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# SAIGA NEWS



Photo by Andrey Gilev "Frosty Morning" of the Saiga male from the Stepnoy Reserve, Astrakhan Region tooks 2nd prize at the XVI International Wildlife Festival "Golden Turtle".

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Providing a six-language forum for exchange of ideas and information about saiga conservation and ecology

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# The Government of Kazakhstan on the way to sustainable use of saiga

**In June 2022, the Government of Kazakhstan, represented by the Minister of Ecology, Geology and Natural Resources, officially announced plans to harvest 80,000 saigas in autumn 2022 to 'regulate the numbers' of the species in western Kazakhstan. This intention was primarily dictated by an increase in overall saiga numbers in Kazakhstan to 1,318,000 individuals, according to the results of a survey in spring 2022 (editors: more detailed data on the spring survey are provided in this issue).**

A document setting out the biological rationale for regulating saiga numbers in the Ural population was prepared by specialists from the Institute of Zoology of the Ministry of Science and Higher Education of the Republic of Kazakhstan. Since there are currently no officially-approved standards for hunting saigas, it was recommended that 10% of the entire Ural population (about 80,000 individuals) should be killed, based on past saiga hunting practices. The suggestion was also made that not more than 5% of males and 47.5% of females and juveniles of both sexes be hunted. Saiga harvesting practices used by the government until 1999 suggest that killing up to 20% of the total population would not lead to a decrease in numbers, but only a suspension of population growth. Killing 30–39% would lead to a population decrease. This standard was applied in the mid-1970s, after which the number of saigas halved. In the same period, amateur hunting was opened on an experimental basis, and poor control over the use of licenses contributed to an even greater violation of hunting quotas and a population decrease. This

led to the decision to suspend hunting in 1979 (Fadeyev, Sludsky, 1982).

The plans announced by the ministry were criticised by the Kazakh public. One of the reasons for such a strong negative reaction was that for many years people had been informed that the saiga is a valuable symbol of the Kazakh steppe, which it is very important to conserve for current and future generations, and that the government was making great efforts to protect this species and combat poaching. Information on the possibility of sustainable use of saiga as a valuable resource had not been widely distributed.

The urgent development of plans to regulate the number of saigas was largely caused by the growing conflict between saigas and farmers. Since 2020, farmers in West Kazakhstan province (where the Ural population is found) have complained about saigas trespassing on crop and hayfields and causing damage. Since 2021, these cases have reportedly taken place more frequently. Crop fields trampled

by saigas have also been recorded in Akmola province (Betpak-dala population).

In 2022, the conflict between saigas and farmers was discussed at a high level between the Ministry of Ecology, Geology and Natural Resources and the Ministry of Agriculture. A working team was organised under the Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources, including representatives from research organisations, Hunting Associations, regional territorial inspectorates for forestry and wildlife, and other organisations.

A number of meetings and discussions were organised, both with representatives of the community and with experts. The main topic was the approach to 'regulating the numbers' of saiga. According to the rules, animal numbers can be regulated in the following cases:

1. a threat of infecting people, agricultural and domestic animals with diseases carried by wildlife;
2. a threat of significant damage to the economy;
3. breakage in the existing natural balance of wildlife in its habitats leading to a reduction in species numbers and other negative consequences;
4. a threat of imbalance in the hydrochemical and other characteristics of water bodies and/or sites, which may lead to animal mortality.

None of these reasons can be a justification for starting to regulate the number of saigas, since there is no evidence diseases are transmitted from saigas to domestic animals. In addition, despite saigas trespassing

on fields and causing damage in certain areas (or to individual farmers), there are no estimates of economic damage at either local or national levels. Paragraphs 3 and 4 of the above Regulations do not apply to saigas. Therefore, plans to 'regulate' the number of saigas have been criticised by experts as well.

Hunting Associations also actively advocated for the opening of amateur saiga hunting. Nevertheless, the plans for the first year were to conduct experimental regulation of saiga numbers exclusively using a specialised state organization under an authorised body.

The big public outcry led to the intervention of the President of the Republic of Kazakhstan, who in mid-July 2022 instructed the Ministry of Ecology, Geology and Natural Resources to

reconsider all possible solutions to the current situation. Given the legislative norms were not ready for other forms of saiga harvesting (except for the purposes of population regulation), it was eventually decided to cancel plans for the harvesting saigas in autumn 2022 and begin systematic preparations for managing saiga populations through their sustainable use as a valuable resource, and, at the same time, to continue to study and protect the species.

One of the tools for planning the sustainable use of saiga is the recommendations of the report 'Sustainable use of saiga antelope: overview and prospects' (2021), prepared by the Saiga Conservation Alliance with the participation of experts from ACBK and a number of prominent international experts.

This report was commissioned by the Convention on Migratory Species: [https://www.cms.int/saiga/sites/default/files/publication/unep-cms-saiga\\_mos4\\_outcome2\\_sustainable-use-saiga-antelopes\\_e.pdf](https://www.cms.int/saiga/sites/default/files/publication/unep-cms-saiga_mos4_outcome2_sustainable-use-saiga-antelopes_e.pdf)

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Saiga males. Photo by Albert Salemgareev

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# Catalyzing support for species threatened by wildlife trafficking

**Wildlife trafficking is estimated to be a multibillion-dollar business involving the unlawful harvest and trade of animals and plants. The [Species Conservation Catalyst Fund \(SCCF\)](#), a new initiative within the [Combating Wildlife Trafficking \(CWT\) Program](#) of the U.S. Fish and Wildlife Service (USFWS), recently awarded its first round of project funding.**

The SCCF aims to reduce wildlife trafficking for specific species, by supporting projects that address the complex social-ecological systems across a species' trade chain. The SCCF focuses on species primarily threatened by illegal trade and supports work that catalyzes significant and sustained change in both demand and range states. The SCCF prioritizes projects that **build empirical understanding** around the trafficking of a species, and **develop, implement, and evaluate strategic activities** to reduce such trafficking. The SCCF is envisioned as a 'conservation accelerator' to launch or grow projects, support opportunities for skill building, and develop networks of researchers and practitioners.

USFWS recently awarded the first round of project funding for the first two trafficking issues to be addressed through the SCCF:

1. The poaching of **saiga antelope** (*Saiga* spp.) in Central Asia and Mongolia for the international trade of its horn;
2. The illegal capture of **cheetah** (*Acinonyx jubatus*) cubs from the Horn of Africa for the live pet trade occurring in the Middle East.

For the **saiga antelope**, USFWS awarded five grants and one cooperative agreement to a total of \$2,172,936. Projects range from 2 to 5 years in length and are located in China, Japan, Kazakhstan, Malaysia, Mongolia, Singapore, and Uzbekistan. USFWS is using its own internal social science staff capacity to ensure that it supports robust research and behaviour change work in saiga horn consumer countries – including in Japan, where this will be the first saiga-related work of its kind to be piloted. The projects and lead organisations are:

1. **An Evidence-Based Approach to Catalyze Reduction of Illegal Saiga Horn Trade in China** – Wildlife Conservation Society. This two-year project is aimed at understanding the saiga horn supply chain and consumption environment in China as the main consumer country and catalyzing demand reduction.
2. **Taking Stock: Establishing an Effective Saiga Horn Stockpile Management System in Malaysia** – TRAFFIC International. This three-year project is aimed at preventing illegal and unregulated trade of saiga antelope horn by institutionalizing a transparent and robust saiga horn stockpile management system in a key consumer country – Malaysia.
3. **Tackling Saiga Antelope Horn Sourcing and Trafficking in Mongolia through an Evidence-Based Approach to Improve Law and Policy Enforcement Activities** – Wildlife Conservation Society. This three-year project is



Saigas at a watering hole. Stepnoy reserve, Russia. Photo by Vladimir Pankov

aimed at reducing threats to saiga antelope in Mongolia by disrupting trafficking, strengthening law enforcement capacity, and establishing chain-of-custody and stockpile management systems.

**4. Reducing demand for saiga horn in Japan and Singapore** – University of Oxford. This four-years project is aimed at reducing the threat of poaching and trafficking to saiga antelope by addressing evidence gaps related to consumer behavior and drivers of consumption in two key saiga horn consumer countries – Japan and Singapore – and reducing consumption through behavior change interventions.

**5. Strengthening Local Capacity to Lead Evidence-Based Conservation of Saiga in Their Native Habitats in Kazakhstan and Uzbekistan** – Fauna and Flora International. This four-year project is aimed at addressing poaching and trafficking of saiga antelope by protecting and conserving saiga populations in their native habitats in Kazakhstan and Uzbekistan.

This funding will also support a cooperative agreement with the Saiga Conservation Alliance, entitled Building a collaborative foundation for evidence-based saiga antelope conservation. This five-year project will bring together all of the USFWS

saiga grantees to build relationships, share information, explore synergies, and identify and fill evidence gaps so that the portfolio as a whole is more than the sum of its parts. This cooperative agreement will support the bringing together of the project teams in 2023 and again in 2027, the development of a USFWS-portfolio specific site within the [Saiga Resource Centre](#) website and the production of articles from USFWS-funded projects for the biannual six-language online & print newsletter, [Saiga News](#), as well as small grants to facilitate interactions between the projects.

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## Mongolian saiga population hits 13,925

Every year experts from WWF-Mongolia and the Saiga Ranger Network take on the immense task of counting Mongolian Saigas to monitor the population. The team completed the census in November 2022 and found that the number of Mongolian saigas has increased to 13,925 individuals. Last year, the census reported there were approximately 10,077 Mongolian saigas. Numbers are estimated using the linear transect method, in the Shargyn Gobi, Khuisiin Gobi, and Darviin Khooloi, which are the main

areas of saiga distribution, and in Mankhan, Zavkhan, and Khomin Tal, inhabited by small saiga populations.

B. Gantulga, species officer with WWF-Mongolia, said: “Although the Mongolian saiga population has grown noticeably, this is not a source of relief because this winter (2022–2023) is predicted to be harsh, or for there to be a dzud (exceptional snowfall) followed by droughts and overgrazing. Together these could have a devastating effect on this vulnerable saiga population”.

In 2014 there were 15,000 Mongolian saigas. Unfortunately, thousands died in 2017 due to goat plague, also known as PPR, and dzud (the combined effect of the lack of grass, extreme cold and heavy snowfall) – see SN-22. Reintroducing individuals to areas where saigas are currently not present, and creating several independent populations, could substantially reduce the risks faced by Mongolian saigas from drought, dzud, and infectious diseases. The protection of Mongolian saiga range by the State and a reduction in illegal hunting would also contribute to saving this extremely rare species from extinction.

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## Surveillance for highly contagious animal diseases within saiga range

In Mongolia, an outbreak of foot and mouth disease was recorded in autumn 2021, infecting thousands of livestock. This highly contagious viral disease also affects wild animals, in particular migratory ungulates such as saigas. Thus, it was necessary to carry out surveillance for disease control within saiga range. Teams consisting of representatives from WWF-Mongolia UN FAO-Mongolia, Environmental and Veterinary Service Departments of Khovd, Uvs, and Govi-Altay aimags (provinces), and the Saiga ranger network conducted surveillance activities within saiga range in February 2022. The teams included veterinarians, wild-life researchers, epidemiologists and saiga rangers.

Eight teams with a total of 34 members collected samples in random locations along transects. The surveillance areas were entirely covered by 3 to 10 cm thick snow and overall rangeland conditions were unpleasant for working in. The teams found the remains of 11 dead saiga and veterinarians took samples for laboratory analysis. Foot and mouth disease was detected in five of the animals, confirming exposure to the disease among saiga.

Based on the surveillance results, the specialists made recommendations, which included conducting active surveillance among saiga populations at least once a year to assess outbreaks of some highly contagious diseases

such as foot and mouth and Peste des Petits Ruminants (PPR, or goat plague); vaccinating domestic herds in saiga range against these diseases twice a year; supplying Saiga Ranger network members with the material resources required to take samples (e.g. protective and sampling equipment) and technical training on how to take and handle samples from infected animals; improving understanding of contagious disease outbreaks and reporting confirmed laboratory test results to local herders, who may otherwise blame saigas for spreading foot and mouth disease due to a lack of understanding.

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Saiga observation. Photo by WWF Mongolia

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## Eco-club members have started monitoring natural springs

In order to support the conservation of Mongolian saigas, WWF-Mongolia is working with school children who are eco-club members to monitor surface water sources. The eco-clubs had previously built enclosures around 26 natural springs in eight soums of Khovd and Govi-Altai provinces (see SN-26 for an article on this).

Since then, the enclosed natural springs have been certified thanks

to the joint efforts of Khuisiin Govi-Tsetseg Lake Basin Administration and the Governor's Offices of the relevant soums. The state environmental inspectors of the relevant soums are responsible for these springs. As a result, they are being protected and cared for as part of registered local properties. In addition, the natural springs are cared for by local herders, who are given a document to recognise that they are "A herder caring for

a natural spring", to incentivise them. All these efforts enable these natural springs to be protected from disturbances, and impose liabilities on people who break or damage enclosures to have them repaired. These interrelated locally-based management practices are very helpful for the eco-club members, who are carrying out monitoring on how these water sources are being used by domestic herds and wildlife in different seasons.

Khuisiin Govi-Tsetseg Lake Basin Administration has included background information on the enclosed natural springs in the environmental database [www.eic.mn](http://www.eic.mn), which is held by the Ministry of Environment and Tourism.

