



NABU KYRGYZSTAN: Activity Report 2010–2020

Ten years of wildlife protection activities

Table of contents

1. Wildlife protection activities in Kyrgyzstan	2
1.1. The first steps	2
1.2. The Global Snow Leopard Conservation Forum	3
1.3. Sculptures, awards, and bilateral relations	4
2. Main activities of NABU in Kyrgyzstan	5
2.1. Science and monitoring	5
2.2. Environmental education	9
2.3. Anti-poaching unit "Gruppa Bars"	12
2.4. "Ilbirs" NABU Rehabilitation Center	18
3. Projects implemented by NABU Kyrgyzstan	20
3.1. "Conservation of Biodiversity in the Northern Tien Shan" (20132017)	20
3.2. Biosphere Expeditions in the Kyrgyz Ala-Too mountains (since 2014)	20
3.3. "Effective Yak Farming in the Tien Shan Mountains of Kyrgyzstan" (2017-20)21).21
Conclusion	22
Thank you note	23
Historical survey	24
List of abbreviations	25

Dear friends of Kyrgyz nature,

The NABU branch in Kyrgyzstan is ten years old, but NABU began to implement its environmental projects in the Kyrgyz Republic back in 1994, starting with the organization of the first Issyk-Kul conference. Here a historic decision was made to create a Biosphere Territory — the largest biosphere reserve in the world.

The event was initiated by the State Committee of Natural Resources of the Kyrgyz Republic, the Faculty of Geography at the Kyrgyz National University (KNU), NABU, and prominent figures from nature protection, education, and science. The NABU delegation from Germany included Professors Michael Succow, Stefan Doempke and Christian Mittag. The biosphere reserve proposed by NABU representatives for creation in Kyrgyzstan has become a new model for specially protected natural reservations internationally. The group we created developed a project on nature conservation in the Biosphere Territory, which also involved German postgraduate students. And at the second Issyk Kul conference in 1998, the Issyk-Kul Biosphere Territory was established, covering a total area of 43,000 km². A year later, the Snow Leopard project was launched as the first step in the implementation of the Biosphere Territory project. And a little later the "Law on Biosphere Territories" was adopted – the first such law in the CIS.

In 2010, NABU (Nature and Biodiversity Conservation Union) opened a branch in the Kyrgyz Republic, thus making a significant contribution to the protection of nature in Kyrgyzstan. In 2011, the NABU leadership – Leif Miller and Thomas Tennhardt – met with the President of the Kyrgyz Republic, Roza Otunbaeva. In the same year, an agreement was signed between NABU and the Kyrgyz State Agency for Environmental Protection and Forestry.

One of NABU's most important innovations was undoubtedly the Global Snow Leopard Conservation Forums in 2013 and 2017.

The NABU team in Kyrgyzstan is a close-knit and dedicated group, which stands for respect for the environment and a love of nature.

Thank you to everyone who supports our ideas for protecting nature and preserving the snow leopard and its population!

Yours, Tolkunbek Asykulov Director of NABU Kyrgyzstan



Meeting with the former President of the Kyrgyz Republic, Roza Otunbaeva

N. of



Boris Tikhomirov, Head of the NABU's Central Asia Program, makes a proposal to hold a world forum on the conservation of the snow leopard

1. Wildlife protection activities in Kyrgyzstan

1.1. The first steps

NABU's work to protect wildlife in Kyrgyzstan began in 1994, when the NGO was one of the organizers of the first Issyk-Kul conference on the creation of a biosphere reserve. For the next three years, programs to preserve the nature of the Biosphere Territory were developed. In 1998, the second Issyk-Kul conference established the Issyk-Kul Biosphere Territory, with a total area of 43,000 km². Since then, there has been comprehensive support for the first ecotourism initiatives based on the principles of the Biosphere Territory.

A year later, the Snow Leopard project was launched as part of the Biosphere Territory project. In 2000, the Gruppa Bars unit confiscated a wounded snow leopard from poachers, which was then transported to Germany for treatment. The rescued snow leopard, followed by other wild animals, needed professional rehabilitation. The need to create a center for the care and treatment of animals and their subsequent release into the wild was met in 2002 with the opening of the first rehabilitation center in Central Asia, in the Sasyk-Bulak Gorge on Issyk-Kul.

The work of the rehabilitation center for wild animals, many of them harmed by poachers, was carried out at a professional level. The specialists at the center treated the animals without taming them and made every effort to return them to their natural habitat. The struggle to save the lives of these animals depended on the resolution of many other problems in the field of wildlife conservation. This was why NABU opened a branch in the Kyrgyz Republic in 2010.

The branch began by establishing contacts with state agencies for nature protection and signing the first agreement on cooperation in the field of nature protection with the Kyrgyz State Agency for Environmental Protection and Forestry (SAEPF).

The specialists in the branch have been actively involved in the work: the environmental education team has provided various activities in kindergartens, schools, universities, in the branch office and in nature; the monitoring team has conducted scientific research and wildlife monitoring; and the anti-poaching unit Gruppa Bars has patrolled the region.

In the first year of the branch's activity, a significant event was the visit of the President of the Kyrgyz Republic, Roza Otunbaeva, to the NABU rehabilitation center in the Issyk-Kul region. During the meeting, the head of NABU's Central Asia Program, Boris Tikhomirov, made a proposal to hold a large-scale forum on the global conservation of snow leopards.

NABU in Kyrgyzstan carries out numerous environmental activities, aiming not only to teach the ecological basics of living in harmony with nature and its inhabitants, but also to enable people to stop hunting and earn a living without destroying red-book animals and their food supply.

1.2. The Global Snow Leopard Conservation Forum

On December 1–3, 2012, an international meeting on snow leopard conservation was held in Bishkek. More than 120 participants from twelve countries (Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyzstan, Mongolia, Nepal, Pakistan, Russia, Tajikistan, and Uzbekistan) and representatives of environmental organizations (NABU, Snow Leopard Trust, WWF, Panthera, Global Tiger Initiative, Fauna & Flora International) expressed their opinions. As a result of the meeting, the "Bishkek Recommendations for the Conservation of Snow Leopards and their High-Mountain Ecosystems" were adopted. This document formed the basis for further work by the countries in the snow leopard's range and by international partner organizations, who developed the "Global Snow Leopard Conservation Program" and other documents for consideration and approval at the Global Forum.

The three-day meeting on the conservation of the snow leopard was a vital first phase in preparation for the Global Forum.

On December 3, the President of the Kyrgyz Republic, Almasbek Atambaev, met with the heads of delegations from the World Bank/Global Tiger Initiative (Keshav Varma) and NABU (Leif Miller and Thomas Tennhardt). The participants informed the president about the results of the meeting and the planned activities in preparation for the forum.

The first Global Snow Leopard Conservation Forum was held in 2013, with the participation of representatives from the twelve countries that make up the main habitat of this animal, along with international environmental organizations. At the forum, the Bishkek Declaration was signed, one of the main goals of which was to identify key landscapes for the species. The forum decided to identify and secure at least 20 healthy landscapes of the snow leopard across its range by 2020, or "Secure 20 by 2020".

