves in the three examined years.

Graphic 4. Wild/Domestic prey correlation development in the period 2000 - 2002



The possible reasons of increase of the natural prey percentage and decrease of domestic animals percentage can be several.

From graphic 3 and graphic 4 it is obvious that actually the decrease of domestic animals percentage in the recognized scat remains is leading this process. There is sharp drop in the percentage of dog remains from 2000 (37%) to 2002 (only 4%). The cattle remains significantly decrease from 2001 to 2002 and also the goat percentage has been decreasing from 24% in 2000 to about 10% in 2002.

One reason of the sharp decrease of domestic animals remains in the wolf scats can be the higher anthropogenic pressure on wolf in Kraishite (more intensive and successful hunting during the last three years). As a consequence, wolves are not so unhesitating when attacking livestock. The opposite, they have become much more careful. The second output of the successful wolf hunting is decreased wolf number.

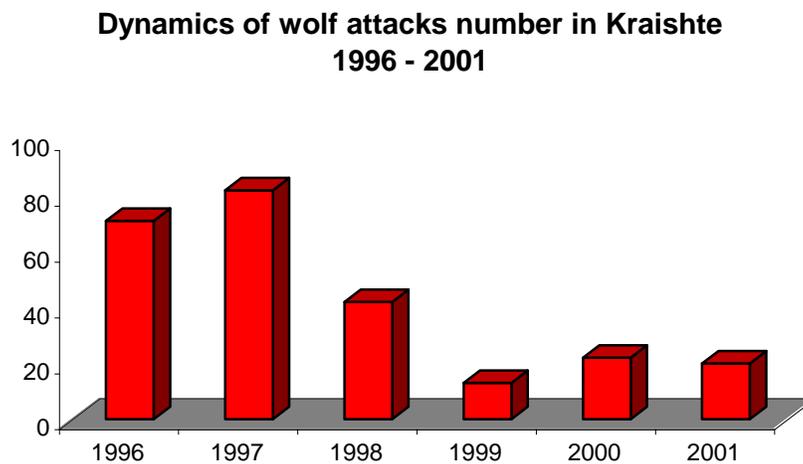
The increase of wild prey remains in wolf scats is very slight and would not bring to such differences. The only a bit more significantly increased prey remains are the roe deer remains (from 6% in 2000 to 10% in 2002).

This slight increase has its explanation. Roe deer hunting is banned in Kraishte during the last three years. During our fieldwork we observe more frequently signs of roe deer presence and individuals.

Wolf activity towards livestock

Graphic 5, which is a result of inquiries with local people during the indicated years, proves that wolf attacks drop in numbers year by year.

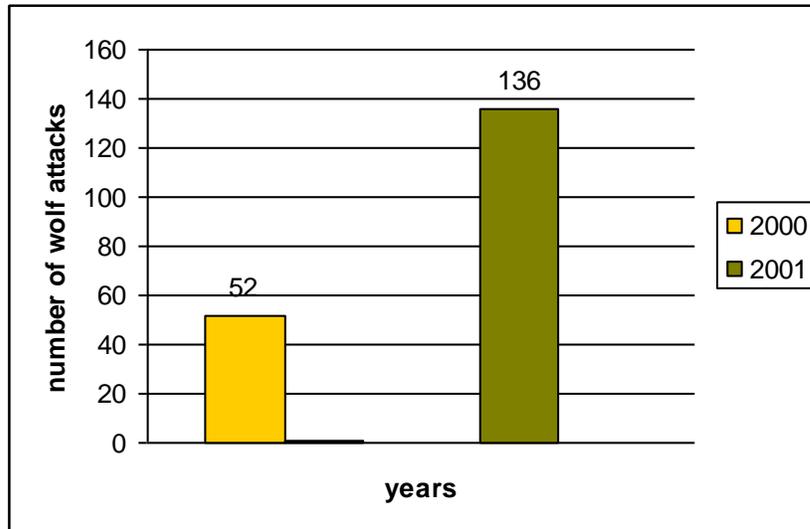
Graphic 5.



On Graphic 6 and graphic 7, results from an inquiry made among local people in Pirin Mts. in 2000 and 2001, are shown. The present inquiry was made by A. Dutsov and K. Valchev, under another project and was conducted in whole Pirin Mts. Following the goals of the other project the authors of the inquiry have not collected data about all the domestic animals (including dogs).