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Ecoclub members monitor a natural spring. Photo by WWF Mongolia



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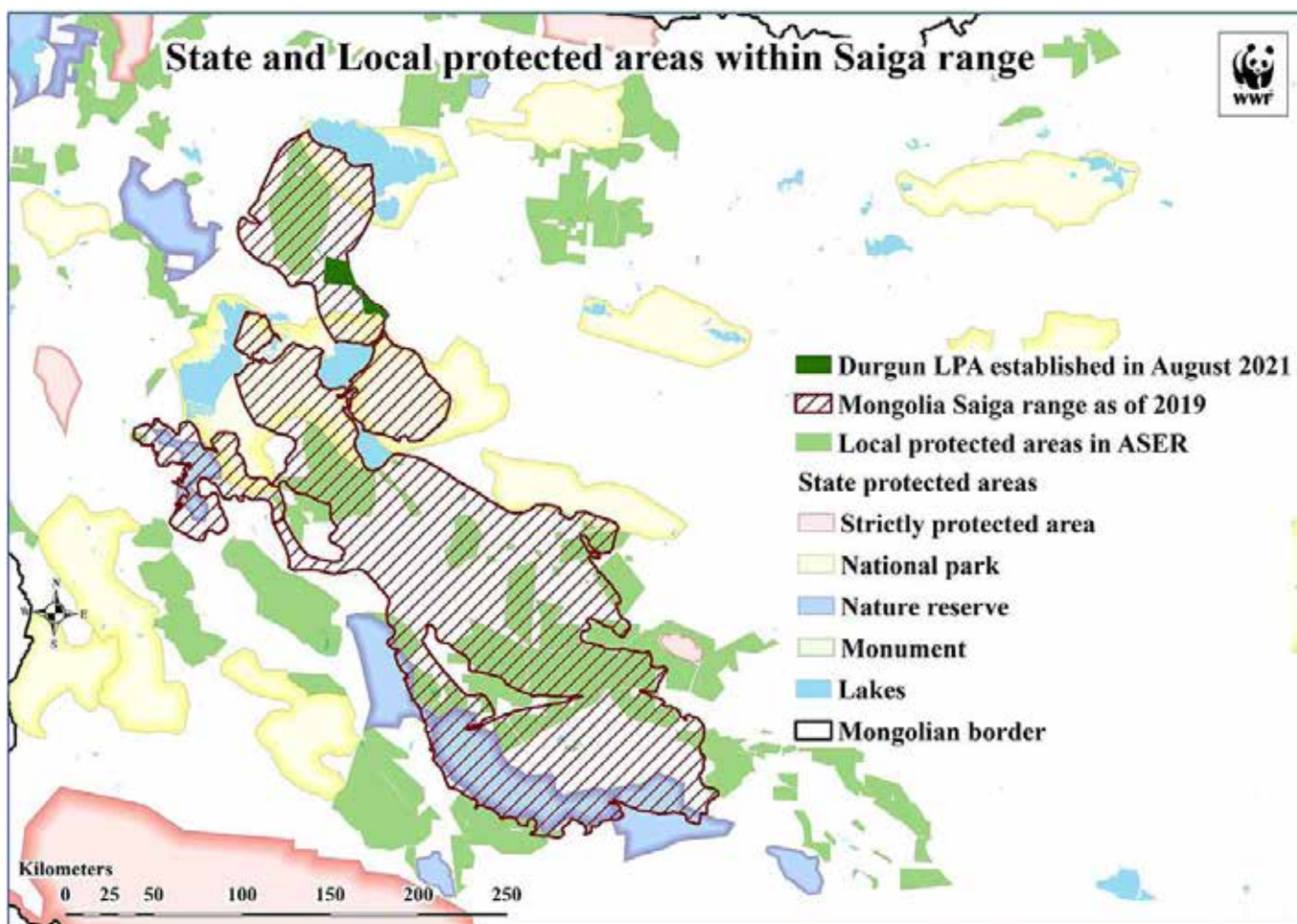
# Local parliament has decided to establish 32,098 hectares of saiga range along the Zavkhan River as a Local Protected Area

As a result of joint efforts by the Environment and Tourism Department of Khovd province, the Administration of Khar-Uus Nuur National Park, Khovd University, and WWF-Mongolia, the local parliament of Khovd province has

decided to establish 32,098 hectares of saiga range along the Zavkhan River as a Local Protected area. The decision was approved on August 27, 2021, and will be valid for 15 years. This is an important decision which will make

a significant contribution to the conservation of the Mongolian saiga. Since January 2021 an additional 3 locations (258,189 hectares) have been designated as Local Protected Areas (see the map). Of the total Mongolian saiga range of 4 million hectares, 2.24 million hectares are now under protection, including both State Protected Areas (29.4%) and Local Protected Areas (26.7%). This means a total of 56.1% of Mongolian saiga range is now protected.

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Map. State and local protected areas within Mongolian Saiga range

UPDATES FROM THE ACBK

# Saiga numbers in Kazakhstan continue to grow

In April 2022, the annual aerial survey for saigas was carried out in Kazakhstan, covering West Kazakhstan, Aktobe, Mangystau, Kostanay, Karaganda and Akmola provinces. According to the results, there are about 1,318,000 individuals in the three Kazakh populations. By population:

- Betpak-dala – 489,000 individuals;
- Ural – 801,000 individuals;
- Ustyurt – 28,000 individuals.

Every population continues to grow steadily. This has been achieved through strengthening of anti-poaching measures by the State security services and legal protection of the species. Under favourable climatic conditions and with well-organised protection, the high natural productivity of the species – females begin to reproduce at 8 months old and have 1–2 calves every year – allows for a 35–40% annual increase in saiga numbers.

Saigas were counted from helicopters from a height of about 100–120 m along pre-planned transects. Then the number of animals per square kilometre was calculated, and the resulting figure was multiplied by the entire survey area, taking into account possible errors. This method is officially approved and is considered the most effective way to count ungulates in vast territories from the air. The numbers given above represent the mid-points between the minimum and maximum estimates for each population.

The saiga survey was organised by Okhotzooptom and the Committee of Forestry and Wildlife, Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan. The research was carried out by ACBK staff.

Learn more at: <http://www.acbk.kz/article/default/view?id=580>



ACBK specialists getting ready to conduct aerial surveys for saigas. Photo by Aleksander Putilin

UPDATES FROM THE ACBK

# Saiga calving in Kazakhstan in 2022

In May 2022, ACBK staff monitored the saiga calving in Aktobe, West Kazakhstan and Kostanay provinces of Kazakhstan, covering the habitats of all three of Kazakhstan’s populations.

The monitoring was carried out in the locations of mass calvings. In the Betpak-dala saiga population, more than 35,000 individuals gathered for calving, as did more than 100,000 individuals in the Ural population and about 3,000 individuals in the Ustyurt population.

To monitor these aggregations, each of the survey teams covered 75-80 kilometres on foot. On the way, they came across about 1,200 newborn saiga babies, and recorded the sex, weight and body length of each. They also recorded the number of calves in a litter – one, two or three. This is possible only in the first hours after birth, since very soon saiga babies begin to run and mix with other calves, so the sizes of individual litters can no longer be determined.

The calving peak was 11th to 14th May. In the Ural and Ustyurt populations, the calving sites were the same as in the previous year, while in the Betpak-dala population, the largest group was recorded in the south of the Altyn-Dala Reserve.

The monitoring of calving sites is carried out annually by ACBK. In 2022, it was organised as part of an agreement with Okhotzooptom on the survey and monitoring of saigas.

Learn more at <http://www.acbk.kz/article/default/view?id=584>



Newborn saiga calf with mother. Photo by Albert Salemgareev



Saiga calving aggregation. Photo by Albert Salemgareev

ELMIRA MUSTAFINA<sup>1</sup>

# Excursion to Alty-Sai Ecopark and Centre for Re-introduction of Wild Ungulates in Kazakhstan

The village of Akhmet Baitursyn is located in a remote part of Kostanay province, central Kazakhstan, in the heart of the Betpak-dala saiga population range. The cultural and educational centre of the village is a school, which even boasts a mini-museum about saigas founded and maintained by a geography teacher.

Children from this village know from an early age that steppe antelopes inhabit their region and that disputes constantly arise around this species, including related to its poaching and protection.

In 2022, ACBK with the financial support of the Saiga Conservation Alliance, put on a two-day field excursion for 23 pupils of the village school from grades 5 to 11. The goal was to show local children and teenagers the rich wildlife of their native land and tell them how wild animals are studied and protected. The first part of the tour was to the Altai-Sai Ecological Park. This ecopark is very important for the monitoring and protection of saigas in central Kazakhstan, as their migration routes pass through it. The participants visited the Tuzkol saltpan and the Altybai riparian forest, watched chicks in raptors' nests and learnt how to count saigas. The first groups of saigas began to appear 30 kilometres from the village. Most of the children

had not seen one before. The trip was also a chance for them to see foxes, wild boars, a snake, steppe eagle, imperial eagle, cinereous vulture and other wildlife.

For the youngest participants the organisers had prepared a colourful Diary of a Young Naturalist with a list of species that the children might encounter during the trip. The children were asked to record the species and numbers of individual animals and birds they came across. They were also given a set of easy tasks, such as listening to the singing of a cricket, which everyone could carry out while staying in tents overnight. That was how the pupils conducted their first wild animal survey. The ability to record one's own observations is one of the main skills that young naturalists need to be taught.



Young naturalist taking records in his diary. Photo by Elmira Mustafina



Field camp. Photo by Peter Trotsenko

The overnight stay and the second excursion day were at the ACBK Centre for the Re-introduction of Wild Ungulates within the Altyn-Dala State Nature Reserve. At that time, four Asiatic wild asses – a male, female and two foals – were in the centre’s enclosures in semi-wild conditions. It was the first time the children had seen wild asses in real life.

Lectures and masterclasses for the schoolchildren were given by experienced field specialists from ACBK, who had been working in the region for many years and had participated in research expeditions more than once.

During the two-day trip the children took part in the following activities:

- Watching wild animals in their natural environment.
- Masterclass in basic ground surveying for saigas.
- Excursion to the Centre for the Re-introduction of Wild Ungulates.
- Talk on the importance of wild ungulates for the steppe ecosystem.
- Masterclass in the organisation of a field camp.
- Masterclass in bird watching and using a bird guide.

‘I enjoyed studying saigas: I saw many saiga tracks, learnt a lot about the plants they feed on,’ said a girl named Ayaru Seidaly, who had taken part in the tour. ‘I was pleased to meet people who work with wild animals’.

Kairat Nurtas also shared his thoughts: ‘My dream has come true, I’ve seen saigas and wild asses. But now I want to encounter wild asses in the wild, as well as saigas’.

Children living in villages within the saiga range are very close to nature, but at the same time they do not always have access to knowledge about the importance of preserving the steppe and its biodiversity. To show the younger generation the wildlife of their native land and to instil in them a desire to study animals and plants for themselves is our most important

task. ACBK aims to conduct regular ecological and educational activities for the residents of villages within the Alty-Sai Ecopark and in its immediate neighbourhood.

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Watching kulans (wild asses). Photo by Elmira Mustafina



Excursion participants at the Centre for the Re-introduction of Wild Ungulates. Photo by Peter Trotsenko

ELMIRA MUSTAFINA<sup>1</sup>

## Saiga Day celebrated in three rural schools in saiga habitats in Kazakhstan

In mid-May, after the completion of the monitoring of saiga calving, ACBK specialists visited a school in the village of Baitursynov, Kostanay province, located in the Altai-Sai ecopark within the range of the Betpak-dala saiga population. Albert Salemgareyev, a leading specialist at the ACBK, and Steffen Zutter, a researcher from the Frankfurt Zoological Society, told the pupils why they study saiga calving sites and talked about how important the calving period is for saigas. They showed an interesting video shot by ACBK specialists a few days earlier of a female saiga feeding her twin calves.

On Saiga Day, schoolchildren from the Druzya Saygi (Saiga Friends) steppe clubs were presented with male and female saiga masks to be used in games and performances. But first they had to assemble them by hand. Creating a mask is a very painstaking job, which takes from 2 to 3 hours. Cutting and gluing numbered parts of the masks, the children told animal stories, had fun and exchanged jokes. During the break, the teachers and pupils talked about the saiga's annual cycle, its migration and how it changes appearance throughout the year depending on the season. The masks were designed so as to let children from the age of 8 years and even adults enjoy creating them in a team, thus developing their teamwork skills and concentration.

In the village of Baitursynov, the boys and girls immediately tested their masks, performing a play about saigas and their natural enemies. In their school they have a 'saiga corner,' in which pupils display books,

manuals, crafts and any other items related to saiga. ACBK supports the children's initiatives and sends new materials about saigas and the steppe to this school mini-museum.

Saiga Day 2022 was held in the schools of the following villages: Akkaytym and Baikadam in Shalkar District of Aktobe province, and Baitursynov in Zhangeldi District of Kostanay province.

<sup>1</sup> Association for the Conservation of Biodiversity of Kazakhstan (ACBK), [elmira.mustafa@acbk.kz](mailto:elmira.mustafa@acbk.kz)



Schoolchildren in the village of Akkaytym wearing saiga masks. Photo by A. Aytjanova



Participants in a saiga skit in the village of Baitursynov. Photo by K. Moldakhmet

OLGA OBGENOVA<sup>1</sup>

## 300 students and 7 steppe clubs celebrated Saiga Day in Russia

In Kalmykia, the Saiga Day festival was organised by students of the Zaya-Pandita Kalmyk Ethnocultural Gymnasium as part of Environment Month. This annual event is held in order to attract schoolchildren to the protection of rare animals and plants in Kalmykia. According to the participants in Saiga Day, the Saiga Trail quest game was especially informative and interesting. Year 6 pupils and their teachers from the gymnasium, as well as grade 8–9 pupils from the Druzya Prirody (Nature’s Friends) steppe club, took part in the game. There was also a competition for grade 5–6 pupils to create posters about saiga protection.

All the participants enjoyed not only the events and prizes, but also the interesting and informative conversations they had at an associated tea party. A competition for creative activity resulted in an exhibition entitled “The White Elder” in the gymnasium library. According to legend, the White Elder is the patron saint of the Kalmyks and all living things on Earth. He is always depicted accompanied by the inhabitants of the Kalmyk steppe – saiga, wolf and eagle.