On October 22, 2013, Atambaev thanked NABU for its initiative and support in holding the Global Snow Leopard Conservation Forum and noted the need to further intensify cooperation between Kyrgyzstan and NABU.

The Global Forum was undoubtedly a success, the Bishkek Declaration and the Global Program for the Conservation of the Snow Leopard and its Ecosystems were adopted at a high political level, and a mechanism for coordinating the implementation of this program was agreed on.

The second International Snow Leopard and Ecosystem Forum was held on August 25, 2017, in the Ala-Archa State Residence in Bishkek, with the participation of representatives of the twelve range countries and also international environmental organizations. The day before the forum, the participants adopted a Declaration on the Conservation of the Snow Leopard and its Ecosystems. The document announced plans to calculate, in the years to come, the exact number of snow leopards on Earth. In addition, experts developed a system for the conservation of at least twenty of the animal's habitats. The participants discussed the possibility of implementing a multicountry project for the conservation of snow leopards, supported by the Global Environment Facility (GEF).



The Global Snow Leopard Conservation Forum 2013



NABU CEO Leif Miller (left) and NABU Director International Thomas Tennhardt (second from right) at the Global Snow Leopard Conservation Forum 2013



The GEF is the largest multilateral trust fund focused on enabling developing countries to invest in nature. The Facility is not a goal in and of itself. Its main task is to develop a global strategy for real projects in each of the countries participating in the global forum. Since the protection of the snow leopard is a matter of international policy, this issue needs to be resolved at government level.



Sculpture of a snow leopard in the Boom Gorge



The NABU Snow Leopard Award is presented to the former ambassador of Kyrgyzstan to Germany, Erines Otorbaev, for his contribution to the implementation of environmental projects and support for the activities of NABU

1.3. Sculptures, awards, and bilateral relations

Snow leopard conservation is not a one-day program, but a long-term undertaking, including monitoring, combating poaching, educational activities, and various campaigns to draw public attention to environmental problems.

The snow leopard sculptures installed in 2015, 2017 and 2019 are designed to inform people, to call for the protection of animals, and to inspire respect for nature. The exhibit is intended to be unique both as a natural object and as a way to draw attention to the problems of modern ecology.

In 2015, a snow leopard sculpture was installed in the Boom Gorge. The second sculpture – in the form of a snow leopard climbing down a steep cliff – was installed in Kichi-Korumdu Gorge in the Suusamyr Valley along the Bishkek-Osh highway in 2017. The third sculpture of the snow leopard and its food supply – mountain goat, hare, and marmot – was installed on the grounds of the Institute of Water Problems and Hydropower at the Kyrgyz Academy of Sciences in 2019.

The decision was also made to establish the NABU Snow Leopard Award for outstanding achievements in the protection of snow leopards and their habitat, as well as for raising the environmental awareness of children and young people.

For active efforts in the implementation of environmental projects, the first NABU Snow Leopard Award was received in 2018 by the former president of the Kyrgyz Republic, Roza Otunbaeva. The second NABU Snow Leopard Award was presented to the NGO "Burgut" in Gornyi Badakhshan (Tajikistan). The third Snow Leopard Award was given to the former ambassador of the Kyrgyz Republic in Germany, Erines Otorbaev, for his strong commitment to protecting the snow leopard in Central Asia.

New prospects for bilateral relations in the field of nature protection: In the spring of 2019, the director of the NABU's Central Asia Program, Boris Tikhomirov, met with the leadership of the Kyrgyz State Agency for Environmental Protection and Forestry (SAEPF). As a result of the meeting, an agreement was signed between the SAEPF and NABU Kyrgyzstan on cooperation in the field of nature conservation for the period up to 2029.

Nature conservation requires a comprehensive approach to solving multinational problems. NABU's ecologists are working to preserve natural heritage assets and making every effort to preserve snow leopards in Kyrgyzstan. Our motto – "for people and nature" – reflects the need for joint efforts in the protection of the environment.

2. Main activities of NABU in Kyrgyzstan

The activities of the NABU branch in the Kyrgyz Republic are aimed at the protection of endangered species, the creation of protected natural areas and the sustainable development of regions. They are carried out in the following areas:

- → scientific research on the range of the snow leopard and on other wild animals by the monitoring team;
- → work on sharing environmental knowledge with the general public, increasing ecoawareness and eco-culture, conducted by the environmental education team;
- prevention of poaching and violations of environmental legislation by the antipoaching unit Gruppa Bars;
- → animal rehabilitation at "Ilbirs", the NABU center in the Issyk-Kul region;
- → veterinary examination of affected animals, preventive care, and medical treatment;
- → establishment and development of media relations, organization of environmental events, preparation of materials for publication, and creation and maintenance of an online presence, carried out by public relations specialists.



Snow leopard Alsu at the NABU Rehabilitation Center "Ilbirs"

2.1. Science and monitoring

To preserve the snow leopard and other wild animals that are on the verge of extinction, scientific studies are carried out on the snow leopard population, its habitat and food supply.

The specialists in the monitoring team conduct a thorough analysis and assessment of the current state of biodiversity of the Kyrgyz Republic; they install camera traps and identify the animal species captured by them. This provides a good basis for studying the fauna of Kyrgyzstan.

To assess the state of biodiversity, monitoring specialists use the following research methods:

- → field (visual method, surveys of the local population, installation of camera traps);
- → application of GIS technologies and computer data processing;
- photo-identification and mapping;
- → cartographic research, biological assessments, etc.

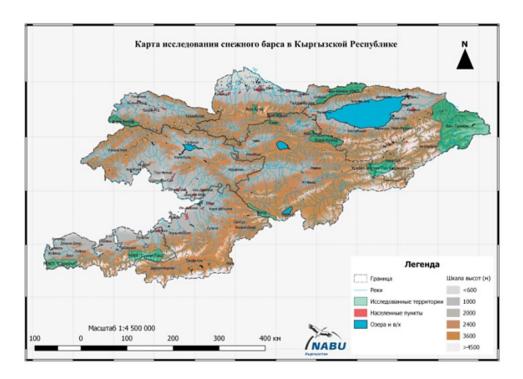
The monitoring team has been investigating significant landscape areas throughout the Kyrgyz Republic (on the map in green):



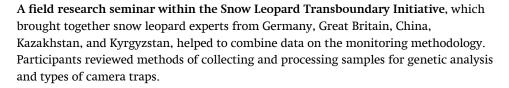
Installation of camera traps in the Chon-Kemin State Nature Park



Monitoring will help to determine the exact number of snow leopards in the country, which is necessary for the development of specific measures to preserve the population of this species.



A monitoring seminar with the participation of experts from Mongolia and Germany showed how to improve efficiency in the monitoring of wild animals with the help of computer programs. Within the framework of the seminar, an expedition was organized to the Ukok Gorge, then to the Kara-Kuzhur valley (the west spurs of Terskey Ala-Too) in the Naryn region. The camera trap frames were analyzed, and the experts in the seminar gave recommendations for further work.