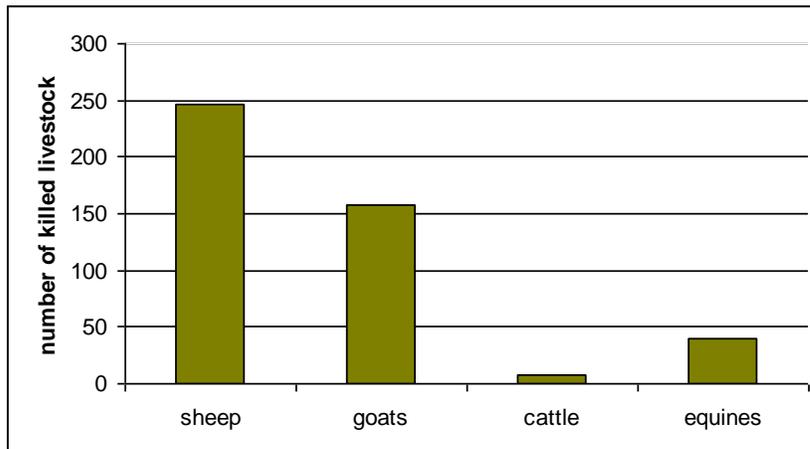
This year our team conducted an inquiry in West Pirin, where our study area is. As data is still being collected through this inquiry in Pirin and Kraishte, results are not included in the present report.

Graphic 6. Wolf Attacks in Pirin Mts., 2000 - 2001



A. Dutsov, K. Valchev, 2001

Graphic 7. Number of killed livestock in Pirin Mts., 2000 – 2001



A. Dutsov, K. Valchev, 2001

The data from Pirin in 2000 and 2001 shows that in Pirin Mts. wolf attacks on livestock are not decreasing during the examined two years, but the opposite. The other difference with Kraishte is that killed sheep are significantly higher number than goats, which are leading in Kraishte. The reasons of all these differences can be become clearer, when the results of the presently made inquiry are worked out and analyzed.

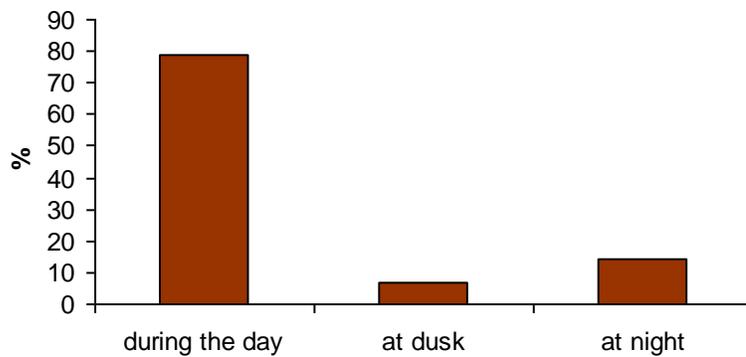
Comparison of wolf activity to livestock in Kraishte and Pirin, relative to time of day/night

Another interesting comparison, which was made after the first result of the inquiry conducted in Pirin came out, is the frequency of wolf attacks on livestock relative to time of day/night. We expected that in Pirin main part of the wolf attacks will be in night time,

because during the whole summer (May – September) most of the livestock is taken up in the mountain and spends nights in mountain fences, or even without fences, while during the day shepherds accompany it. However, the result from the first year inquiry in Pirin showed that the situation in this aspect is pretty the same as in Kraishte. The picture is almost identical (see Graphics 8 and 9). To understand what is the reason for that we need to investigate this problem more deeply. The first supposition is that when reliable protection (livestock guarding dogs) is missing, livestock is easy target for wolves even during the day in the very rough terrain of Pirin Mts.

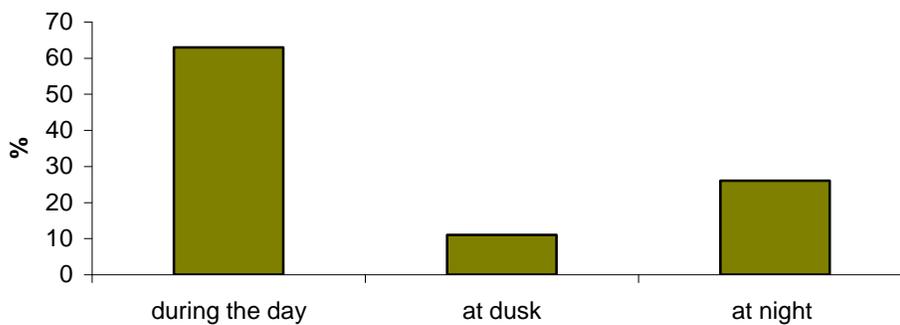
Graphic 8.