In Liman District of Astrakhan province, Saiga Day 2022 was organised by the Vozrozhdeniye (Rebirth) steppe club. The celebration included an intra-district environmental contest between awareness-raising teams, called

Let’s Save the Saiga Together, where participants explained what they were doing to protect the saiga. In total, 15 schools from Liman District took part

in the competition. The winners were secondary school No. 2, Liman village, the runners-up were secondary school No. 1 from Liman and the secondary school of the Protochnoye village. The other schools were awarded participants’ certificates.

Following tradition, the staff of the Stepnoy Sanctuary (Zakaznik) supported the children in celebrating Saiga Day. This year, they organised a competition for the best drawing, called “The Nosy Miracle of Nature”, with



Saiga Day in Kalmykia, Druzya Prirody steppe club, Zaya-Pandita Kalmyk Ethnocultural Gymnasium



Saiga Day in Astrakhan province, Vozrozhdeniye steppe club

three categories: 1 – Hello, I’m Stepa, I Live in the Stepnoy Zakaznik (the task was to draw a small saiga baby); 2 – Happy When Mum is Around (depicting a female saiga with a saiga baby); 3 – Happy to Be Together (depicting a saiga family). Twenty-three drawings were given prizes, the best of which are presented below.

<sup>1</sup> Russia steppe wildlife clubs coordinator, [obgenovaob@gmail.com](mailto:obgenovaob@gmail.com)



Yulia Savenkova, 13, secondary school, Karavannoye village



Ulyana Bondarenko, 13, secondary school, Olya village



RICHARD T. SOBEY<sup>1</sup>

# Two Types of Wildlife Crossing Point on the A380 in the Ustyurt Plateau

**The Uzbekistan Highways Investment Agency (Avtoyulinvest), under the Committee for Roads, is constructing a new 240 km long highway in Karakalpakstan from the town of Kungrad to Daut Ata, at the Kazakhstan border. Under the loan agreement with the funding agency (Asian Development Bank), the project has been classified as a Category A environment impact project due to its crossing of the migratory route of the Ustyurt saiga population.**

With this in mind, and after the project Environmental Impact Assessment further designated the project area as being 'Critical Habitat' for saiga, under international standards for biodiversity conservation, a Biodiversity Action Plan was drafted.

All construction methods for Good International Industry Practice, are being followed, which means that in order to reduce the impact of the road on wildlife, a Mitigation Hierarchy for construction methods is in place. This means that impacts are reduced in order of: Avoid, Minimise, Restore, and Offset. The road design and implementation has now reached the stage of 'Restore', which means that detailed mitigation measures for this stage are now being prepared.

Such measures include two types of wildlife crossing point: Across the road for saigas and other endangered species such as Goitered Gazelle; and under the road via tunnels for the Central Asian Tortoise, and other reptiles and small mammals. An associated habitat restoration scheme is also planned for the areas of land adjacent

to these two types of key wildlife crossing points.

The Saiga Crossing Points (SCPs) are 100 meters long and have a 20 meter-wide earth ramp either side leading to and from the road. Four such points are design-approved and will soon be under construction. They will be constructed between Ayapbergen rail station through to Kiyiksoy rail station. These locations are on the traditional north-south saiga migration routes from the Sam desert in Kazakhstan, through Almabet and then Churuk in the Saigachy Complex Nature Reserve, and across the road between the towns of Jaslik and Karakalpakiya on the A380 road (Fig. 1).

The thirty-nine drainage tunnels are being made wildlife-friendly by ensuring that slope gradients to their culverts and retention ponds are graded to a ratio of 1:2 height to base, so that smaller wildlife species, including tortoises, can enter and exit the drainage tunnel system under the road (Fig. 2).

In terms of restoring ecological habitat, black saxaul tree planting is planned for the southern 120 km section, whereas for the northern 120 km section, a feasibility study is being undertaken to determine how wild herbivore fodder plants can be re-seeded around or near project road structures, such as the SCPs, and the soil excavation 'borrow pit' areas.

The logistics issue is that for such a long road, in order to re-plant and sow seeds along both sides of the road, a large quantity of tree seed and shrub, grass and herbaceous seed needs to be collected, and multiplied in nurseries, to generate enough seed for sowing. At present the plan has been to identify key areas for biodiversity impact mitigation, and to design appropriate demonstration schemes at these locations in the first instance.

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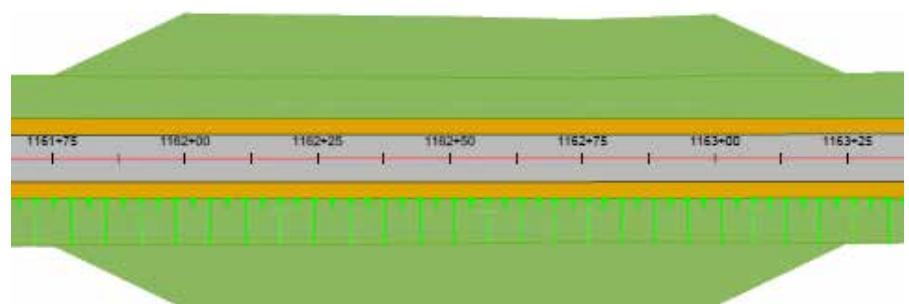


Fig. 1. Over-road Wildlife Crossing Point (for saiga and goitered gazelle)

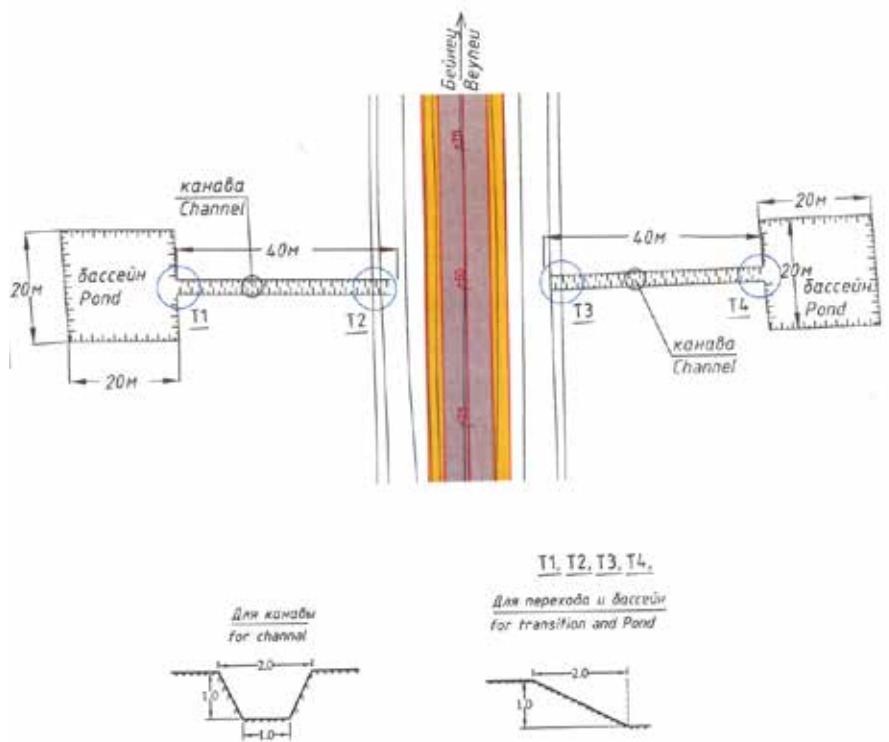


Fig. 2. Under-road Wildlife Crossing Point (drainage system crossing point for small mammals & reptiles)



Saiga tracks crossing the A380 road between Jaslik town and Ayapbergen railway station in December, 2004. Photo by Alexander Esipov

JOSEPH W. BULL<sup>1</sup>

# Building towards saiga conservation alongside economic development

**In September 2022, as part of the UK Darwin Initiative-funded project “Resurrection Island: enterprise, conservation and development around the Aral Sea”, an international project team delivered multiple days of training in Uzbekistan (Tashkent and Kyr-Kyz) on mitigating the impacts of economic development projects on nature. In particular, this included new tourism projects, and natural gas extraction activities – key issues in saiga territory, and for many other species too.**

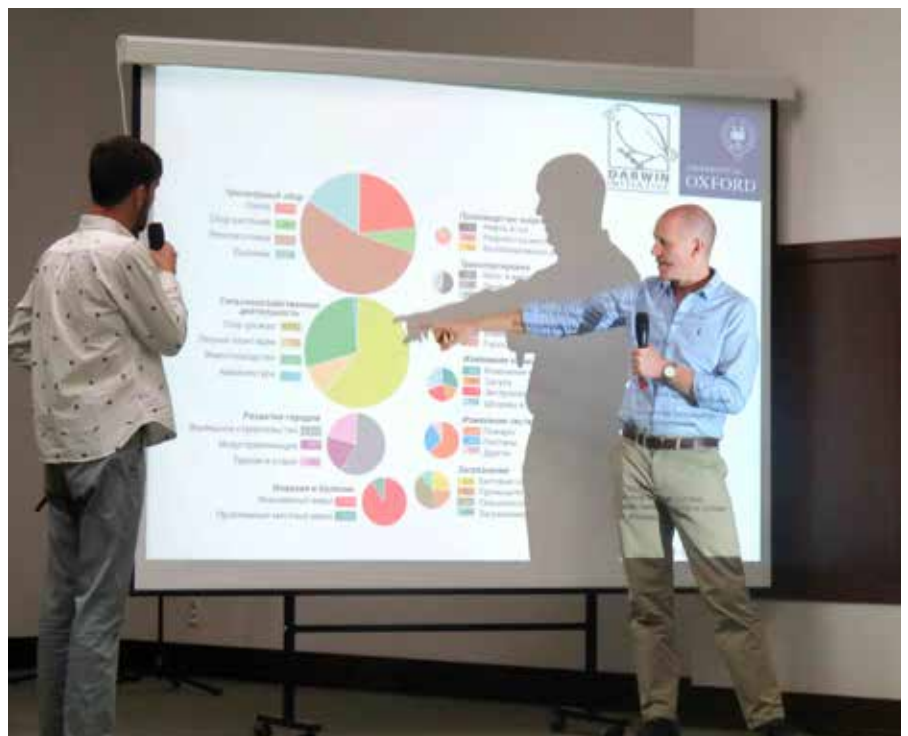
The training sessions were delivered to a total of over 100 participants from approximately 25 organizations in Uzbekistan. The purpose was firstly (a) to highlight the typical impacts of sectors – such as tourism, and natural gas extraction – on Uzbek biodiversity, then (b) to show how these impacts can be prevented and reduced, and (c) what kind of international policies are in place that provide a regional incentive to do so. Finally, the training explored global best practice approaches mitigating biodiversity impacts.

Structurally, the sessions combined a taught component with practical exercises and group feedback, and were extremely well received. Importantly, they also provided a useful mechanism for convening multiple different organisations from the public and private sectors to discuss nature conservation. It is hoped that these meetings represent a broader movement towards developing an effective national ‘community of practice’ for conservation alongside development in Uzbekistan.

The training sessions are part of a broader programme designed to ensure nature conservation (of saigas and many other species) around Resurrection Island, situated in the

middle of the former Aral Sea. The biodiversity of the Island and surrounding region is of high conservation value, and yet is threatened by issues such as poaching, expanding infrastructure, and rapid local climate change. This programme (of which SCA is part) has supported the designation of new protected areas, promotion of eco-tourism, and reduction of environmental impacts by working closely with industry.

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Training participants working together on mitigating the impacts of economic development projects on nature in Tashkent and Kyrk-kyz. Photo by Alexander Esipov

NELL MILES<sup>1</sup>

## Public lecture on the importance of the saiga in providing ecosystem services

**On 19th September we visited Kyr-Kyz, a small town within the Aral Sea region, to deliver a public lecture on the importance of the saiga in providing ecosystem services. The lecture was attended by children from two local schools as well as members of the public, and was a great success. Children prepared for the event by creating art and delivering performances about conservation and ecosystem connectivity. This was followed by the lecture itself, given by Nell Miles from the University of Oxford. Attendees learnt about the ecological interactions within ecosystems and how these generate functions which boost ecosystem health and provide benefits to humans, going on to learn about the saiga's contribution to these functions and its intrinsic role within steppe communities.**

Following the lecture, children from the two participating schools competed in a friendly relay race to illustrate the 'teamwork' needed in an ecosystem to provide benefits for humans. Each student participated as a species in the ecosystem, working together to win the race. It was a lively event with children very engaged in the lecture material and ecological concepts discussed, and all parties enjoyed it greatly.

Materials were also disseminated to school staff and the public on ecosystems, saigas, and other steppe wildlife to provide educational materials for future use. The event supports the Saiga Conservation Alliance's aim to increase environmental education and awareness amongst communities in the Aral Sea region, providing a better understanding of surrounding wildlife and increasing local pride in nature. We thank the Whitley Fund for Nature for supporting this important work.



Attendees at a lecture on steppe ecosystems in the village of Kyrk-Kyz. Photo by Alexander Esipov



Students talk about the structure of ecosystems. Photo by Alexander Esipov

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AND RUSTAM OLIMOV<sup>1</sup>

## ‘Saigas as a bridge between the past and the future’ was the theme of Saiga Day 2022 in Uzbekistan

**In the past, saigas played an important role in the stability of the environment and all its inhabitants. They continue to be a very important component of the entire steppe ecosystem, including for people living in the steppe. Preserving the saiga and doing all we can to encourage it to return to the steppes will help to ensure a healthy and prosperous life for people. That is why it is so important to develop the right attitude in the younger generation to the protection and conservation of saigas.**

The 2022 Saiga Day in Uzbekistan had an eco-festival format. As usual, it was held in villages near saiga habitats, as well as in Nukus, the capital of Karakalpakstan. This year, schools from Muynak in the Aral Sea region also joined the event.