The knowledge gained was applied in the practical part of the seminar – field research in the Ala-Archa National Park, located 30 km south of Bishkek city on the slopes of the Kyrgyz Mountain Range. Here you can see ibex, wild boar, and deer, but also predators such as fox, wolf, rare snow leopard, and lynx. Among the small animals there are hares, martens and stoats, badgers and porcupines. The birds that live in the park are bearded and stone partridges, song and golden eagles, saker falcons, and vultures, which are listed in the Red Book.

The seminar participants captured ibexes and birds on their cameras. The specialists learned how to plan field routes correctly. The unified approach to snow leopard accounting developed here will further improve the collection and analysis of camera trap data.

"Khan-Tengri" biodiversity

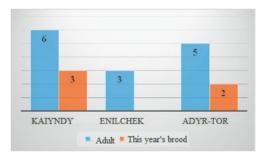
To the southeast of Issyk-Kul Lake, beyond the crest of the Terskey Ala-Too ridge, is the highest part of Kyrgyzstan – the Central Tien Shan. The creation of the Khan-Tengri State Nature Park has played a special role in preserving the biodiversity of this area.



Field research seminar within the Snow Leopard Transboundary Initiative

In 2018, the first expedition to explore the territory and install camera traps took place in the Saryjaz, Engilchek and Kaindy river valleys. More than twenty species of mammals were visually recorded, including the Tien Shan white-footed brown bear, argali, ibex, and several species of large birds of prey. There are five species that the snow leopard can potentially hunt.

In parallel, traces of the activities of large animals were recorded; traces of several animals were noted. In the trans-border zone of the Central Tien Shan (the Saryjaz, Engilchek and Kaindy river valleys and the spurs of these mountains), the average degradation of mountain ecosystems has been recorded. The presence of a variety of animal species indicates a gradual stabilization of the population. According to local residents and rangers, there has been a dynamic growth in biodiversity over the past two to three years, thanks to the work of the park. The region is also unique in its recreational potential (Khan Tengri Peak, Merzbacher Lake, etc.) for the development of various types of mountain adventure tourism.



Number of snow leopards captured by camera traps in the Central Tien Shan in 2018–2019

Specialists in the monitoring team at NABU Kyrgyzstan, with the participation of colleagues from Khan-Tengri SNP, set 54 camera traps in trans-border areas (in the Saryjaz, Engilchek and Kaindy river valleys and on the spurs of these mountains). In the period from 2018–2019, the frames of the camera traps captured nineteen leopards, nine bears, three manuls, a wolf, a fox, a marmot, an owl, a badger, an argali, an ibex, and other animals.

Expedition to Altay

The Republic of Altai is located in the south of Western Siberia, in the center of the Eurasian continent, in the mountains of the Southern Altai, where Russia's external border runs. The scientific research expedition took place with the staff of the Saylyugemsky National Park on the southern ridge of the Chui valley in the Kosh-Agach district.

The researches in the expedition were carried out in three directions:

- → installation of camera traps;
- → visual accounting of the snow leopard's food reserve with coordinate data bindings (transects);
- → accounting for traces of the snow leopard's vital activity with the collection of animal excrement.

Camera trap data and assessment of the biodiversity of the regions studied

In the Talas region, in March 2019, ibex, snow leopard, lynx, argali, badger, fox, ermine and several species of large birds of prey were caught in the frame of the camera traps installed in the Kara-Buura State Nature Park.





Research expeditions at an altitude of more than 3,000 meters above sea level



Research expedition in the Chui valley (Kosh-Agach region, Republic of Altai)

In the summer of 2019, in the Issyk-Kul region (Turgon, Tuz, Chymyndy-Sai, Jyrgalan), camera traps captured two snow leopards, manul, deer, ibex, roe deer, wild boar, brown bear, lynx, marmot and other forms of fauna.

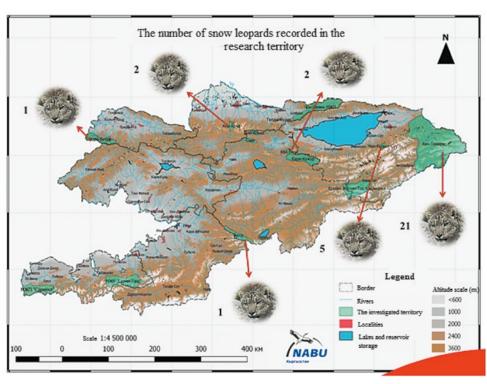
In the expedition to the Ala-Archa SNP and Kemin district in Taldy-Bulak valley, photo traps installed in winter 2019 recorded snow leopard, ibex, snowcock, stone partridge, steppe polecat, ermine, and fox.

In winter 2020, camera traps in the Issyk-Kul region in the Chon-Kyzyl-Suu Gorge recorded five snow leopards, lynx, brown bear, mountain goat and other animals.









Number of snow leopards captured and identified by the monitoring team of NABU Kyrgyzstan in 2017-2020

Implementation of the "PROSPECTS 2020" project

In early 2020, the SAEPF, NABU Kyrgyzstan, Ilbirs, UNDP and the Snow Leopard Trust selected high-altitude areas of Kyrgyzstan for monitoring activities. Our organization planned to set up more than ninety camera traps in the Turkestan Mountains, the northern slopes of the Kichi-Alai Mountains, the southwestern part of the Ferghana Mountains, Terskey Ala-Too and the highlands of Inner and Central Tien Shan.

From September to October 2020, monitoring specialists together with staff of the Sarkent State Nature Park and the Surmo-Tash State Nature Reserve installed photo traps in the Turkestan Mountains: twenty in the Sarkent Nature Park and twenty-two outside the territory adjacent to the nature park. This is about 100,000 hectares of the territory of the Turkestan Mountains, at an altitude of more than 3,000 meters above sea level.

2.2. Environmental education

One of the priorities of NABU Kyrgyzstan is to develop the ecological culture of the population.

Goals and objectives of the environmental education team:

- → raising local population awareness and improving environmental consciousness;
- → environmental campaigns in kindergartens, schools, and universities of Kyrgyzstan;
- → excursions with schoolchildren and students;
- → work with protected areas of Kyrgyzstan;
- participation in international projects and conferences;
- → scientific and educational articles, guidelines, and books.

NABU Kyrgyzstan conducts environmental lessons and campaigns and celebrates holidays on the ecological calendar. It also organizes round tables, scientific seminars, press tours, master classes and events in the ethno-game style.

NABU Kyrgyzstan environmental lessons in all regions of the Kyrgyz Republic

At environmental lessons, experts talk about rare and endangered species of animals and their protection, showing photo and video materials and other visual aids. NABU environmental lessons are held regularly throughout Kyrgyzstan, even reaching the youngest citizens of the Kyrgyz Republic, kindergarten pupils. In game format, children are told about a large predatory cat – a snow leopard – and about its behavior, habitat, and nutrition, because the love of nature is instilled in childhood. Each child tries to draw a snow leopard during the lesson.

Ecological campaigns

Popular wisdom says that nature reflects the character of the people that live in it. The state of the environment depends only on humans. Respect for nature is already an ecological culture, and this position is at the forefront of our events.