Wolf attacks on livestock relative to time of day/night, Kraishte



Graphic 9.

Wolf attacks on livestock relative to time of day/night, Pirin Mts. 2003



Human pressure on wolves

Killed wolves in the study areas

A big number of wolves were killed in Kraishte during 2003. In West Pirin hunters have no such success at all.

Kraishte

The first wolf killed in the area in 2003, was killed in February, in Trun FU. It was large male (45 kg.) about 5 – 6 years old. It was good and healthy looking animal, which means, that it could be the breeding animal in the pack. However, killing that wolf exactly before the start of the breeding season, might have destroyed the reproduction process in that pack.

The second animal was a yearling male from another pack neighboring to the pack of the first killed wolf. The interesting fact was that the wolf was killed in the vicinity of the town of Trun (very close to the living area). We took the killed animal and examined it. It turned out that its stomach was almost empty. The only thing we found in it were oak and beech leaves. There was no single hair of an eaten animal. That probably means that the wolf had not eaten for a long period. Probably this is the reason to approach the town so much.

The third animal was killed in July, and it was most possibly from the pack we have observed from the beginning of our field work in the area. We still do not have details about that animal.

The fourth killed animal was a male puppy again from the same pack (Ljubash pack). It was killed in mid October. This puppy was a proof that the Ljubash pack managed to reproduce again this year. We could compare the status of that puppy with our socialized wolf puppy. The wild one was much lighter, smaller in size and the teeth change was delayed in comparison with our puppy. Most probably the reason for that is lack of sufficient and nourishing food.

Three additional wolves were killed in October (two males and one female), but all three of them in Trun FU.

Another three wolves were killed in November in the Breznik FU. The only thing we know in this moment is that the three animals belonged to one pack. This is the pack with the most south home-range we know by now in Kraishte.

For the rest of the hunting season another two wolves were killed in Breznik FU.

In November, December and January three more males were shot in Trun FU.

The conclusion is: very successful hunting period for the hunters in Kraishte, but very bad year for the wolves in that area. Fifteen wolves altogether killed in Trun and Breznik FU.

This situation could be clearly seen during our fieldwork. In the home range of a pack, which numbered of at least three animals, in January 2003, in January 2004 we always followed the tracks of only one animal. We have some thoughts that this pack was destroyed. The real result of this massive killing of wolves in Kraishte could be observed in summer 2004 when we try to define if the packs (which left) in the area will have managed to reproduce.

West Pirin Mts.

In west Pirin one wolf was killed in the beginning of the hunting season. It is large male killed in mid October. Another two were killed in December.

The fact that so few wolves are killed in our second working area, proves again our expectations that the hunting efforts are not so successful here and this would make our work easier and more effective. The hard, rough terrain of Pirin is one of the factors,

which are favorable for wolves in the area. Hunters often observe wolf tracks, but don't have good chances to shoot them.

DNA analysis

We have been collecting wolf tissue samples, from all over Bulgaria. This is done with the purpose to examine a possible hybridization of wolves with domestic dogs, for which we already have some proofs (but not genetic). Twelve of those samples were sent for such analysis to Poland, to our colleague Malgorzata Pilot. We still expect the results. But in the mean time Malgorzata had made another research, comparing the genetic diversity in different wolf populations in Europe. The result shows that the Bulgarian and the Greek populations have the richest genetic diversity (6 haplotypes) from all the studied populations.

This result is a strong argument in our efforts for wolf conservation in Bulgaria and lobbying for improvement of wolf legal status.

Education and Public Awareness

The school education program

By: Elena Tsingarska – Sedefcheva and Kalina Tzvetkova

In our previous annual report (2002) we already wrote about the ways of the school education program implementation, the areas of implementation, the numbers of schools involved this year, the number of pupils, the materials produced and used in the program, etc.

Visits to schools and conducting games

In the end of the school year, after pupils and their teachers had the possibility to work on the materials during the school year, we made trips and visited all the schools again. This time differing from the last implementation of the program (in 2000/2001) we did not make slide projections for the older pupils, because they are the one who worked with the study books in 2000/2001. Instead, we prepared and implemented practical games with the pupils who worked on the program this school year. This was made with the purpose to check what pupils have learned from the study books and working during the year, but also because a lot of teachers asked us in 2000/2001 if it is possible to make something practical with pupils not only to stay in the classrooms.

We prepared two different types of games and conducted them in the school yards. Pupils were very happy to participate.