In Nukus, Saiga Day was organised as a school eco-festival hosted by the Progress Centre for Education and Development. School No. 54 in Jaslyk village hospitably received teams of young ecologists from neighbouring villages – schools No. 31 in Kyrk-Kyz and No. 52 in Yelabad. Many visitors, including schoolchildren, teachers, and village residents, came to support the participants. To ensure every visitor could watch the teams perform, the competitions were organised in several locations. Participants showed similar involvement and activity at school No. 26 in Karakalpakia village. This is the most remote village of Uzbekistan, located on the border with Kazakhstan and close to the Saigachy protected area. Pupils and

teachers from five secondary schools took part in the eco-festival in Muynak (Nos. 1, 3, 4, 5 and a branch of school No. 4 in the Mikoyan village), three of them for the first time.

The staff of the Saigachy Complex Landscape Reserve also came to the

festivals in Nukus and Jaslyk, where they offered their own competitions. The event in Muynak was attended by officials from the newly-established district branch of the Committee for Ecology and Environmental Protection of Karakalpakstan.

The festival was supported by environmentalists from the Uz-Kor Gas Chemical company and the Saiga Conservation Alliance. Experts from the Ekomaktab NGO developed a programme structure, which was offered to teachers from steppe clubs. Innovative teachers and enthusiasts diversified the programme with their own creative approaches, which made the festival extremely fun and exciting.

The eco-festival was opened by introducing each team. Then the participants started to perform tasks at different stations. At the Q&A station, the teams answered questions about the saiga’s biology and lifestyle. At the Situation in the Reserve station, the Saigachy Reserve staff prepared



A poster on the theme ‘Saigas as a bridge between the past and the future.’ School No. 1, Muynak. Photo by Elena Bykova

tasks describing real cases in the wild, and the participants had to find the right solution. For example, what would you do if you came across a venomous snake? What would you do if you saw a saiga baby abandoned in the steppe? The children discussed each answer with the reserve rangers, who shared their experiences. At the Artistic station, the competitors had to produce colourful posters on the theme 'saigas as a bridge between the past and the future'. The participants passionately and excitedly did all they could to complete their tasks in the best way and win.

The Sports Quest contest was extremely emotional. The task required a considerable amount of dexterity and resourcefulness. The participants were to overcome 'dangers,' such as being ambushed by a sabre-toothed tiger, crossing a 'rapid stream' or passing through a tunnel. The movements of the team symbolically represented the movements of a saiga herd. The children took part in these sports competitions with great enthusiasm, while the Saigas on Migration and Web of Life interactive games helped them

feel the difficulties that saigas face during migration.

Pupils of school No. 26 in the village of Karakalpokia took part in running and bicycle marathons. The villagers actively supported them and even took part in the event themselves.

The Theatre Stage competition closed the festival programme. The teams put on costumes of saigas, mammoths,

ancient people, 'modern' poachers, smugglers, and rangers, and played out different situations in front of the audience, closing their performance with slogans about protecting the environment and saigas. The Saiga Anthem sounded a very solemn closing note at the end of the festival. The awards ceremony added bright and memorable emotions to the holiday.

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Starting the ecological marathon at the Progress Centre for Education and Development. Photo by Kristina Kuzmicheva and Rustam Olimov



Participants in the festival from three schools after the awards ceremony. Photo by Kristina Kuzmicheva and Rustam Olimov

ILYA SMELYANSKY<sup>1\*</sup>, VADIM KIRILYUK<sup>2</sup>, SVETLANA TITOVA<sup>1,2</sup>

## Saigas are returning to the Russian Trans-Volga region

**Before the break-up of the USSR, the border areas of the present-day Russian Trans-Volga region were part of the continuous range of the Volga-Ural saiga population. This includes the northern part of the Lower Trans-Volga area, where saigas summer and calve, as well as the Baskunchak lake area where saigas spend the winter. In the second half of the 1990s, saiga numbers catastrophically declined and their range shrank significantly.**

In the last decade, the Volga-Ural population in Western Kazakhstan has been steadily growing; according to official data the population has increased twentyfold in this period, so it is now more than double the historical maximum size (of about 300,000 individuals; *Milner-Gulland et al. 2001*), reaching  $810,000 \pm 150,000$  individuals by spring 2022. During the population's low point, only single individuals were found on Russian territory, but starting from 2015–2018 the species range began to expand again eastwards and northwards.

For much of the year saigas remain in Kazakhstan near the border with the Saratov, Volgograd and Astrakhan provinces of the Russian Federation. However, in 2018–2021, when the

region was impacted by strong droughts, saigas visited the Russian Lower Trans-Volga area in exceptionally large numbers and remained there for at least one month. According to experts, in June and July 2020, there were 45,000–50,000 individuals in this area.

Data on the numbers and distribution of saigas in the Russian Trans-Volga region are based mainly on interviews. The only attempt to estimate the population size was made by the authors of this article in late August 2021, when 1,142 animals were recorded during a survey on a 435-km transect. Extrapolation to the territory occupied by saigas at that time (4,271 km<sup>2</sup>) produced a population estimate of 28,000–33,000 individuals; taking into

account areas that were not surveyed, it could be up to 38,000 individuals. In our opinion, the number of saigas in the spring could be 1.5–2 times higher.

Every year, about 80% of this area's saiga population stays in the northern part of the region, north of Lake Elton, within four municipal districts in the south-east of Saratov province (especially Alexandrovo-Gaysky and Novouzensky) and two districts in the north-east of Volgograd province (particularly Pallasovsky District). They usually begin to enter the area in large numbers in April, with a peak in May and June. For several years, saigas have been calving annually here, and in some places large numbers of calving antelopes were recorded in 2020–2022. Presumably, the Russian territory is not only the periphery of a temporary summer habitat for the Volga-Ural saiga population, but also an important breeding ground. Towards the autumn activity drops and remains low throughout the winter.

In the southern half of the Trans-Volga region (southern half of Pallasovsky District, Akhtubinsky and Kharabalinsky Districts of Astrakhan province), saigas are present in significantly smaller numbers, which decrease rapidly towards the south.



Saigas grazing on a harvested grain field near the village of Serogodsky, Pallasovsky District of Volgograd province. September 2021. Photo by Ilya Smelyansky

Saiga movements into the Trans-Volga region do not represent long-distance directional migration, but are relatively short-distance movements within areas of seasonal concentration, with a tendency to shift to the territory of the previously lost part of their historical range. They rarely move further than 25–30 km from the border with Kazakhstan and concentrate near areas of mass border crossings (Fig. 1). In the spring and summer of 2020–2022, females and juveniles predominated, with adult males making up less than 15% of the animals observed. Throughout the winter and until early April, adult males accounted

for up to half of the population, and in some places even more.

There is a small relatively sedentary group of saigas (up to 4,000 individuals as of September 2021) in an area near Lake Bulukhta that is little used by humans. All other saiga herds in the Russian Trans-Volga region are transboundary and for them it is critically important to be able to cross the state border. In Saratov province, most of the border is free of artificial barriers, but in some places saigas have to cross rivers (the Small and Large Uzen, Dura and Gorkaya). To the south, a barbed wire fence has been installed along

almost all the border to prevent livestock from crossing it. Saigas pass across the border by breaking through the wire or finding gaps in the fence, which is not an insurmountable obstacle, but may cause injuries and sometimes even kill the animals. In 2021, several openings were made in the barrier in Astrakhan province specifically for saigas.

The main anthropogenic threats that affect most of the saigas, covering the entire northern half of the region, are poaching and conflicts with farmers and pastoralists. Poaching is not at a commercial scale, and is estimated

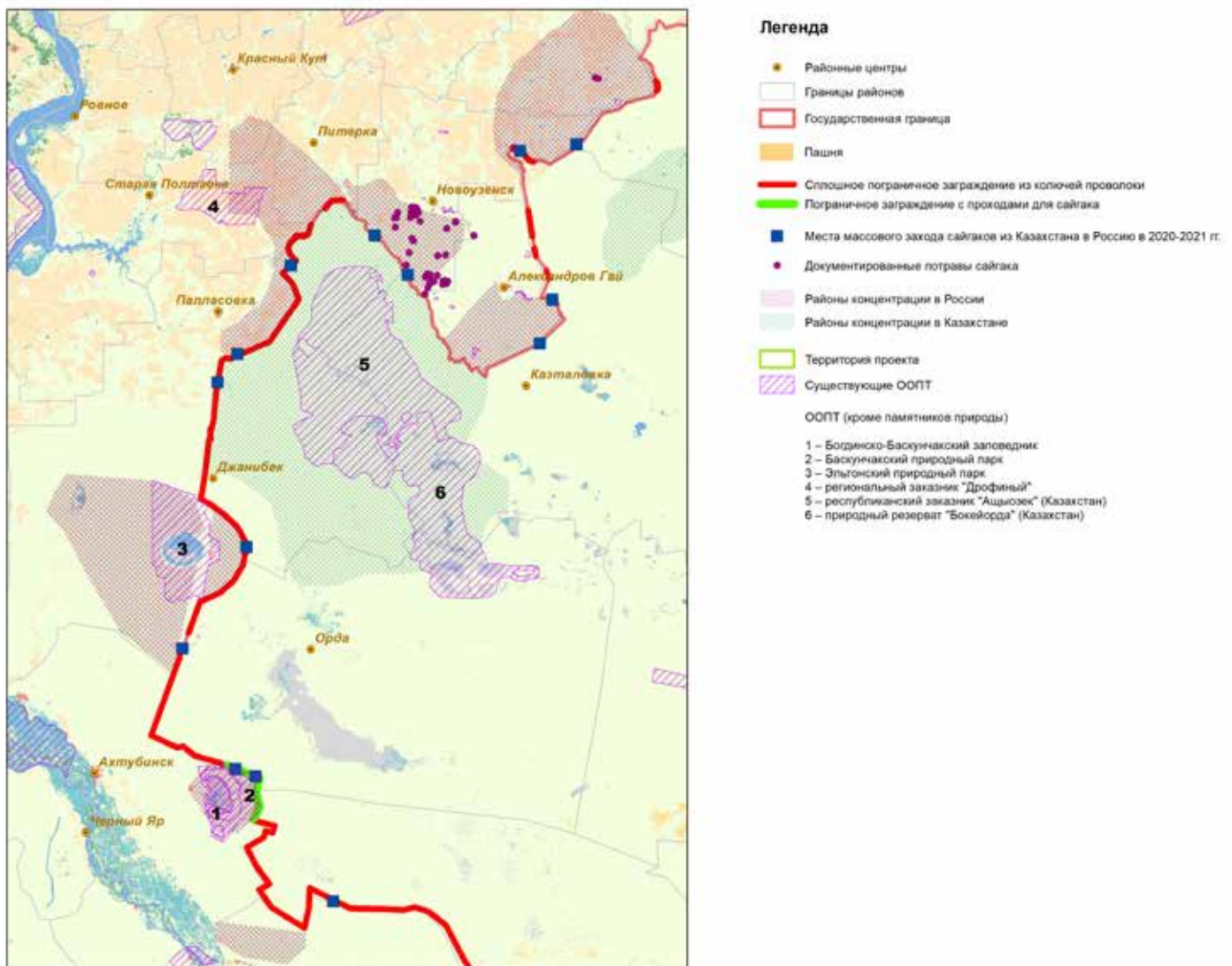


Fig. 1. Distribution of the Volga-Ural saiga population in the regions adjacent to the Lower Trans-Volga region in Russia and Kazakhstan



not to exceed 1% of the population. As far as we know, conflicts with agriculturalists have not so far led to direct killing of saigas, but they have resulted in numerous cases of deliberate disturbance, including before and during calving, which increases mortality, at least among newborns. The causes of conflicts are damage to crops and hayfields (trampling, to a lesser extent grazing) and competition between saigas and livestock for watering holes.

In the absence of organised poaching, the safety of saiga in the Russian Trans-Volga region depends on the attitude of the local population, which differs in the southern and northern parts of the region. In the south, there are no crops or valuable hayfields, so most people there have a positive attitude to saigas, not generally expecting trouble from them and showing willingness to help if necessary. People in the north regard saigas as a threat to agriculture, and a negative attitude prevails there; the presence of saigas is treated as a natural disaster that should be eliminated.

However, there are not many reliably established observations or quantitative estimates of damage to crops and hayfields. In 2020, reports of damage by saigas came from 10–15 rural settlements in six municipal districts of two provinces. Damage to several dozen farms and small agricultural companies was officially confirmed. The total cost of damage to 13 farms in two districts was estimated at more than 13 million roubles (over \$200,000).

The severe conflicts of 2019–2020 (for example, in Novouzensky District of Saratov province and Pallasovsky

District of Volgograd province) were significantly aggravated by drought. The farmers' demands to get rid of saigas and receive compensation for losses were then discussed at the level of the provincial government. In spring 2022, when saigas crossed the border in similar numbers, but in favourable weather conditions, the farmers were much less concerned.

There is also the issue of the potential risk of the transmission of dangerous infectious and parasitic diseases across the border from saigas to livestock. There are no reliably established reports of such transmission in the region, but concerns are widespread across all the three provinces, both among livestock breeders and agriculture specialists and in various administrative organisations.

About 14% of the areas where saigas concentrate in the Trans-Volga region are within five areas with different levels of protection (a state nature reserve, two natural parks and two regional reserves). Another 17% of the territory is minimally protected as a border zone. In total, almost a third of the area used by saigas is under some kind of formal protection. In some areas where saigas concentrate, the proportion protected is significantly higher (almost 90% around Lake Baskunchak) or lower (10% in the Kharabali area and 19% in the interfluvium between the Dura and Altata).

However, in most regional protected areas the regime and organisation of protection do not meet the goals of saiga conservation and do not fully protect the animals. The protection of saigas outside federal protected areas is the responsibility of the regions' environmental and law enforcement

services. Unfortunately, they do not have enough resources (only 6–7 rangers operate in 8 municipal districts, which means on average one ranger has to control a territory of at least 650,000 hectares). Provincial environmental authorities have groups tasked with combatting poaching, but there are only 1–2 groups in each province and they cannot pay much attention to saiga protection. Border protection authorities make a great contribution to the cause, detecting and preventing at least 70% of all known cases of poaching in the region.