"Birds' Day", "In Harmony with Nature", "The Snow Leopard is a symbol of the mountains of Kyrgyzstan", "Tazalyk" (a campaign to encourage recycling), "Day of Ecological Knowledge", "International Day of Mountains" and other campaigns calling for the preservation of the fauna of the Kyrgyz Republic are held in educational institutions, children's health centers and camps, high-altitude jailoos (summer pastures) and protected areas. The slogan of the campaigns is the same: "Let's save wild nature". But the formats of events are different. Guided tours, master classes, competitions and exhibitions, presentations and performances, theater productions and creative activities for children – NABU Kyrgyzstan's events reach out to an everexpanding circle of nature lovers.



Eco-educational event "In the embrace of the mountains – let's save nature"



Nature observations





Participants of the eco-art-camp in the Kara-Kuzhur valley in the Naryn region

The state of the s

Teach-in-discussion "Ecology of nature and soul" (themed on the novel When the Mountains Fall), timed to coincide with the World Wildlife Day (March 3)

Environmental seminars, round tables, and master classes

Another form of eco-educational activity is seminars and master classes, where we not only teach, but also talk about the responsibility of the individual for the environment and the importance of developing an ecological outlook among citizens.

In 2011, a round table on "Current Problems of Ecology" in the Issyk-Kul reserve brought together Issyk-Kul residents interested in nature protection.

In 2012, we presented a paper, talked about our past work, and showed documentary films at a "Meeting of the Unified Public Network for the Conservation of Biocultural Diversity", with the participation of various public organizations, NGOs, mass media, students, and teachers of the KNU, and pupils of "#\$school no. 62.

In 2012, at the seminar on "Integrated Management of Natural Resources in the River Basins of Central Asia", held for the residents of Kochkor Valley and organized by NABU Kyrgyzstan, the Free University of Berlin and the Volkswagen Foundation, we talked about activities in the field of biodiversity conservation and presented the results of our research to the participants.

In 2012, the round table on "Environmental Protection" in the Salkyn-Tor National Park discussed the problems of nature protection in the Naryn region.

In 2012, a round table on further cooperation between NABU and local organizations took place in the Arstanbap recerational area.

In 2013, a youth conference on "Snow Leopard Conservation – the Path to Sustainable Development" was held.

In 2014, we launched the "Let's protect our animals" campaign to mark World Turtle Day. In the same year, on the start of the winter season, we made forty bluebirds, which we installed as part of the "Bird Protection" campaign, with teachers and students of the Faculties of Geography and Biology of the KNU.

In 2015, participants in the scientific seminar on "Current Issues in the Protection of the Snow Leopard and Its Ecosystems", held to mark Snow Leopard Day, declared that the snow leopard was "a brand of Kyrgyzstan". The participants spoke about the need to develop methodological manuals on the snow leopard and its habitat in Kyrgyzstan, and to work more closely with the local population to raise environmental awareness. The reports of the participants were published in a special issue of the scientific journal *Science, New Technologies and Innovations of Kyrgyzstan*, with the NABU Kyrgyzstan logo. For NABU, this was quite a significant step in the implementation of educational work since the magazine devoted an entire issue to environmental problems. Published issues are included in the Russian Science Citation Index (RSCI).

In 2016, we talked about the environmental activities of NABU at a seminar on "Nature Protection as a Form of Education for Schoolchildren", with the participation of principals from the Moscow district and teachers of ecology, geography, biology, and other natural sciences.

In the same year, on the Day of Ecological Knowledge, a campaign entitled "Tazalyk" was held in the Gareev Botanical Garden with students of the Faculty of Ecology of the KNU.

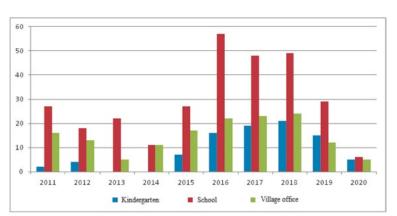
In 2017 a new format of eco-educational events, a teach-in discussion of the "Ecology of Nature and the Soul" (based on the novel *When the Mountains Fall*), was held to mark World Wildlife Day. Writers!%&! publicists, representatives of the arts, teachers and students in the field of ecology and nature management from the KNU, the Bishkek State University (BSU), and the Kyrgyz National Agrarian University spoke at the discussion, calling for joint efforts to save wildlife, which is largely dying due to human intervention.!"It is important to remember the precepts of Manas and the philosophy of Chinghiz Aitmatov. They call for a careful attitude to nature. Remember the words of one of the commandments of Manas: 'To live in harmony with nature'. Since ancient times, nomadic peoples engaged in hunting, but killed no more than what they needed for food. Remember the image of Kozhozhash, who turned against nature and wanted to conquer it, but failed. Today, hunting has turned into a commercial activity, and this should be stopped", noted a participant in the event, publicist D. Kerimov.

Specialists in eco-education actively participate in an annual international environmental campaign called the "March of Parks". In 2018, as part of this campaign, environmental lessons on the topic "Protected Areas of Kyrgyzstan" were held in schools in the Kemin district. The pupils were told about the important role of protected areas in preserving the biodiversity of Kyrgyzstan. We planted a hundred young poplars with the staff of the Chon-Kemin State National Park and pupils. The participants were proud to say that they would talk about their involvement in this important event in the future.

Another interactive format in the eco-educational activities of NABU Kyrgyzstan was the environmental debate held in 2019. It is important for us to develop a sense of responsibility for the preservation of environmental well-being among students and future ecologists. They must not only learn to defend their position, but also be able to listen to their opponent. In summary, the students noted that the experience gained will be useful in the fields of communication and public speaking.

In 2019, an eco-art camp for children was organized in the high-altitude Kara-Kuzhur valley in the Naryn region, which brought together 25 children aged 9 to 14 from all regions of Kyrgyzstan. Participation in the camp at the NABU Ecocenter, located 300 km from Bishkek, offered children an opportunity to improve their health with a long stay in the fresh air in a high-altitude valley. Daily routine, morning exercise, sports and competitions are beneficial for children's development and health. And most importantly, the children were told about nature and its inhabitants.

On the Day of Biodiversity, round tables with presentations and discussions are regularly held in the NABU Kyrgyzstan office.



Eco-educational events held by NABU Kyrgyzstan in 2011–2020



Ecological actions in high mountain pastures (jailoos) at Son-Kol Lake



NABU's educational activities have covered almost all regions of Kyrgyzstan. The coordination of environmental education in the country's preschool, school, and higher educational institutions, as well as education of the local population, contributes to the development of an ecological worldview and an ecological culture.

531

eco-educational events were held by NABU Kyrgyzstan in 2011–2020



Observations during anti-poaching raids

weapons were seized by or with the help of the Gruppa Bars in 2011–2020

Eco-educational campaigns in the high-altitude jailoos (summer pastures) of Son Kol Lake attract a large number of local residents and their children. In the ethno-game format, we talk about the importance of preserving biodiversity. Lectures entitled "The rare species of animals and mammals listed in Red Book of the Kyrgyz Republic" and "In the embrace of the mountains – let's save nature", dedicated to the animals and plants in the Red Book of the Kyrgyz Republic, are held in the Karatal-Zhapyryk reserve for children of the local cattle herders. At these events, children from 3 to 15 years of age enthusiastically draw pictures about nature and sculpt from plasticine. Through drawings, stories, poems, and theatrical performances, we show the audience the depth of environmental issues. Children are happy to be involved in the creative processes of our events. During their trips to the regions, the eco-education staff encourage local residents and their children to take care of nature, and to talk about the biodiversity of Kyrgyzstan, global environmental problems, nature reserves and parks.