The competition

This year we organized again competition for best work (picture, scale model, etc.), but this time the condition for pupils was to work in groups. There were fantastic works of wolf, bear or lynx habitats made by natural materials. There were big paintings, collages and many other works. All the classes which presented works, received a gift for the whole class. Exhibition was set in the Ecological Education Center with the Sofia Zoo

and opened on the Large Carnivore Day. The exhibition stayed during the whole summer and many visitors of the Center had possibility to see it.

The questionnaire. Results

In the beginning of the school year during our visits to disseminate the materials for the education program, we gave to pupils to fill up a questionnaire. It contains questions about the wolf, bear and lynx habitats, the food, the size of these animals, etc.. These questions aimed to check the knowledge of pupils about these species. The second group of questions were such which checked the attitude of pupils towards large carnivores. It was emphasized on questions about the wolf, as it is known that the main problem with human attitude towards a large carnivore is towards this species.

In the end of the school year during our second visit to schools we gave pupils the same questionnaire to compare the results and the estimate if our education activity was successful, if it achieved its goals.

Hereafter the results of the questionnaire are added. We included the results from the questions about wolves, since this is our main target species.

The answers of all the questions given above have positive development after pupils have worked on the education activities. From some questions (where the knowledge was examined) it is obvious that pupils had good idea about it. For instance, on the question “How big is the wolf”, before the education activities, about 60% (average) of the pupils already knew the right answer. However, it is also obvious that the education activities helped to the rest 40%, to learn and to understand the right answer. After pupils worked with the materials 90% of them (average) knew the weight of the wolf.

The situation with questions about attitude is a bit different. Although, the development after implementation of the education activities is also positive, here the percentage of those who answer positively is smaller. For instance, the question “Is the wolf dangerous to humans?” is answered with “YES” by nearly 80% (in average) by the inquired pupils. After implementation of the education activities there is positive development, but it only levels away the opinions. “YES” and “NO” are almost 50% to 50%. Most probably the reason for that is the education in most of the families, through the grand parents’ stories, and the children stories, where the wolf is attacking other animals and even people. We don’t imagine that by implementation of one education program the whole negative attitude towards the species and the other large carnivores will be changed to completely positive. That’s why we are satisfied by these results as we see positive movement in the whole process. Our opinion is that this process should continue on a larger scale (National level) and in long terms. The first small success in this aspect is that the Pirin National Park Administration, liked very much our materials and they would like to finance reprinting of some number of the two study books, to be used again in education activities about large carnivores.

The Large Carnivore Day

Since our goal was to attract as many children and other visitors as possible to this event we decided to organize and to conduct it in Sofia. This had another advantage, all the National media are based in Sofia. We could make wider media coverage of the event. After the visits to the schools finished in the end of May, we concentrated on the preparation of the happening.

We had the kind invitation of the Ecological Education Center with the Sofia Zoo. The hosts provided us with space to set the exhibition of the best pupils' work, which participated in the competition.

We prepared slide projection, video documentaries about large carnivores, visits to the wolf and the brown bear enclosures and lectures there, a number of practical games and at the end of the event a competition for best picture of asphalt was organized.

Last but not least, participating pupils had the possibility to see, touch and pet our puppy Vucho and of course to take photos of them with him. The day passed very well. More than 100 pupils and adults visited the event and more than half of them got involved in the activities. The class, which made the best work (a game with questions about the three LC species, model of Bulgaria).

We had good media coverage, although we learned at the last moment that the regional authority of the Ministry of Environment had organized voluntary cleaning of Vitosha Mts. (next to Sofia). One of the three national TV channels made a direct connection with the studio in a morning emission. It was Saturday morning and we believe a lot of people were in front of their TVs. An article with photos was published in one of the national daily newspapers.

We decided that The Large Carnivore Day has to become a tradition and to be organized every year.

Print materials

This year we managed to prepare and print a WOLF Poster. It was our idea since a long time, but the funds of the time were always limited and directed in more urgent activities. The poster is directed to the wide public and contains the essence about wolf's role in nature. I would like to say special thanks to my husband Sider, who painted the picture for the poster and made the design, all for free.

Additional media coverage

This year we hardly tried to reach some of the national media (national TV, radio, newspapers). The only success with this was having one of the three national TVs and one of the national daily newspapers on the Large carnivore day.

We needed national media to tell on our view about the anti – wolf campaign launched during the hunting season. Every year in October, in the beginning of the hunting season media express the opinion and the information given by hunters about the “too high wolf number”, about the huge beasts of 70 – 80 kg killed by hunters, about blood-thirsty wolves who attack livestock and kill big number sheep, goats, etc. This is the general information coming out through media every fall and winter. We were unable reach national media to answer all this. A contact was made with a newsman who wished to make an interview with us, but he was blocked by the chiefs. It was obvious that there is no wish in the direction of that TV to show another view.