Taking into account current trends, we can expect more saigas from the Volga-Ural population to move into the Russian Trans-Volga region. In order to conserve these animals, it is necessary to establish two new protected areas, implement conflict mitigation measures, organise regular monitoring of the animals' numbers and distribution and ensure ongoing interaction with Kazakh colleagues.

The study was conducted in 2021–2022 and supported by WWF Russia and by the Russian Geographical Society projects prepared and launched in 2020 by A. P. Mezhev (22 October 1963 – 08 January 2021).

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EKATERINA BEREZINA<sup>1</sup>

# Images from camera traps taken in 2020–2021 used to analyse biodiversity and monitor the saiga population in the Stepnoi Reserve, Astrakhan province, Russia

**The principle of non-interference in wildlife is fundamental in the work of protected area staff, and currently available technologies allow for the study of biodiversity with minimal impact. Camera traps have proved themselves a useful non-invasive method of studying mammals, birds, and other wildlife. Monitoring with camera traps makes it possible to obtain large amounts of information, including species diversity, numbers, and population density, as well as to study various aspects of animal ecology. Another undeniable advantage of camera traps is the ability to record rare and nocturnal species that are difficult to survey in other ways.**

In the Stepnoy Zakaznik, an almost year-round habitat for much of the North-western pre-Caspian saiga population, camera traps were installed quite recently. They have already become an integral part of the work of the reserve and a huge help in

monitoring and researching the animals' behaviour. Although it has been impossible to use camera traps to estimate the size of the saiga population because of difficulties with identification of individuals, the images obtained serve a source of information

about their seasonal and daily activity, especially in places frequented by the animals.

This report presents the results of the analysis of archival camera trap images from the Stepnoy Zakaznik taken in 2020–2021. The camera traps were installed near three small bodies of water formed by flooding artesian wells (Fig. 1).

The analysis involved 38,151 photographs taken by camera traps of three models – SEELock S308, SEELock S108 and Browning BTC-7A, which were placed at a height of about 1 m above the ground. The following data were entered in the table: animal type (if identifiable), time and date of the image, number of individuals of a photographed species and, wherever possible, sex and age. To avoid recording the same individual several times, each species was only recorded if there was an interval of at least two hours between observations.

A total of 33 species was recorded, including 24 species of birds and 9 mammals. The most recorded birds were ruddy shelduck *Tadorna ferruginea* (182 pictures), black-winged



Groups of male saigas (left) and a pack of wolves (right) near a field station at B3 location. Photo by Stepnoy Zakaznik

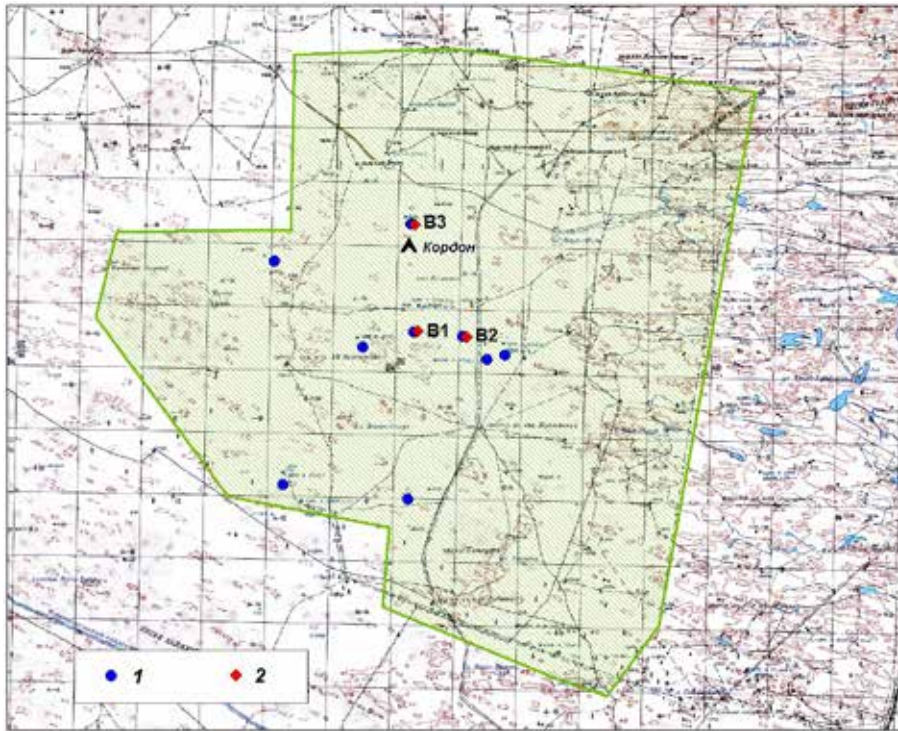


Fig. 1. Distribution of camera traps across the territory of the Stepnoy Zakaznik.  
1 – lakes formed by artesian wells, 2 – locations of camera traps.

stilt *Himantopus himantopus* (52) and western marsh harrier *Circus aeruginosus* (51). The last two species frequenting only one of the three locations: *Himantopus himantopus* B2 and *Circus aeruginosus* B1. The long-legged buzzard *Buteo rufinus* was recorded three times at location B1. Important protected bird species such as steppe eagle *Aquila nipalensis* (17 pictures), demoiselle crane *Anthropoides virgo* (24) and cinereous vulture *Aegypius monachus* (15) were also regularly recorded. Among mammals, the most recorded species were saiga *Saiga tatarica* (827 pictures) and red fox *Vulpes vulpes* (479). The steppe wolf *Canis lupus campestris* (102 pictures). Secretive mammals such as corsac fox *Vulpes corsac* (28 pictures, 22 of which were at location B1) and Asian steppe wildcat *Felis lybica ornata* (4 pictures at location B1) also visited the watering holes quite regularly. In general, locations B1 and B3 yielded almost equal numbers of representatives of different species, with higher species diversity at B1.

In total, 10,842 saigas were recorded in the photos, with 6,901 pictures taken at location B3, 4,161 at B1, and 590 at B2. The average group size was approximately 13 saigas in both 2020 and 2021, while the average number of adult males in the groups increased from 3 individuals in 2020 to 5 in 2021. The largest total number of males was recorded at location B3 – 1,481 individuals, with 609 at location B1 and 141 at B2, which is roughly proportional to the total number of saiga photo records in each of the locations.

An analysis of seasonal and daily dynamics helped identify several patterns. In winter, the average number of saigas per photograph is noticeably smaller (on average 4 individuals, with the minimum of 2.5 individuals in December), while in spring and summer it is higher – about 16 individuals on average. In autumn, the average number of saigas in one image is 13 (Fig. 2). The largest number of saiga groups was registered in August and December 2020 (149 groups in each

case). The largest group (145 individuals) was recorded on 22nd September 2020 at location B3. Changes in the average numbers of saiga recorded throughout the day are reflected in Figure 2. Average group size decreases at night, which may be associated not so much with saiga behaviour as with the resolution of the cameras in night mode, which made it possible to count only individuals coming sufficiently close to the trap. Saiga numbers at watering holes increased from dawn to the middle of the day. According to the literature, in the periods of the highest average daily temperature, saigas prefer to rest (Sokolov, Zhirnov, 1998), and the photos show that watering holes are an important resting place for the animals. In the evening, saigas probably leave the watering holes to graze.

The saiga groups captured by the camera traps varied in sex and age composition, although sex and age are often hard to discern due to the low resolution of the cameras and overlapping images of different individuals.

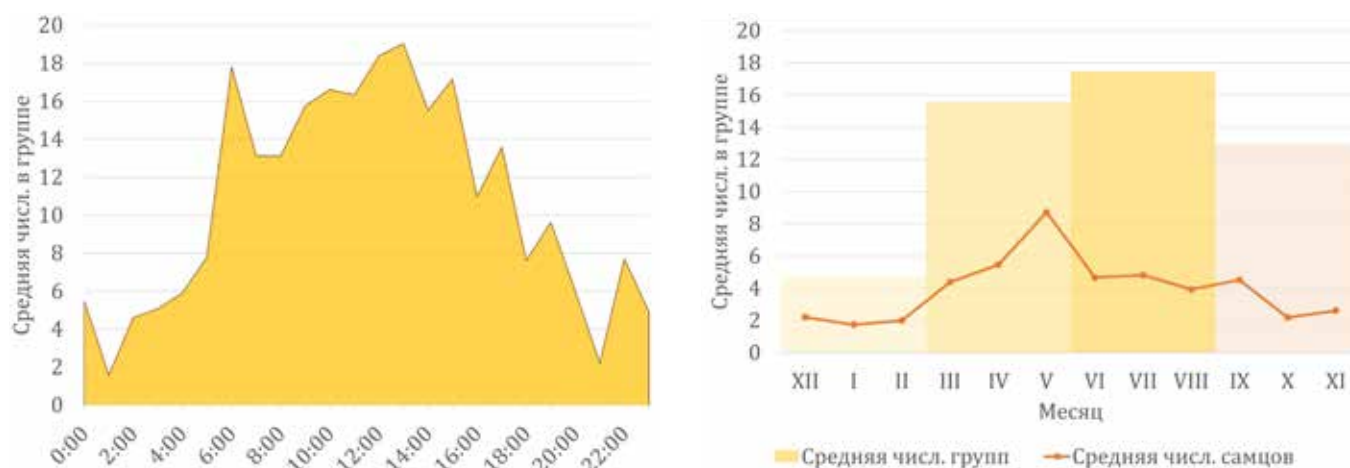


Fig. 2. Seasonal and daily dynamics of the size of saiga groups in 2020–2021.

The graphs present combined data on observations for two years, by month and hour.

Left: Monthly group size. Bars – mean group size; Y-axis – months; Orange line – mean number of males.

Right: Mean group size by hour.

Mixed groups of both sexes with young, as well as groups of females with young were recorded from June to October (the earliest record of a young saiga was made on 1st May); separate groups of males were especially common in November and December, which is associated with the rutting period; however, starting from the end of November, the number of mixed groups of males and females begins to grow. The largest number of adult males recorded in a group was 47, with the average number of adult males in

mixed groups estimated at four individuals, which is approximately 30% of the average group size.

Although the images taken by camera traps do not provide reliable information about population size, they make it possible to indirectly assess changes, including in the number of adult males in a population, seasonal variations in sex and age composition associated with phases in the life cycle, daily activity and other extremely important ecological and ethological characteristics.

The author expresses her sincere gratitude to the management of the Steпnoy Zakaznik for the photographic material provided for the analysis. The work was supported by the Saiga Conservation Alliance via a small grant competition for young conservation leaders in 2021.

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# Two new protected areas to conserve saigas in Kazakhstan

**The Bokeyorda State Nature Reserve and the Ashiozek State Wildlife Sanctuary (Zakaznik), both with federal status, have been established in the western part of West Kazakhstan province, in Kaztal, Zhanybek, Bokey Orda and Zhanakala Districts. Both protected areas were designated following a decree by the Government of the Republic of Kazakhstan issued on 25th May, 2022, and officially opened on 1st July 2022. The Bokeyorda Reserve consists of two sections, Aralsor and Zhanakala, and has a total area of 343,040.1 hectares. The Ashiozek Zakaznik is 314,504.1 ha in area and adjoins the Aralsor section of the Bokeyorda reserve.**

The main goals of both reserves is to protect saigas and conserve the most characteristic landscapes and ecosystems of the northern part of the Caspian Lowland. The Aralsor section and Ashiozek Zakaznik almost entirely cover the drainless basin of the seasonal Ashiozek River with all its main tributaries and the system of salt pans at its mouth. The Zhanakala section includes a significant part of the system of floodplains and salt pans formed by the Kamysh-Samar Lakes, fed by the Big and Small Uzen Rivers, as well as the adjacent periphery of the Naryn sands.

Vegetation cover includes various typical and psammophytic, mainly salty, desert steppe plant communities, dominated by xerophytic bunchgrasses and forbs (specifically *Artemisia* spp., *Tanacetum achilleifolium*, etc.) combined with northern desert communities dominated by dwarf shrubs of *Artemisia* spp., *Atriplex cana*, and *Anabasis salsa*, saline meadows and inland salt marshes, hyperhalophytic saltwort deserts around numerous salt flats, and psammophytic deserts

dominated mainly by *Artemisia arenaria* and *Agropyron desertorum*. Trees are scarce; small groves and open woodlands of oleaster and tamarix are scattered along salty gullies and the edges of salt flat depressions, with single trees and small stands of black poplars and white willows in valleys. Low shrubs, specifically *Spiraea hypericifolia* and *Rhamnus cathartica*, form thickets in gullies and terraces of river valleys and salt lake depressions.