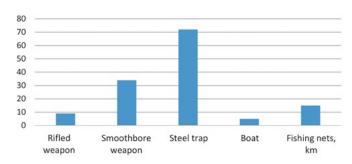
It is important for us to develop an ecological culture, to cultivate a love for nature, the Motherland and ourselves. We show rather than just telling, to develop habits of observation and attention.

2.3. Anti-poaching unit "Gruppa Bars"

Environmentalists of the Kyrgyz Republic are sounding the alarm about the preservation of biological diversity in the country. One of the reasons is rampant poaching. The anti-poaching unit Gruppa Bars was created to quickly identify and stop the illegal hunting of wild animals.

Tasks assigned to the Gruppa Bars:

- → prompt detection and suppression of illegal hunting of wild animals;
- → conducting awareness-raising activities with the local population in order to prevent poaching and other violations related to the illegal use of wildlife products;
- → gathering information about the facts of poaching.



Poaching devices seized by or with the help of the Gruppa Bars in 2011–2020

The Gruppa Bars unit operates in partnership with state environmental agencies such as the SAEPF, the State Inspectorate for Environmental and Technical Safety (SIETS), the Ministry of Internal Affairs of the Kyrgyz Republic and other environmental public interest groups. Regular raids are also carried out with the assistance of local authorities.

Confiscation of animals and their rehabilitation

Many birds and animals have been rescued, rehabilitated in the NABU center "Ilbirs", and released back into their natural habitat by the Gruppa Bars. Efficiency and legal skills are important in the work of the unit.

Raids across the Republic

During the raids, potential poachers have been detained with unlicensed guns, the carcasses of shot birds and animals, poaching devices and baits. All materials are transferred to law enforcement bodies. The inspection of vehicles often reveals hooks, spinning rods, other fishing gear and nets. These are seized, and a report is drawn up on the spot.

The Gruppa Bars unit also conducts night raids, as night hunting with lights is strictly prohibited. There are many cases of poachers being detained at night. This is dangerous, but for the sake of nature conservation, we use all the options available to us.

We have detained poachers with the carcasses and skins of red-book animals and birds and found poaching devices in their vehicles. The raids reveal the facts of illegal deforestation and illegal fishing. The fishing nets we find are burned on the spot, and the poaching boats are confiscated.

Public awareness-raising is an important way to protect wildlife. The Gruppa Bars team regularly talks to local residents to inform and persuade them and collects information about poachers.

400,000 Kyrgyz som for trying to sell a bear skin

In 2014, the Gruppa Bars, working with the SIETS, revealed the illegal sale of the skin of a red-book bears. An attempt to sell the skin and head of a dead Tien Shan brown bear to the residents of Jalal-Abad region cost the poacher a fine of 400,000 som (around 4,600 euros).

Poacher in the frame of the camera trap

In 2016, a man with a gun was caught in the frame of a camera trap installed by the Gruppa Bars in the Salkyn-Tor Nature Park. Fifteen camera traps were installed in the territory of the park, and in one of the frames we could see a man with a gun. The materials of the photo recorder were transferred to law enforcement bodies, the man's identity was established, and his gun was confiscated and transferred to the law enforcement agencies for ballistics examination.

Rescue of a manul by the Gruppa Bars

The manul is a feliform predatory mammal. It is slightly larger than a domestic cat, with a long, thick coat. It lives mainly on syrts (elevated flatlands) – in particular, cold high-altitude deserts. The manul prefers rocky mountain landscapes and treeless slopes, sometimes going up into the mountains as high as 3,500 meters above sea level. Manuls live in the holes of marmots or badgers, or in rock crevices, under large stones. It is very difficult to see them: manuls, like snow leopards, are rather secretive animals listed in the Red Book. Their exact numbers are unknown due to their secretive behavior.



Detention of a poacher with a firearm





Poachers caught by camera traps installed by the Gruppa Bars



Camera traps, the start of a new phase in the scientific monitoring of wildlife, have become an effective tool in the fight against poaching.

Local children once caught one of these animals and brought it to the Mambetaliev Zoological Museum in Don-Alysh village. The head of the museum pointed out to the children that the manul is listed in the Red Book of the Kyrgyz Republic, and that the animal should be released. Then the Gruppa Bars team was informed that the exhausted manul could be molested by dogs. The Gruppa Bars and employees of the SAEPF found the weakened and hungry manul not far from where it had been released, under a tree. The animal was brought to the office of NABU Kyrgyzstan, where it was examined by highly qualified veterinarians.

"The condition of the manul is weak. It is exhausted and dehydrated. It can be seen that the animal has not taken food for 10 to 15 days. In addition, the manul is limping, which means that there is damage to the paw. But there are no bite marks. The animal has experienced stress; it will need to rest in a familiar environment. If it was left in this stressed state in nature, the manul would be unlikely to survive; he could simply die of hunger. We need 14 to 15 days for his full rehabilitation", said the veterinarians. After a course of rehabilitation, the manul was released into nature in one of the highlands of the Kochkor district. The event was observed by journalists.

At the end of 2016, we seized five weapons from poachers together with the SIETS. The materials were transferred to the office of internal affairs for the Tong district for further investigation. At the end of 2016, in the raids in the Zhety-Oguz and Tong districts, three poachers were detained, and two boats were seized. In addition, 42 nets with a length of 3,360 meters were pulled from the waters of Issyk-Kul. The nets were burned.

Often, raids are carried out in the "non-hunting" season in "unexpected" mode. For example, at the end of February 2017, poachers were detained with two unlicensed guns (IZH-16 and IZH-12) and a shot wild duck. In March, eight wolf and three fox skins, as well as a stuffed brown bear, were found on sale without permits at a market on a bypass road in Alamudun district. The materials were seized and turned over to the SIETS; an official report was drawn up at the site. For bear shooting, the legislation of the Kyrgyz Republic provides for a fine of 400,000 Kyrgyz som (in 2017, this fine increased to one million som). There are very few bears in our country, fewer than one hundred in total.

In November 2017, in the Issyk-Kul region, a car was stopped and a bird, thought to be a kestrel, was found in the cabin. It was packed into a box, along with more than ten items of equipment for catching birds of prey. There were also two quails, six pigeons and two jerboas, used as bait for birds of prey. The live baits and poaching devices were seized and transferred to law enforcement bodies.



Release of the manual after the course of rehabilitation



Anti-poaching raids in the highlands

In 2018, an attempt was made to save a **lynx cub** found by a local cattle breeder. Following information received from the employees of the Chon-Kemin SNP, the Gruppa Bars set out for Tort-Kul village in the Kemin district, Chui region. After examining the animal, we found that the bones of the two front paws were broken, and the state of the animal was unsatisfactory. Once the delivery report had been completed, the lynx was taken to the NABU office, where he was examined by a veterinarian. The doctor concluded (in writing) that the cub with crushed bones in its front paws had been in this state for about a week, that the general condition of the animal was very weak, and that the wounds were not compatible with life.