After a very negative article about wolves was published in October, in a newspaper disseminated in West Bulgaria, I contacted a journalist from a local newspaper of the town of Pernik. She is also writing materials for the above mentioned newspaper and I hoped there might be a possibility to publish the information told by us there. She made long interview about our work and about the wolf as a species. However, the editors of the regional newspaper did not accept the article. The journalist gave it to the local newspaper of Pernik town, where it was published.

A cable TV, which is broadcasted in West Bulgaria, expressed interest towards our work. In December, they visited us in Pirin Mts. where we work and made interviews, shots of our work and of our wolf puppy Vucho. They made really good, and positively directed short documentary, which was shown in January, in the best time in the evening. I hope many people saw it.

Media work still appears to be hard job for us, because of the strong hunters influence as hunters are in the highest government positions.

The future plans for public education about large carnivores in Bulgaria

The Large Carnivore Information Center

Since the beginning of the Wolf Study and Conservation Program implementation building up an education center was in the plans of the education activities.

Our idea is that when such a center is built up it will be our tool for long-term education about large carnivores. When we concentrate our education efforts in this center, we will be able to enrich the education materials and to increase the number of schools and pupils, involved in this process. This is the main idea for the center, to make it popular among schools throughout the country and to accept groups of pupils during the school year.

In 2002 we chose the appropriate place for the center. This is Pirin Mts. where the project fieldwork is very intensive since the beginning of 2003. Being a National park with very beautiful landscape, giving refuge to wolves and bears and being visited by many tourists, Pirin is the right place to become a home of the Large Carnivore Information Center. After long negotiations an old building was purchased. It needs a lot of refurbishment. When the needed finances are raised we are going to refurbish it and to equip it as an information center. The building is in the village of Vlahi. This is the village, where the WSCP uses the project base of SEMPERVIVA Society, made for their Karakachan breeds conservation project. Vlahi is located in a very beautiful area in the mountain lower parts (600 m). From the village there are trails, which lead to the higher altitudes, where the National park is. The future information center is almost in the center of the small village. The idea for its establishment harmonizes with the idea for the development of Vlahi. A group of people working on the WSCP and the Karakachan breeds conservation project, together with some other colleagues have the idea to develop the village as an entrance of the National park. Another NGO is refurbishing a building to make a seminar center. The Karakachan project offers horse and village tourism. There is

a common idea to open a coffee – house and a souvenir shop. Such an infrastructure would bring a lot of the mountain tourists to stop in Vlahi, to see all this and to spend some time there. The LC information center would be a very good complement to this composition. The eco tourism, educating people about nature and wildlife would be very efficient in such a combination.

Organizing the LC center

The idea is to have one big room for the exhibition, which will contain the main part of the information and the education materials (including interactive materials); a room for projections, meetings and work with pupils; a small souvenir shop and a small coffee; a small office room and one room for accommodation of the project staff when working in the area. The way the center is planned would give possibility for work with different groups of the society.

The wolves

In May, we started to look for a wolf puppy in the Bulgarian zoos. In the zoo of Varna there were puppies born. The director agreed to give us one puppy for free. We took the puppy when it was 11 days old, with the purpose to socialize him with humans. It is a male and we called him Vucho. He is already 9 months old and is doing very well with people. We want Vucho to be our ambassador wolf and he is already starting to implement this task. We already had some visitors in Vlahi, who came to see him. Actually, Vucho started his mission already when he was only a month old. We brought him on the Large Carnivore Day and pupils had the possibility to touch him and to take photos of them with him. Vucho has a large enclosure at the end of the village of Vlahi and we go every day for walks with him. We started constructing the enclosure in August, but because of delayed delivery of some materials and because we are very much taken up by different tasks we managed to complete it in mid September.

In October, we took another wolf, which was given to us from the Sofia Zoo. It is an adult male, which has not been socialized with humans, but living in a zoo for many years is used to people. The main purpose of taking Balkan (this is the name of the wolf) was that it is much better that Vucho lives with other wolf (wolves), but not alone. When Vucho was 5,5 months old we put him in the large enclosure, where Balkan was brought a week before that. According to our observations the wolves did not have much contacts in the beginning, but as the time is passing the young one has more courage to approach the old one. Generally they are doing well living in same enclosure, although it seems that they do not have close interactions.