Saigas inhabit almost all parts of the new reserves. The Aralsor section and Ashiozek Zakaznik include important calving sites and areas where the animals concentrate in summer and autumn, and are crossed by the seasonal migration routes of the western group of the Ural saiga population. The Zhanakala section encompasses wintering sites used by a part of this group, and formerly included the wintering and calving grounds used by the eastern group of this population. According to ACBK specialists, in recent years, there are 100,000 or more saigas in the Aralsor section and Ashiozek Zakaznik. In the Zhanakala

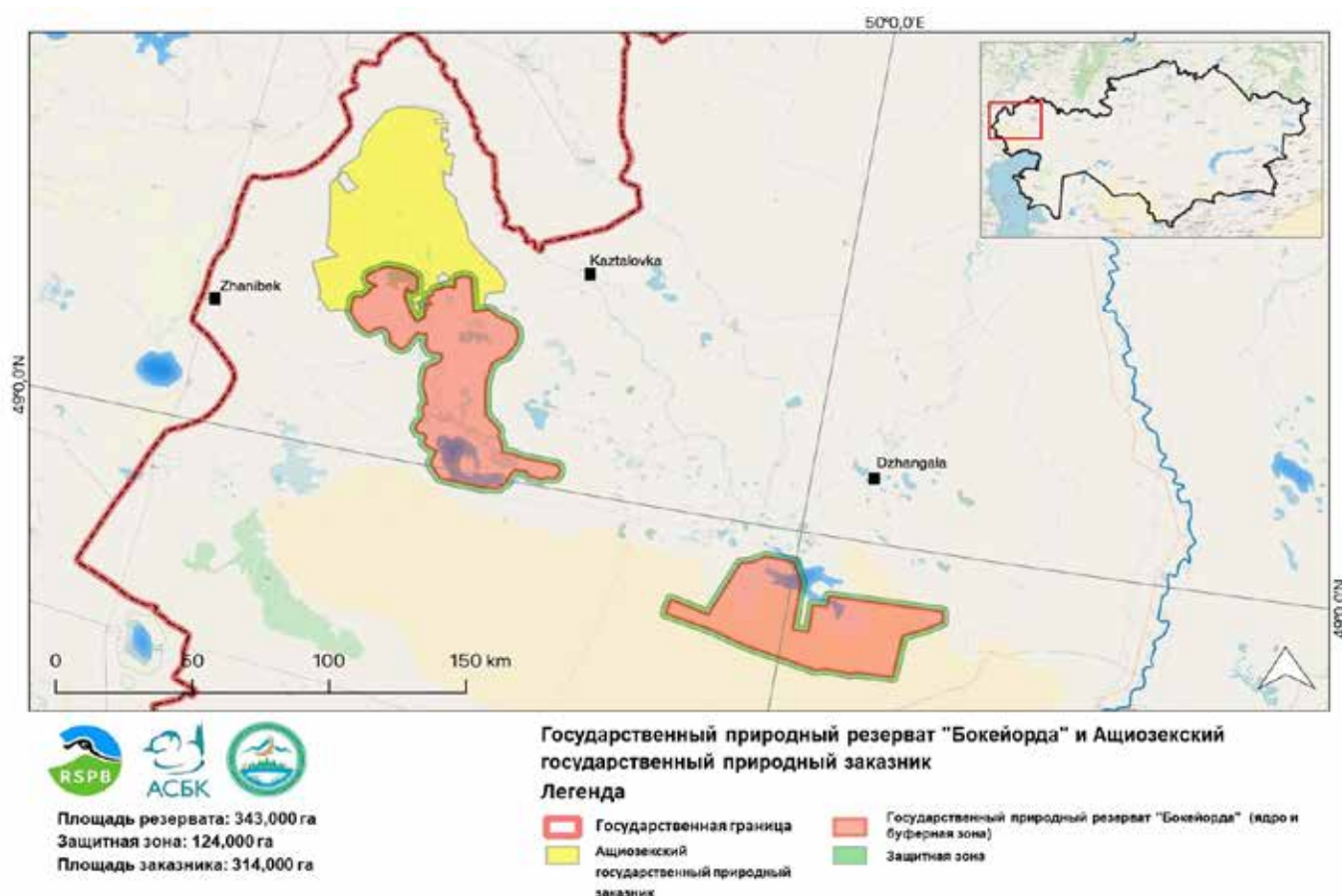


Ashchyozeck river in the Bokeyorda reserve. Photo by Ilya Smelansky/ASBK

section, saiga numbers are currently relatively small but may grow to tens or even hundreds of thousands of individuals if the Kamysh-Samar floodplains are flooded.

The Bokeyorda State Nature Reserve is in a specific category of protected area; a nature conservation and research institution with exclusive land use rights for the entire territory, part of which is strictly protected. One of the essential characteristics of this type of protected area is that it is divided into zones. In addition to the strictly protected core, the reserve has a buffer zone where some activities are allowed, such as traditional land use (in this case, moderate grazing and haymaking), research, tourism and some other activities compatible with the environmental objectives of the protected area. In addition to the buffer zone inside the reserve, it is surrounded by a 2–3 km-wide protected transition zone all along the perimeter.

In contrast to the reserve, there are about 200 leased farming plots within the zakaznik. These are all livestock breeding farms using the natural ecosystems of the zakaznik for grazing and hayfields. The use of natural resources will be limited and regulated within the zakaznik. The zakaznik



Map of Bokeyorda State Nature Reserve and the Ashiozek State Wildlife Sanctuary

does not have its own administration and will be managed and protected by the directorate of the Bokeyorda Reserve.

Documents justifying the creation of both protected areas were prepared in 2012–2013, as part of the project "Conservation and Sustainable Management of Steppe Ecosystems" implemented by the Government of the Republic of Kazakhstan/GEF/UNDP.

By the time these justifications had been developed, the Ural saiga population had not yet recovered after a catastrophic decline at the turn of the 21st century, having only reached 20,000–30,000 individuals. Now it is 40 times larger, with 800,000 saigas recorded in spring 2022. Livestock numbers have also increased significantly in the 4 districts where the reserve and the zakaznik are located, with cattle growing 2-fold, sheep 1.5x and horses 2.5x. All this creates new challenges for the protected areas Administrators and for environmental organisations, setting new tasks that were not envisaged in the original documents.

ACBK, working in partnership with the Royal Society for the Protection of Birds (RSPB), is assisting the Forestry and Wildlife Committee under the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan in planning activities within the new reserve and zakaznik. These include developing a 5-year management plan, a biodiversity monitoring programme, training courses for the staff, and providing vehicles and field and research equipment.

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## Will a new national park help preserve the isolated Aral saiga population?

On 4th March 2022, the Government of Uzbekistan issued a decree designating five new national natural parks in four regions of Uzbekistan on lands managed by the forestry department. The Aralkum National Park will be established in Muynak District of the Republic of Karakalpakstan, covering an area of about 1.0 million hectares: [lex.uz/ru/docs/5892355](https://lex.uz/ru/docs/5892355). Aralkum is a new anthropogenic desert that has formed on the dry bottom of the Aral Sea as a result of destructive human activity. This is the youngest desert in Central Asia, otherwise called the White Desert after the colour of sea salt crystallised on the former seabed. Despite the young age of the desert, which continues to grow in size through ongoing shrinkage of the remaining body of water, and the

instability of the new territory, which is just beginning to be populated by terrestrial plants and animals replacing marine organisms, some areas of the Aralkum boast rich biodiversity with diverse and unique flora and fauna that have formed over a long historical period. In particular, the new protected area will include an archipelago of former islands (Vozrozhdeniye, Konstantin, Lazarev, Bellingshausen and some other), adjacent territories of the Western and Central Aral Sea (coastline and the remaining body of water) and the dry bottom. The northern boundary of the Aralkum protected area coincides with the state border with the Republic of Kazakhstan.

The vegetation of the national park is characterized by the monodominance

of landscape species (*Artemisia terrae-albae*, *Haloxylon ammodendron*, *Salsola orientalis*). The isolation of the area has allowed this vegetation to retain its structure, in the absence of human disturbance and grazing. At the same time, the sands of Aralkum are a natural laboratory for observing the natural course of vegetation change. Currently, it clearly reflects three stages of succession: psammoseries (psammophilous succession), haloseries (halophytic succession) and potamoseries (tugai vegetation succession). The vegetation that forms during each of these stages is original and has no analogues. Currently, 123 species of higher vascular plants belonging to 90 genera and 31 families have been recorded in the areas which used to be islands. *Artemisia terrae-albae*, *Salsola orientalis* and *Haloxylon ammodendron* communities, which are typical of sandy and gypsum deserts in Uzbekistan, have remained only on Vozrozhdeniye Island. The island also features rare species such as *Astragalus brachypus* (the first record in Uzbekistan), *Linaria dolichoceras*, *Chondrilla ambigua* and *Astragalus lehmannianus* (the previous record was a herbarium specimen collected in 1921).



Typical sandy landscape of Vozrozhdeniye Island.  
Photo by Alexander Esipov



Endangered caracal was recorded by camera trap.  
Photo by Alexander Esipov



These Upper Cretaceous geological concretions are found on Vozrozhdeniye Island.

Photo by Elena Bykova



Huge flocks of flamingos can be seen quite often in the western Aral. Photo by Elena Bykova

The vertebrate fauna of Aralkum currently comprises 128 species, including 1 amphibian, 12 reptiles, 93 birds and 22 mammals. Having developed in strict isolation, it has unique relict features. Historically, the vertebrate fauna of the former islands of the Aral Sea is most closely related to the fauna of the surrounding deserts – the Ustyurt plateau and the Kyzylkum desert, while structurally it is the most similar to the Ustyurt fauna. Recently, as the Aral Sea has shrunk and the islands have connected with the mainland to form a new topography, it has begun to change. The result is the development of new faunal complexes, which have no analogues elsewhere in the world.

The national park will be a home for rare species such as the Russian tortoise *Testudo horsfieldii*, Tatar sand boa *Eryx tataricus*, blotched rat snake *Elaphe sauromates*, greater flamingo *Phoenicopterus roseus*, osprey *Pandion haliaetus*, golden eagle *Aquila chrysaetos*, lesser kestrel *Falco naumanni*, pintailed sandgrouse *Pterocles alchata*, Brandt's hedgehog *Paraechinus hypomelas*, corsac fox *Vulpes corsac*, caracal *Caracal caracal*, and saiga *Saiga tatarica*.

The saiga antelope is one of the key species in the Aralkum desert, which currently inhabits small islands, the shore of the remaining West Aral Sea and the dry bottom in the south-east. The saiga population is resident, numbering about 100. In the late 19th century, these ungulates were abundant on Vozrozhdeniye Island. L. S. Berg (1908) reports that in the spring of 1897 an industrialist killed 1,500 saigas to sell their horns to China. In 2007–2010, at least 100–150 saiga individuals lived in the Aralkum, both on the original islands and on the former bottom of the Aral Sea now covered with vegetation (Nurijanov, 2010). Human activity has intensified in recent years in connection with projects to afforest the drained bottom and the extraction of hydrocarbons, so saigas now prefer to stay in places most inaccessible to humans. In addition to poaching, which in the past significantly reduced saiga numbers on the former islands and adjacent territory, the other negative impact is from the industrial sector developing in the region. Intensive infrastructure construction at the new West Aral natural gas field began in 2022, by the company Sanoat Energetika Guruhi. The activities include the development of

ultra-deep drilling wells (up to 4,000 m) and the construction of quarries and gravel roads. Heavy vehicles move almost around the clock on the previously virgin territory of the islands and the dry bottom, which has an extremely negative impact on saigas and other fauna.

Saigas, as well as other inhabitants of the former islands (wild boars, hares), are also illegally hunted. Hunting is limited because the territory is controlled by border forces, but both gas industry workers and local residents visiting the territory to gather metal waste remaining on the site of a former military base are reliably known to be involved in illegal hunting and do not miss the opportunity to poach wild animals. The military base is known as Kantubek military town or Aralsk-7. It was located on the Vozrozhdeniye Island from 1942 to 1992, and was completely demolished in 2019. Because it was militarised and therefore off-limits, Vozrozhdeniye historically experienced very low human pressure. However, along with other uninhabited islands it has recently, over a very short period, faced a wide range of threats, including poaching, habitat disturbance and degradation. There is also a recently erected fence along the



Kazakh-Uzbek border, which is a grave obstruction to large and medium-size animals (see SN-15, 21).

Currently, a programme entitled “Vozrozhdeniye Island” is underway, supported by the UK Government’s Darwin Initiative, the Whitley Fund for Nature and People’s Trust for Endangered Species. The programme is working to zone the territory of the national park, which, in accordance with the legislation of the Republic of Uzbekistan, will include core, recreational and economic development zones. Proper zoning will help balance biodiversity conservation goals and the socio-economic

development of the territory, as well as enabling industrial companies to fulfil their obligations to prevent and mitigate their negative impacts on biodiversity. This will help to ensure the integrity and sustainability of the fragile ecosystems of the Aral Sea.

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Very clear and extremely salty water of the Aral Sea. Photo by Alexander Esipov

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# The current state of saiga habitats in the North-Western pre-Caspian region

**In the past decades, the North-West pre-Caspian saiga population has been extremely small. According to the survey conducted by WWF in 2020, it consisted of only about 6,350 individuals ([otr-online.ru/news/krasnoknizhnyh-saygakov-poschitali-s-pomoshchyu-bespilotnikov-152138.html](https://otr-online.ru/news/krasnoknizhnyh-saygakov-poschitali-s-pomoshchyu-bespilotnikov-152138.html)). The low number explained why saigas hardly made long-distance migrations, preferring to stay throughout the year in protected areas (Chernye Zemli Reserve in the Republic of Kalmykia and the Stepnoy Zakaznik in Astrakhan province) or near them, in an area of about 2–3,000 km<sup>2</sup>. However, the improvement in the sex and age structure of the population observed in recent years may just suggest the end of this long period of population depression.**

According to the objectives of the Saiga Conservation Strategy in the Russian Federation ([sudact.ru/law/rasporiazhenie-minprirody-rossii-ot-11082021-n-30-r/prilozhenie/5](https://sudact.ru/law/rasporiazhenie-minprirody-rossii-ot-11082021-n-30-r/prilozhenie/5)), by 2030, the number of saigas in the region could increase to 20,000, and their range may grow to 20,000 km<sup>2</sup>. Basically, this will involve the eastern districts of the Republic of Kalmykia (Chernozemelsky, Yustinsky and

Yashkul'sky Districts), whose rangelands, according to [astrastat.gks.ru](https://astrastat.gks.ru), were grazed by 1,328,300 sheep and goats as of 2019 – saigas' main competitors for food.