Migratory birds are often targeted by hunters, whose activities are regulated by law. It is essential to have permits. Poaching of migratory birds in the Issyk-Kul region is not uncommon. Hunting without a permit is strictly forbidden.

In the course of anti-poaching raids in the Issyk-Kul region in 2018, several incidents were recorded. In the Tong district in the Issyk-Kul region, two poachers were detained: one with a 12-caliber IZH-18 smoothbore gun, and another with a 16-caliber IZH-17 smoothbore gun. The detainees did not have any permits. Two more poachers were detained with 16-caliber smoothbore guns (IZH-17 and IZH-18) with 27 cartridges, and the carcass of a freshly shot hare.

With the onset of spring, many birds arrive in Kyrgyzstan. Unfortunately, many become the victims of poachers. Another resident of the region was detained with a shot duck. The man did not have any permits. A report was drawn up on the site, and the materials were handed over to the relevant authorities.

The peregrine falcon is the fastest bird on the planet, capable of the highest speed of all living creatures. One of these red-list raptors was seized from a resident of the Issyk-Kul region in July 2018. The detainee said that the bird had been given to him by friends; he wanted to use the bird to take part in the "Salburuun" (complex hunting games of the Kyrgyz people with hunting birds and dogs). He was also found to have badger and fox skins, which were used as bait. The report on the illegal keeping of birds of prey was drawn up by employees of the Department of Hunting of Karakol city. The fine for such a violation is 250,000 Kyrgyz som.

In September 2018, a poacher was detained with an IZH-12 smoothbore gun with four cartridges and a hare carcass. He was fined 5,000 som.

Shooting and arrest of a poacher with a roe deer carcass in November 2018 While traveling with a TV crew from Germany to conduct filming and anti-poaching raids in Issyk-Kul region, Gruppa Bars members detained a poacher with a roe deer carcass. The detainee said that he had been hunting with a friend, who had managed to escape on horseback. A report was drawn up on the site, and he was given a fine of 50,000 som.



Meetings with the local population to prevent poaching



Detention with Red Book saker falcons





Detention of poachers with an illegally shot roe deer

The Gruppa Bars team actively cooperates with local rangers in the fight against poaching by conducting training sessions. In 2019, for example, a training seminar on new laws for the fight against poaching was organized. At the training, representatives of environmental organizations of Kyrgyzstan discussed the new legislation in the field of environmental protection, which entered into force in the Kyrgyz Republic in 2019. Law enforcement officers explained to hunters and hunting experts how to properly draw up reports when detaining poachers.

Rare and endangered animal species saved by the Gruppa Bars in 2020

The story of Zhaabars: On January 9, in the Talas region, local residents found a snow leopard. The bloodied animal climbed a tree, from which he was removed by local residents. On the night of January 9–10, the Gruppa Bars and the veterinarian of NABU Kyrgyzstan, together with specialists from the SAEPF, went to the Talas region and brought the snow leopard back to Bishkek. In the veterinary clinic based at the Kyrgyz National Agrarian University, we took an X-ray and found that the animal had a gunshot wound: the head was peppered with shot, the X-ray showed more than sixty pellets. At the meeting, a decision was made to operate immediately. The operation was successfully performed by three doctors.

"The operation lasted 1.5 hours, just as long as the anesthesia works. During this time, eighteen pellets were removed from the forehead, eye, mouth, and tongue. Two pellets were removed from the right eye, this eye leaked out even before the beast was found. The vision in the left eye is no more than 40%. There was no time to remove the remaining pellets in the neck and shoulder blades because the effect of anesthesia ended. But with the right antibiotic therapy they will come out when rejected by the tissue. Judging by tooth abrasion, this is an approximately two-year-old male." B. Azhybekov, the veterinary physician of NABU Kyrgyzsta&(

Today, this snow leopard is making good progress; he was named Zhaabars, in honor of the character created by Chinghiz Aitmatov in the work *When the Mountains Fall*. Zhaabars's condition is stable. He receives eye drops to improve his vision, antibiotics, and therapy. The forecasts of veterinary physicians are positive. Doctors hope that the vision in at least one of his eyes will improve after treatment. The animal receives a drug to improve blood circulation of the brain. His diet includes water, beef fillet and soft bones.

The story of Ak-Moor: Snow leopards, as a rule, have a nocturnal and secretive lifestyle and live in hard-to-reach places. These predators rarely come down to lower altitudes, and if they do it is because of a shortage of food. So the snow leopard in Naryn region was baited by dogs on one of the winter pastures of Zhumgal. The cattleman, seeing a snow leopard in the barn, hiding from the dogs, did everything possible to save the animal. He chased away the dogs and notified the local hunter D. Zhumaliev, who immediately informed the SAEPF and went to find the snow leopard. Arriving in the dead of night, the hunter captured the animal; at home, he built a cage and fed it. He immediately informed the local head of the administration, the prosecutor's office and the leadership of the SAEPF. The Gruppa Bars team was also notified; the group drew up a report and took the animal to Bishkek city.

In the NABU Kyrgyzstan office, the snow leopard was examined by veterinary physicians. It turned out to be elderly, presumably 11–12 years old. Three fangs were missing, which meant that it couldn't hunt in the wild. Its condition was below average, and good care and medical supervision were required. Based on the experts'

findings, the snow leopard was assigned to the NABU rehabilitation center in the Issyk-Kul region.

The snow leopard was named Ak-Moor, in honor of the works of the national poet Suyunbai Eraliev. Ak-Moor has already settled into the rehabilitation center, receives finely chopped meat and is under the close supervision of the NABU Kyrgyzstan veterinary physician and specialists of the rehabilitation center.

The story of the argali lamb: A few months ago, during the raids, a group of rangers from the Kara-Buura district in the Talas region, headed by M. Zhamankulov, found a baby argali. Helpless, it lay under a rock in the mountain trails where the migration routes of its species pass. The huntsman brought the lamb home and nursed it, making every effort to keep it alive. After learning about the activities of the NABU rehabilitation center, the huntsman turned to the Gruppa Bars with a request to provide assistance. Employees of NABU Kyrgyzstan, together with a veterinary physician and specialists from the SAEPF, immediately left for the Talas region. The animal was brought to the office and then, in accordance with the decision-making commission, transferred to the "Bugu-Ene" center. Since 2017, the fine for illegal hunting of argali has been one million Kyrgyz som.

The story of Tentek: On May 3, 2020, a resident of the Naryn region found a snow leopard eating a calf, and decided to catch the predator, because he saw that it was limping and would not be able to attack in response. After the animal had been caught, the man notified the staff of the SAEPF. The snow leopard was sent to the NABU rehabilitation center. In order to determine the state of its health, the staff of the SAEPF and a veterinary physician, B. Azhibekov, arrived in the rehabilitation center from Bishkek. A full examination showed that the snow leopard was blind in the right eye, the teeth were abraded, and the joints of the left paw, mouth and nose were damaged. The overall condition was below average. Doctors prescribed treatment for a speedy recovery, and the specialists of the rehabilitation center made every effort to save this animal, which was given the name Tentek.

The rescue of a roe deer fawn: A roe deer fawn was found by A. Batyrbek Uulu, a huntsman from one of the hunting farms of the Chui region. Once the deer had grown up, the people who had sheltered it realized that they needed to make arrangements for its future. They turned to the Department of Biodiversity Conservation and Protected Areas of the Chui region.

A hunting specialist of the department, S. Nurmoldoev, brought the roe deer to the NABU Kyrgyzstan office. Wild animals are very difficult to keep in captivity, as they need space. The problem was that the young deer would not be able to survive in the wild, because it was used to human attention and could easily become prey to both predators and poachers. The decision was made to transport the roe deer to the "Ilbirs" rehabilitation center.



Inspection of the snow leopard named Ak-Moor from the Naryn region



Anti-poaching raids are producing results. According to local residents, poaching is decreasing every year. This has been influenced by an increase in the level of fines, a growing understanding of the importance of preserving wildlife, and, of course, regular raids.



Birds of prey released back into the wild after rehabilitation

2.4. "Ilbirs" NABU Rehabilitation Center

"Ilbirs", the NABU Rehabilitation Center, was opened in Sasyk-Bulak Gorge in the Issyk-Kul region in 2002. The center rescues injured wild animals and birds, which undergo rehabilitation following the instructions of a veterinary physician. The rehabilitation center is provided with all the necessary means to treat and care for its patients.

The main goals and objectives of the center:

- → the rescue of wild animals;
- → promotion of humane treatment of animals;
- → treatment, care, and rehabilitation;
- → release to nature after rehabilitation:
- → management of animals in the center who are not able to survive in the wild.

As of December 2020, three snow leopards (named Alsu, Ak-Moor and Kolyuchka) a wolf (Akela), a lynx (Leopold), a roe deer (Emma), two golden eagles, seven falcons and three kites are kept in the enclosures, with a total area of 7,000 square meters. The conditions are as close to natural as possible for snow leopards and other wild animals.

So far it has been possible to release into the wild more than a hundred rescued animals and birds, including rare and endangered species, golden eagles, snow vultures, manul cats and many others.

The first animals at the center were four snow leopards: Alsu, Bagheera, Kunak and Bagheera's daughter Kolyuchka, as well as one lynx, three golden eagles, a steppe eagle) and many other birds. The snow leopard cubs mentioned above (except Kolyuchka, who was born in captivity) were confiscated from poachers in 2002. Kunak was brought to the center after poachers tried to take him out of the country. He had been kept in captivity, blunting his predatory instincts. Bagheera and Alsu are disabled; their paws were damaged by a trap. In the wild, they would not be able to hunt and could die. In the wild, snow leopards do not live as long as in the rehabilitation center, where they are cared for, fed and given medical treatment.

The snow leopards Pirate and Leader

Pirate and Leader were two snow leopards who were born in captivity in 2009, both blind and in critical condition. On the recommendation of a veterinary physician, they needed a complex ophthalmological operation in two stages, after which long-term rehabilitation and qualified care were required. A decision was made to transfer the snow leopards to a foreign clinic for their treatment, rehabilitation, and care in appropriate conditions. So, Pirate and Leader were handed over to the staff of Almaty Zoo, where the operations were performed. NABU Kyrgyzstan specialists visited the zoo three months later to learn about the postoperative condition of Leader and Pirate.

Leader and Pirate were born from a brother and sister; they were blind because of inverted eyelids. Specialists were asked to operate in order to straighten their eyelids and improve their vision. But the animals' immunity was weak, and they died of pneumonia in Almaty Zoo in 2014 – one in July, the second in November.

Our animals

Snow leopard Alsu. She was caught in 2003 by poachers, who wanted to smuggle her into a Moscow circus. The poachers were detained, and the snow leopard was seized. Alsu's forelimb was damaged from the trap she was caught in – the tip of the paw is missing. Now Alsu is used to it and moves without any problems.







Snow leopards at the "Ilbirs" Rehabilitation Center (from top downwards): Bagheera, Kunak, Alsu

Snow leopard Ak-Moor. A female snow leopard, she was brought from Zhumgal in January 2020 by members of the Gruppa Bars team and the SAEPF. She had tried to attack livestock, but was unsuccessful, because she was old and weak and had three fangs missing. Specialists, having examined the snow leopard, decided to transfer her to the rehabilitation center, because the animal would not have survived in the wild.

Snow leopard Kolyuchka. She has lived in the center for a long time, from an early age. To release Kolyuchka into the wild would mean condemning her to certain death. She doesn't know how to hunt, as no one has taught her. She was born in captivity and is used to people, so sooner or later she would approach people, which would be fatal.

Lynx Leopold. When he was brought to the rehabilitation center in 2012, Leopold was quite a tame kitten. Employees of the State Environmental Inspectorate had confiscated Leopold and two other lynxes in the Nookat district in the Osh region. The confiscated animals were transferred to the rehabilitation center. Since the tame Leopold would not have been able to survive in the wild, he was left in the center, and the other two lynxes were released into the wild after a course of rehabilitation lasting 1.5 years.

Wolf Akela. Akela was brought to the rehabilitation center by a cattleman from Kemin. He had found him as a cub, defenseless and weak, in the mountains, while grazing cattle. The cattleman brought the animal back with him and practically tamed it. He then gave the wolf to the rehabilitation center, because he could no longer manage this growing predator. Our task is to rehabilitate the wolf and then release it into the wild.

Roe deer Emma. Emma is a roe deer fawn who was also tamed by humans when she was left without a mother and almost died. Emma survived thanks to a huntsman from one of the hunting farms of the Chui region.



Lynx Leopold

3. Projects implemented by NABU Kyrgyzstan

3.1. "Conservation of Biodiversity in the Northern Tien Shan" (2013–2017)

The project "Conservation of Biodiversity in the Northern Tien Shan" was supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) and NABU Kyrgyzstan.

The project objective was to develop a common strategy for the rational use and sustainable management of specially protected natural territories in the Northern Tien Shan region. The project covered four specially protected habitats of wild animals, including snow leopards, located on the territory of Kazakhstan and Kyrgyzstan. The project ran from 2013 to 2017.

The project experts actively studied the management of protected areas, the scientific aspect of such territories, problems in the development of ecotourism and opportunities for public participation in the conservation of biodiversity.

The program of cooperation between the cross-border territories of Kyrgyzstan and Kazakhstan included the preservation of fruit trees and the protection of rare animals. The project involved joint protection and monitoring of biodiversity in the Northern Tien Shan region. It also aimed to improve the system of pasture use with the help of international donors, and to promote ecotourism.

Extensive work was carried out on the preparation of a management plan. One of the main tools of the management system for protected areas is the biodiversity monitoring program. Seminars to train the rangers of the *#+&,-\$./&!0"%"\$!1%"23\$!4%35 in the skills of installing camera traps for monitoring snow leopards were an important step in the implementation of the project objectives.

The final seminar for the project was held in December 2016. The results of the three years of work were presented to the public: the management plan for the Chon-Kemin SNP, recommendations for pasture management and for the monitoring of flora, birds, and mammals in the Chon-Kemin SNP, as well as many interesting facts about the conservation of biodiversity in the transboundary region of the Northern Tien Shan.