In 2021, WWF allocated us a grant to study the current state of rangelands and to make a vegetation map (scale 1:200,000) of the territory of the current and expected distribution of the

north-west pre-Caspian saiga population. Field studies were conducted within the supposed area of distribution in 2021–2022. Information was collected on transects with a total length of 4,300 km. The transect surveys resulted in 142 geobotanical descriptions, 23 geobotanical profiles and 4 soil profile descriptions, about 600 herbarium sheets and more than 6,000 photographs. Changes in vegetation were recorded with the help of an odometer on a topographic map with a scale of 1:100,000.

Subsequent analysis of the data using cartographic sources and remote sensing results, including Landsat and Sentinel-2 satellite images, made it possible to create a vector map of the current vegetation in the area using ArcGIS software. The map consists of the following layers: vegetation contours with an attribute table, the border between the desert and steppe zones, fallows, fields, sors (flat salt-pan depressions, with the surface covered with a white salt crust in the dry season), loose sands, lakes, irrigation canals, human settlements and paved roads.



Fig. 1. *Salsola tragus* on the sands. Photo by I. Safronova



Fig. 2. *Artemisia lerchiana*-*Poa bulbosa* deserts. Photo by I. Safronova

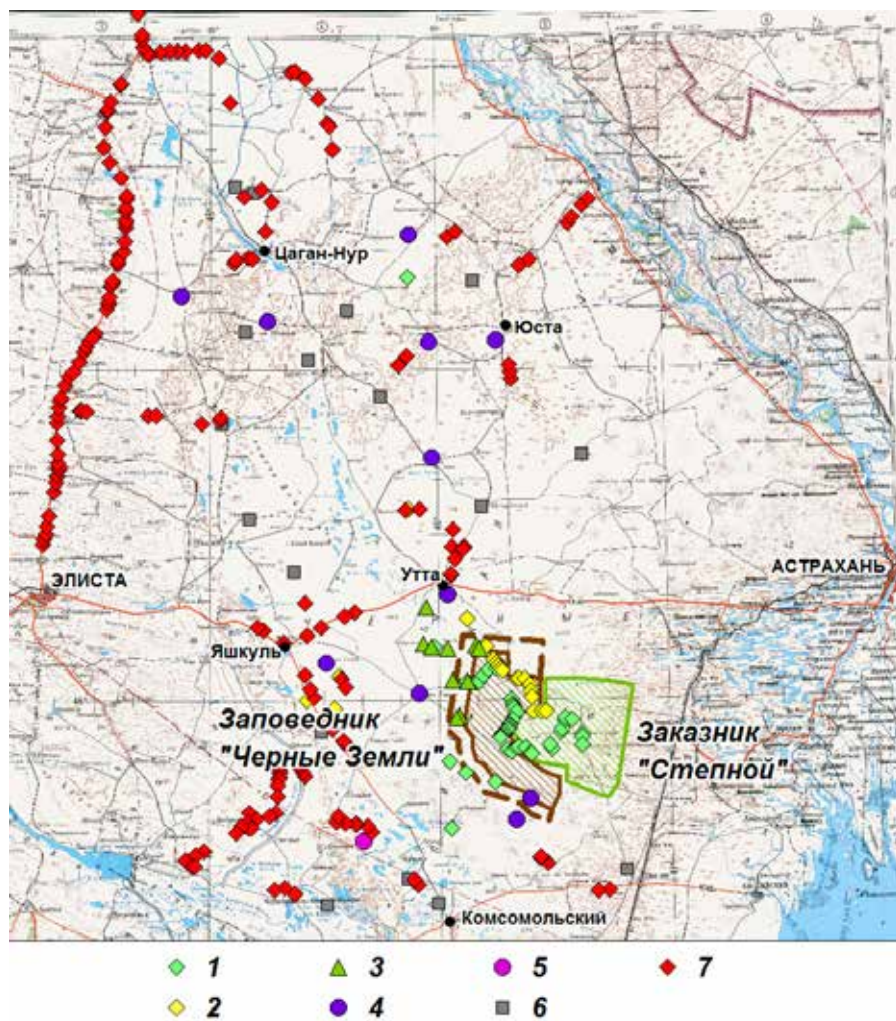


Fig. 3. Saiga records in 2021 and 2022

Legend

Authors' observations:

- 1 – May-June 2021
- 2 – August 2021
- 3 – May 2022

Interviews with farmers:

- 4 – observed in 2021
- 5 – observed in 2021 and 2022
- 6 – not observed for a long time
- 7 – pastures fenced with 'electric shepherds'

The map legend contains descriptions of 61 vegetation communities, of which 16 are located in the steppe and 45 in the desert zones. The spatial structure of the vegetation is mostly heterogeneous. Each vegetation community profile includes characteristics of the dominant vegetation and elements of micro- and nano-relief near sheepfolds and wells.

A large portion of the study area is occupied by sands. Overgrazing on the sands leads both to the spread of the annual plant *Salsola tragus*, which can be eaten by saigas for a short period at certain times of year (Fig. 1), as well as to a complete disappearance of other vegetation and the formation of loose sands. Such areas are unfavourable saiga habitat. Poor-condition

vegetation was recorded in much of the Kharbinsky Reserve and to its east, between the villages of Bergin and Smushkovoye, and in the southern part of the region. However, in general, plant communities in much of the study area are in fairly good condition (Fig. 2).

Currently, saigas stay mainly within the desert zone (Fig. 3). During our field research, we encountered 1,097 saiga individuals (in May-June 2021 – 634, in August 2021 – 430, in May 2022 – 33), mainly in protected areas (Chernye Zemli Reserve and Stepnoy Zakaznik) and adjacent territories. In June 2021, we observed 3 saigas (2 females and 1 male) killed by wolves within the protected areas.

Where possible, local people were interviewed. In 2021, we interviewed 17 farmers and in 2022 12 farmers. Most of them (10 in 2021 and 7 in 2022) had not encountered saigas in the last 5–10 years (sometimes longer). However, farmers neighbouring protected areas see small groups of saigas from time to time (Fig. 3). The older generation has warm memories of the 1980s, when saigas were numerous. The most remote farms where saiga records were made in recent years include those near the villages of Chkalovsky (1 male) and Yusta (16 individuals – males, females and young), where animals were seen in May 2021, and farms located 12 km south-west of the village of Pervomaysky (2 individuals) and 16 km west of the village



Fig. 4. 'Electronic shepherd' (electric fence). Photo by I. Safronova

of Shorv (30 individuals), where saigas were recorded in summer. About 100 saigas were observed near Beloozerny village in July 2021. One farmer based to the west of the Adyk-Komsomolsky road spoke of a family of saigas that had been using the area as a calving ground for quite a long time – this year there were 10 individuals.

Recently, saiga migration in Kalmykia has been obstructed by a device known as 'electric shepherds' (fences composed of several rows of live wire to prevent the movement of livestock) (Fig. 4). So far, the largest fenced areas

in the western part of Kalmykia – on the Ergeni hill and along major roads (Fig. 3), but many farmers in the central part of the Republic also plan to install electric fences. Their number has increased in the south of the region near the village of Achinery in Chernozemelsky District. We came across fenced pastures near the protected areas along the Adyk-Yashkul and Yashkul-Utta roads. Some farmers in these areas are aware of the harm they can cause to saigas during migration and have a negative attitude to the installation of the 'electric shepherds'. Another pressing problem is the lack of watering holes for saigas.

The materials we obtained suggest that plant communities in much of the study area are in fairly good condition. Their diversity is sufficient to provide food for the growing saiga population throughout the year.

Apart from the authors of the article, the following researchers took part in the project: I. A. Goryaev (Botanical Institute, Russian Academy of Sciences, St. Petersburg), S. A. Poluektov (Hermes Centre for the Development of Creativity in Children and Youth, Moscow), D. G. Polyakov (Institute of Steppe, Russian Academy of Sciences, Orenburg), S. S. Ulanova and N. L. Fedorova (Institute of Complex Studies in Arid Territories, Elista).

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Saigas in the Mekletinsky Reserve. Photo by I. Goryaev

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# Geoinformation mapping of fire-damaged areas in saiga habitat in the North-Western pre-Caspian area of Russia

Landscape fires are a significant factor determining the dynamics of grassy ecosystems across the world. Fires not only destroy vegetation and soil, but also decrease the accumulation of plant seeds in the soil, change the thermodynamic properties of the earth's surface, reduce the humidity of upper soil layers, and intensify erosion processes. Regular fires in the steppe also lead to changes in vegetation composition, increasing the proportion of turf cereals resistant to fire and displacing semi-shrubs, which inevitably affects herbivore populations. The destruction of vegetation by fire also forces animals to migrate in search of food. In some years, steppe fires in the North-Western pre-Caspian region cover more than 1.5–2 million

hectares, which could negatively affect herbivores, including saigas.

To specify the spatial and temporal patterns of fire distribution within saiga habitat in this region (administratively, the Republic of Kalmykia and the portion of Astrakhan province on the right bank of the Volga), we decrypted Landsat satellite images from 1984 to 2021, which are publicly available on the portal of the US Geological Survey, and can also be downloaded using the Vega-Science service developed by the Space Research Institute of RAS. Two combinations of spectral channels were used (*Fig. 1*): 'natural colours', roughly showing how the image is visible by the human eye; and a combination with the infrared range included,

highlighting areas destroyed by fire. Satellite images were processed and decrypted using the free software QGIS. Archival data on fire sites, as well as all other available information on areas damaged by fire, were also used in the analysis. However, the most accurate results were obtained only with the help of experts who 'manually' identified burnt-up sites.

The analysis helped identify 3,976 fires over almost 40 years on a total area of 7.17 million hectares (*Fig. 2*), which means about one third of the region's territory had been affected by fire, with some sites having burnt more than 10 times. Over 90% of fires were recorded in summer and autumn. No fires were recorded in 1984–1988, which might be the result of a combination of factors such as a smaller number of cloudless satellite images and their poor quality, as well as a significantly smaller area affected by fire. The smaller fire area recorded between 1984 and 1990 is also confirmed by other studies. The increase in the area affected by fire since the early 1990s may be associated with growing livestock numbers, lower moisture levels, and shrinkage of arable land, leading

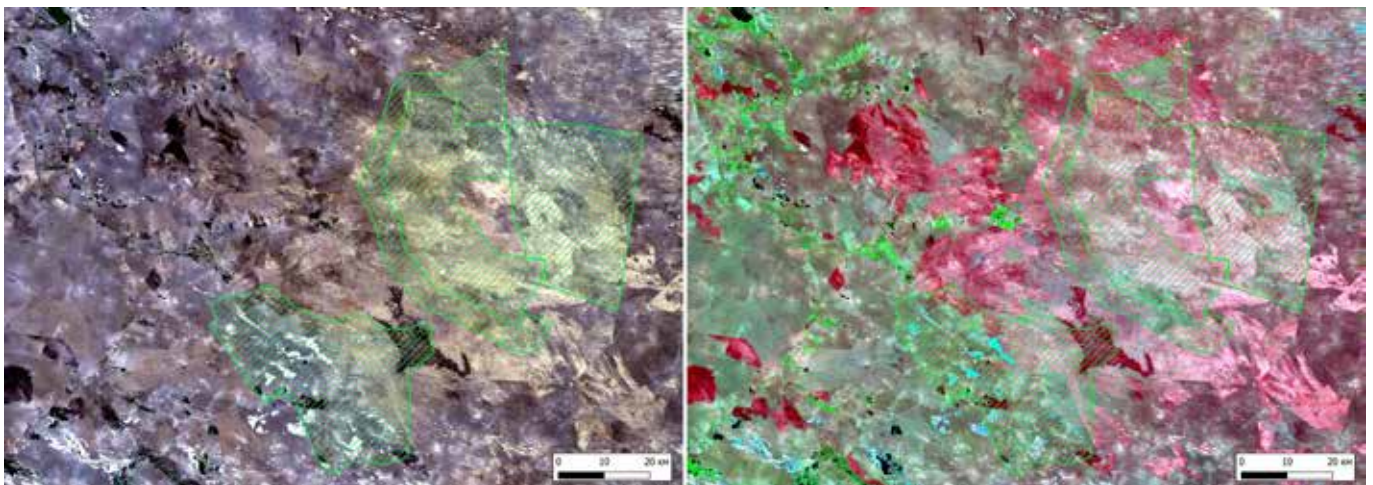


Fig. 1. Satellite image of a burnt-up site on 6th August 2006 (left – synthesis in natural colours, right – with the inclusion of near and short-wave infrared channels)

to the accumulation of dead plant remains and the intensification of fires. Catastrophic fires, each covering an area of more than 25,000 hectares, have been recorded from 1998 onwards. The largest ones, covering an area of more than 200,000 hectares (in 2000, 2002, 2006, 2007, 2011), took place in the Chernye Zemli Reserve and Stepnoy Zakaznik and adjacent territories. Between 1998 and 2011, more than 40–60% of these protected areas, which are core habitat for saigas, were destroyed by fire every 2–3 years. Certainly, this has affected the saigas living there. On average, in 1997–2008, up to 40% of the Chernye Zemli Reserve

and 25% of the Stepnoy Zakaznik were destroyed by fire annually. In 2006, the Chernye Zemli Reserve burnt almost completely, with 95% of its territory damaged by fire. After 2011, the number and area of steppe fires in the region decreased significantly (Fig. 3, 4), which is associated with the restoration of livestock numbers and aridification. This led to a decrease in the volume of dead plants, which resulted in the shrinkage of fire areas. The 2020 drought, caused by uncontrolled grazing, led to the almost complete destruction of vegetation by livestock, which is why only single, small, fire sites were recorded in 2020 and 2021 (Fig. 4). The area of fires in this

landscape depends primarily on combustible material – dry grass. Factors that reduce the amount of dead organic matter – grazing, higher temperatures and droughts – contribute to the reduction in the fire-affected area.

Saiga numbers sharply decreased in the region in 1997–1999, when the first catastrophic fires affected their habitats. After 2003–2004, saiga numbers in Kazakhstan tended to increase but the north-west pre-Caspian population did not. On the contrary, after 2010–2011, its numbers dropped to a minimum. This may be associated with the largest areas being damaged by fire in the Chernye Zemli Reserve

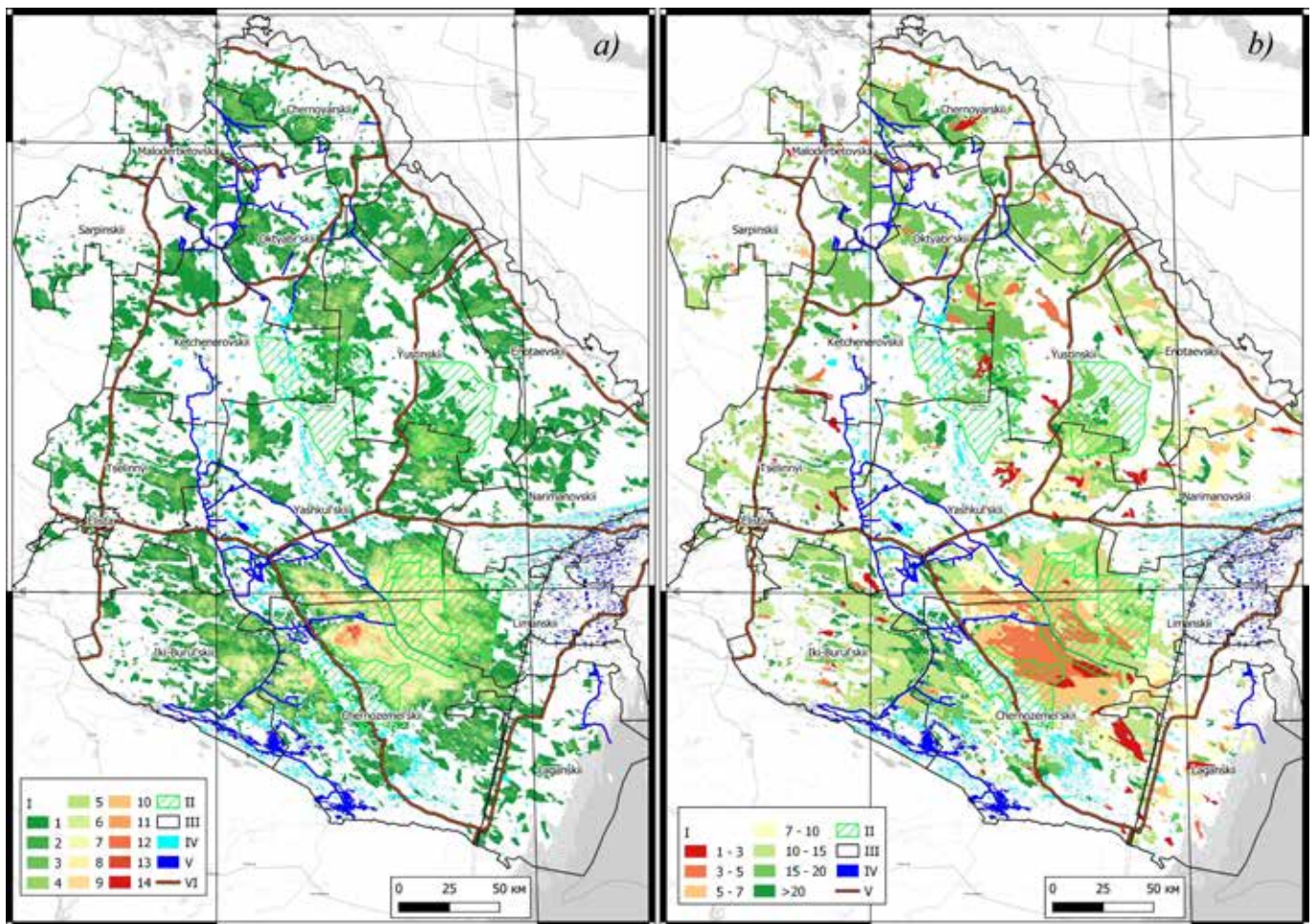


Fig. 2. Number of fires between 1984 and 2021 (a, I – number of fires, II – protected areas, III – district boundaries, IV – salt pans, V – lakes and canals, VI – paved roads) and duration of pyrogenic successions as of 2021 (b, I – succession duration, years, II – protected areas, III – district boundaries, IV – lakes and canals, V – paved roads)

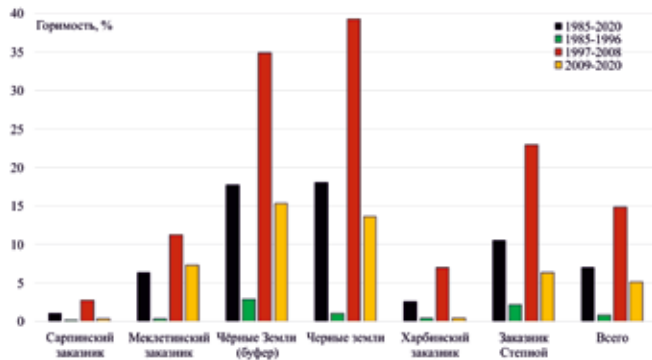


Fig. 3. Comparison of fire sites in strictly protected natural areas in different periods

and adjacent territories between 1997 and 2008, when, probably, deprived of their foraging grounds, saigas migrated outside the protected areas, where they could become easy prey for poachers.

About 80% of the fires recorded within 10 kilometres and half within 20 kilometres of the Chernye Zemli Reserve eventually reached its territory. Approximately 70–75% of fires within the Steпnoy Zakaznik, located to the east of Chernye Zemli, came from adjoining territories indicates insufficient fire prevention measures at their borders and internally. In the Sarpinsky and Kharbinsky Zakazniks, for example, about half of the fires come from outside, while the rest break out inside the protected areas.

The pyrogenic transformation of plant communities resulting from regular fires in the study area, according to our personal observations and other surveys, leads to a decrease in the proportion of semi-shrubs (such as *Artemisia* spp., *Bassia* spp.) and various grass species in the vegetation, and the predominance of turf cereals (*Stipa* spp., *Festuca* spp., *Agropyron* spp.) and ephemera (for example, *Poa bulbosa* L., *Anisantha tectorum* L.), which are combustible after their growing season, in early-mid-summer. Similar pyrogenic changes are also recorded in savannas. Comparing the periods of pyrogenic successions, numbers of fire cases, results of geobotanical studies and meteorological data, as well as conducting additional studies, will in future allow for more accurate assessments of the contribution of fire to the dynamics of vegetation in saiga habitats.



Fig. 4. Dynamics of burnt areas and livestock numbers

The work carried out by our team has resulted in a local geoinformation system entitled ‘Landscape fires in saiga habitats in the north-west pre-Caspian Sea region.’ The study was accomplished with the support of WWF Russia under the WWF001671 project ‘Geoinformation mapping and analysis of the dynamics of landscape fire areas in the saiga habitat in the north-west pre-Caspian Sea region.’

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# Carlyn Samuel: I love working in saiga conservation

Today we are happy to introduce another passionate saiga conservationist who has long been committed to the conservation of this beautiful species. Carlyn Samuel is Programme Coordinator for the Saiga Conservation Alliance, whose role in the work of the SCA cannot be overestimated. Carlyn lives in the UK and travels a lot around the world, visiting saiga habitats as well. Not surprisingly, Carlyn defended her Master's thesis on saiga, collecting material in very remote regions of Kazakhstan. Carlyn is now responsible for the strategic management of SCA projects and programmes, which is essentially the mechanism that unites and coordinates the work of a large group of people living in different countries. Carlyn does her work with great love for people and nature. Her high professionalism, energy and enthusiasm, together with a cheerful nature and charm make even the most difficult projects manageable.



**Editor:** When did you grow interested in wildlife, in general?

**CS:** When I was a kid I used to spend hours in my garden building homes for hedgehogs (I was constantly disappointed when they didn't use them!), as well as making 'adventure' trails for ants, dotted with honey and sugar, they are fascinating creatures if you take the time to watch them! I remember noticing that ladybirds seemed to love the fresh mint, so I planted it all over the garden, it spread like wildfire, I don't think my parents were too impressed!

**Editor:** When did you first take an interest in the saiga?

**CS:** I first heard about saigas in 2010, when EJ mentioned them during my interview for her MSc in Conservation Science at Imperial College. I went home and googled them and thought they were incredible!

**Editor:** When did you start your activities in saiga research and conservation?

**CS:** For my Masters dissertation I chose to focus on the saiga;

evaluating the success of a public engagement project for the conservation of the Ural saiga population in Kazakhstan. I thought that spending a few months there might mean seeing them. I was so wrong! I didn't even see a hoof-print! However, I was blown away by the steppe, it's so vast, with so few trees, unlike the scenery in the UK. You can see for miles, when you're inside the van you think there is nothing out there, but the second you step outside you realise you're surrounded by so much wildlife, from the amazing smells of the wild herbs, to steppe eagles nesting on the ground, marmots scurrying around making curious little noises and of course, the elusive saiga!

**Editor:** Can you tell us an interesting story about saigas?

**CS:** It wasn't until I had been working in saiga conservation for four years that I finally saw one! We were being hosted by the incredible rangers of the Stepnoi reserve in Kalmykia, who were kindly taking us around the reserve to the spots where they usually see saigas. I was told that this would be my best



Carlyn starts the "Sandbasket challenge" – a fun challenge to raise the public awareness of saiga conservation. Photo Alexander Esipov





Carlyn with a group of dedicated conservationists from around the world at WCN Expo 2013 in San Francisco, USA.

Photo by Martin Varon

bet to see them, but I was getting a little disheartened by the third hour of not seeing any, when we were standing on the top of a small hill, and suddenly you could feel a distant rumble, and then there it was – a massive cloud of dust moving towards us at about 40 km/h, with binoculars you could make them out, charging across the steppe. We jumped in the van to see if we could get a closer look, and suddenly one leapt out in front of us, then, finally there they were, racing against the van. It was an amazing sight.

**Editor:** What are the main problems in your work?

**CS:** I think a major challenge is that saigas don't do well in zoos, which means that the general public don't get the chance to engage with them up close, so they miss out on the opportunity to really see how unique they are – and this can make it hard to raise much-needed funds. Another challenge for me is the language barrier, even though I can now order a room

with a shower, tell people I'm not married, and ask for directions to the theatre in my best Russian, these phrases seem to do little to help saiga conservation! However, we are really lucky that Sasha, our project manager, is Russian and speaks fluent English, this has been such a boost to our efforts as she can liaise with our colleagues in the range states as well as with our world-wide donors with ease.

**Editor:** What is the best thing in your work?

**CS:** I love working in saiga conservation and find it inspiring how passionate people are about saiga conservation, and how much of their time they are willing to donate to save this species. Take the rangers in Ukraine for example, despite tanks rolling through their reserve and their jobs being made extremely dangerous, they've stayed behind on the Askania-Nova reserve [ed. *Askania-Nova is a biosphere nature reserve located in Kherson province of Ukraine*]. Like all the other rangers

I've had the privilege to meet, they are 100% dedicated to saving saigas and other endangered wildlife, and go above and beyond in their role. They truly are an inspiration.

**Editor:** What are prospects for the saiga conservation? What needs to be done first of all to help this species survive?

**CS:** On my trips to Kazakhstan, Russia and Uzbekistan I have met hundreds of kids who have never seen a saiga in the wild, yet they celebrate Saiga Day in their schools each year with such enthusiasm. They hold the future for this species, and for so many more species, in their hands, and it is wonderful to see their love for the natural world at such a young age. With kids like these championing saiga conservation I feel positive for the species' future.



Carlyn at the monument to the guardian of the Steppe – the White Elder. According to legend, this deity is always accompanied by a saiga.

Photo Alexander Esipov



"Double portrait" – Carlyn and a tiny saiga calf from the Yashkul Center for Wild Animals of the Republic of Kalmykia.

Photo Alexander Esipov

**Editor:** You have worked in the nature conservation sphere for the long time. What has changed over these years and what are current tendencies in this sphere?

**CS:** I think that we have made huge advances in recent years, it's been a slow process, but finally it seems like conservationists are making inroads with working with governments to improve conservation locally. At the SCA, our colleagues in-country have built up great trust and relationships with governmental agencies, who now regularly ask them to advise on conservation matters, they often implement our advice, and they are increasingly supporting our efforts. We also seem

to have turned a corner with working with businesses and big industry, partly due to constantly knocking on their door, and partly due to governments changing regulations to protect nature. These organisations have a lot of influence, and often have the ability to make a really positive impact on nature. Our Darwin project in Uzbekistan: 'Resurrection Island: enterprise, conservation and development around the Aral Sea', is a perfect example of this new-found cooperation and trust, we are bringing together government, conservationists, local people, tourism operators and even a gas company to work towards a common conservation-focused goal, and that makes my heart sing!

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# Saiga Conservation Alliance Awards Programme returns in 2023

SCA is pleased to report that the Annual Awards Programme, in partnership with Wildlife Conservation Network, will return in 2023.

The awards programme aims to build capacity, promote excellence and increase grass roots participation in saiga conservation; and is vital to delivering SCA's mission within saiga range states (Russia, Uzbekistan, Kazakhstan, Mongolia) and consumer countries (China, Singapore, Vietnam, Malaysia).

The 2023 awards 'Small Grants Programme', 'Young Conservation Leaders' and 'Excellence in Saiga Protection' will be announced in turn, over the period from February to June 2023. Each award will be launched and announced via SCA social media and website and will be accompanied by application and eligibility guidance. Awards winners will be notified between 2 and 4 weeks of each deadline.

Proposed 2023 award programme and application dates are:

**Small Grants Programme** –  
February 13 to April 10, 2023

**Young Conservation Leaders** –  
March 1 to May 1, 2023

**Excellence in Saiga Protection** –  
April 2 to June 20, 2023



Flowers on the steppe. Photo by Carlyn Samuel

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