3.2. Biosphere Expeditions in the Kyrgyz Ala-Too mountains (since 2014)

As part of a partnership between NABU and Biosphere Expeditions, an international NGO that organizes conservation expeditions for volunteers around the world, research on the southern exposure of the Kyrgyz Ala-Too ridge began in 2014. It is an important habitat for many rare and endangered species of plants and animals.

The staff of the Gruppa Bars take an active part in the biosphere expeditions to Suusamyr Valley, as instructors and guides.

The objective of expeditions is to study the range of the snow leopard and its food supply. The expeditions are also interested in other types of wild fauna. With the involvement of volunteers, the research team conducts expeditions, collecting as much information about snow leopards as possible. Another aim of the Biosphere Expeditions





"Conservation of Biodiversity in the Northern Thien Shan" project



Biosphere Expeditions in the Ala-Too mountains

is to draw the attention of people of various professions to the problem of preserving rare species of animals. During expeditions, observations are also made with the help of camera traps.

The participants in the expedition are able to see and photograph mouflons, wild goats, little marmots and other animals.

Volunteers from Germany, America, France, the United Arab Emirates, England, Holland, Singapore, China, Sweden, Austria, Italy, and Canada participate in the expeditions. According to the program, volunteers explore the flora and fauna of the area at an altitude of 3,000 meters above sea level and higher and set up camera traps.

In the 2019 season, the volunteer participants saw direct evidence of the presence of a snow leopard in the region: first, the tracks of the animal were recorded in the snow, and then the snow leopard got into the frame of the camera trap. Besides snow leopards, many other animals were also included in the frame. There are pictures where up to seven snowcocks were caught in one frame, sometimes with a brood of up to twelve chicks. DNA tests have now proven that the snowcock is a potential food for snow leopards.

3.3. "Effective Yak Farming in the Tien Shan Mountains of Kyrgyzstan" (2017–2021)

The development of yak farming and the processing of yak products have a positive effect on the well-being of local residents in the high-altitude valleys and reduce the level of poaching activities that destroy wild animals.

The objective of the project "Effective Yak Farming in the Tien Shan Mountains of Kyrgyzstan" is the conservation of the biological diversity of mountain pastures in Kara-Kuzhur Valley, located in the Inner Tien Shan of Kyrgyzstan. The project is supported by the Government of the Federal Republic of Germany within the framework of the German-Kyrgyz cooperation and NABU.

"Supporting a marketing strategy for yak-farming products aimed at sustainable economic activities can provide an appropriate income for farmers. Within the framework of the project, many activities were implemented: for example, in order to increase the awareness of herders about sustainable yak husbandry, an ecological education center was created, which, in the future, will be able to be used not only for educational purposes, but also for ecotourism, providing the local population with another sustainable source of income." (Tolkunbek Asykulov, Director of NABU Kyrgyzstan)

The Kyrgyz yak population is one of the important components of the fauna of Central Asia and occupies a significant place in the overall system of animal biodiversity in Kyrgyzstan. Given that there is currently a huge demand for eco-friendly products, especially meat and meat products, yak farming is certainly considered a high-priority sector within the Republic.

Within the framework of the project, an ecological education center was created in the Kara-Kuzhur high-mountain valley. In the future, the center will be used not only for educational purposes, but also as a platform for ecotourism, which will be another opportunity to generate sustainable income for local communities.



In the footsteps of the snow leopard



Yak herding in Kyrgyzstan



Team of NABU Kyrgyzstan

Conclusion

The territory of Kyrgyzstan is characterized by a high concentration of biodiversity, which must be preserved. NABU Kyrgyzstan specialists have conquered more than one mountain peak in the footsteps of the snow leopard, and each research expedition gives results that are carefully processed by scientists and help in the preservation of the snow leopard and its food supply.

In its ten years of work, NABU Kyrgyzstan has regularly run campaigns and events to raise environmental awareness and draw public attention to the problems of biodiversity. The complex and dangerous work of the Gruppa Bars in the fight against poaching deserves a separate mention.

In order to eliminate poaching, it is necessary to divert local residents from poaching activities by promoting the development of environmentally oriented livestock production – for example, yak farming. Jobs can be created through the production and processing of sustainable agricultural products.

It is also very important to talk to local residents, explaining issues and promoting the conservation of nature.

Dear friends! If you want to take part in our events for the benefit of nature in your native land, write to our email address nabu.kg@mail.ru and tell us about your thoughts and ideas. For more information about the work of NABU Kyrgyzstan and our research, please visit www.nabu.kg.

Thank you note

The Kyrgyz branch of NABU is very grateful to Boris Tikhomirov for ten years of responsible guidance, good counselling, and support in the development of the organizational structure.



Historical survey

1994 First Issyk-Kul conference and decision to create a Biosphere

Territory (NABU, State Nature Management Committee, Kyrgyz

National University)

1995–1998 Creation of an active project group to develop the conservation

project of the Biosphere Territory

1998 Second Issyk-Kul conference, establishment of the Issyk-Kul

Biosphere Territory with a total area of 43,000 km²

1998 Support for the first initiatives to create a long-term ecotourism

project within the framework of the Biosphere Territory

1999 The beginning of the "Snow Leopard" project as the first step in

the implementation of the Biosphere Territory project

2000 Confiscation of the first snow leopard and its transportation to

Germany for treatment

2002 Establishment of the first rehabilitation center in Central Asia

2010 Opening of the NABU branch in the Kyrgyz Republic

2011 Meeting of the NABU leadership with the President of the Kyrgyz

Republic, Roza Otunbaeva, and signing of the agreement between NABU and the Kyrgyz State Agency for Environmental Protection

and Forestry (SAEPF)

2011 Visit of the President of the Kyrgyz Republic to the "Ilbirs"

Rehabilitation Center (Sasyk-Bulak Gorge)

2013 First Global Snow Leopard Conservation Forum. Meeting of the

NABU leadership with the President of the Kyrgyz Republic,

Almasbek Atambaev

2013–2017 Project: "Conservation of Biodiversity in the Northern Tien Shan"

Since 2014 Biosphere expeditions in the Kyrgyz Ala-Too Mountains

2017 Second International Snow Leopard and Ecosystem Forum

2017–2021 Project: "Effective Yak Farming in the Tien Shan Mountains of Kyrgyzstan"

List of abbreviations

KNU – Kyrgyz National University, named after Jusup Balasagyn

NABU Kyrgyzstan – The branch of NABU in the Kyrgyz Republic

NGO – non-governmental organization

 ${\it SAEPF-State}$ Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic

SIETS – State Inspectorate for Environmental and Technical Safety under the Government of the Kyrgyz Republic

SNP – State Nature Park



The branch of NABU in the Kyrgyz Republic (NABU Kyrgyzstan)

Address: Tabachnaya ul. 24, 720011, Bishkek

Tel./Fax: +996 (312) 48-22-20 Email: nabu.kg@mail.ru

Tolkunbek.Asykulov@NABU.de

Web: https://nabu.kg/