

SAIGA NEWS

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



Photo by ACBK

Saiga Day goes international!

This year, for the first time, Saiga Day was celebrated simultaneously in three countries - Kazakhstan, Uzbekistan and Kalmykia (the Russian Federation). This joint celebration was planned in December 2010, at a meeting for the exchange of ideas and best practice held in Uralsk, which took place as part of the "SOS Saiga!" project funded by the People's Trust for Endangered Species and the SOS Fund (see article in SN-12). The plan is to expand International Saiga Day to other countries and regions in future years, and the authors would be pleased to hear from anyone keen to join this movement and hold their own Saiga Day next year as part of this international celebration of saigas and steppe biodiversity.

Kazakhstan

In Kazakhstan, Saiga Day was held in West Kazakhstan province, and organized by the Association of the Conservation of Biodiversity in Kazakhstan, in collaboration with the Saiga Conservation Alliance and Fauna and Flora International (FFI). This area was purposefully selected for Kazakhstan's first Saiga Day, as it is where the mass die-off of saigas took place in May 2010. This initiative was carried out within the project "Building public engagement for conservation of the Ural saiga population" (see SN-12).

Saiga Day took place in five villages in Kaztalovskiy and Zhanibekskiy districts (Azhibai, Nursai, Borsy, Karaoba and Akoba), between 27 April and 4 May. There were 350

Continued on p.2.

This edition is funded by:

CONTENTS

Feature

Elena Bykova, Yuri Arylov and Olga Klimanova

Saiga Day goes international! 1

Updates

Christiane Roettger

A workshop to launch priority actions
for Kazakhstan's Saigas 4

Bakytbek Duisekeev

Another saiga die-off in Western-Kazakhstan province 4

Yury Grachev

Results of aerial counts of saigas in Kazakhstan in 2011 5

Jessica Holdcroft

Wildlife Rescue showcases unique species
from around the world 6

Danara Zharbolova

Saiga protection by everyone! 6

Media reports:

Increased saiga numbers in China. 7

Kazakhstan's law enforcement agencies unite to counteract
poaching.

Cases of saiga poaching

Articles

Vladimir N. Miroshnichenko

The Year of the Saiga in Kalmykia: Key results and future
challenges 9

Buyanaa Chimeddorj

Saiga conservation progress in the Great Lakes Basin
of Western Mongolia 10

Dominik Thiel & Conny Thiel-Egenter

An impressive visit to the saiga rangers in the Stepnoi Reserve 11

Sergey Sidorov

Preliminary results of saiga monitoring
in the NW pre-Caspian region in 2011 12

Albert Salemgareev

A trial of infrared imaging and aerial survey
for saiga counts of in the Betpakdala population 14

Pavel Amosov

Saigas around Lake Baskunchak 15

Ceri Rhoades

A SWOT analysis of the Saiga Conservation Alliance 16

Saiga heroes

Aslan Baideldinov, Centre for Wild Animals
of the Republic of Kalmykia 17

Project round-up

Updates on SCA projects 18

New saiga publications 19

Continued from p.1:



Photo by ACBK

participants in total, including schoolchildren from the 1st to 4th forms, their teachers and parents. The events included games, competitions and puzzles. The children from each school had prepared artworks and read their own and other people's poems about saigas. The events were well received and helped to improve the general ecological knowledge of the participants as well as their appreciation of saigas.



Photo by ACBK

More details are available at:

http://acbk.kz/index.php?option=com_content&task=view&id=222&Itemid=311.

Uzbekistan

In the last few years, Saiga Day has been celebrated on the Ustyurt plateau in Uzbekistan. This year it took place on 27th-29th April, under the slogan "It is within our power to conserve the saiga". Two villages took part, Jaslyk and Karakalpokia, in Kungrad district. The events were organized by local schools, supported by the Saiga Conservation Alliance and FFI, and gathered together schoolchildren, local residents, local administrators, environmental and law-enforcement agencies, NGOs and the media.



Photo by A. Esipov

Village Council heads and School Principals welcomed participants, emphasizing the importance of the event, the need for everyone to get involved in the conservation of their native land, and the importance of saigas as a component of biodiversity. School children performed a diverse concert program, which was preceded by talks about ecology and saiga conservation, as well as art and craft competitions. Prizes were given both to competition winners and to the most creative teachers.

Each school organized an unforgettable programme including sports events for the children and their parents organized by school 54, Jaslyk village. This is the first time grown-ups have participated alongside their children. In school 26, Karakalpakia village, the children showed impressive language skills by singing songs and reading poems about nature in Kazakh, Russian and English. The varied dances were another highlight. The children from school 56 in Karakalpakia village performed puppet shows based on fairy tales and legends associated with saigas,

many of which they had made up themselves. The spectators also enjoyed the quizzes which took place in both schools in Karakalpakia. The children demonstrated good knowledge of saiga ecology and of other steppe animals.

Russia

As part of International Saiga Day, the Centre for Wild Animals of the Republic of Kalmykia organized a set of special excursions for children, including the chance to see captive saigas, films and talks, and stories about saiga conservation in Kalmykia and elsewhere. The children also enjoyed sports competitions and quizzes. In total 250 children participated, from schools in the Yashkul and Chernozemelsky regions.



Photo by K. Surchok

Pupils writing cards in search of saiga friends in other countries.

For more information please contact Olga Klimanova, Kazakhstan at olga.klimanova@acbk.kz; Elena Bykova, Uzbekistan at esipov@xnet.uz and Yury Arylov, Russia at kalmsaiga@mail.ru



Photo by A. Esipov

Updates

A workshop to launch priority actions for Kazakhstan's saigas

Christiane Roettger, UNEP/CMS Secretariat, CRoettger@cms.int

The Committee of Forestry and Hunting of the Ministry of Agriculture of Kazakhstan and the UNEP/CMS Secretariat convened a workshop in Astana on 17-18 February to set up the technical coordination for the CMS Saiga Memorandum of Understanding (MoU) and to agree priority activities for saiga conservation in Kazakhstan. At the meeting, representatives of wildlife management authorities in Kazakhstan, the CMS and relevant NGOs discussed the implementation of the saiga MOU as well as the conservation status of the Bukhara Deer. The UNEP/CMS Secretariat concluded an agreement with the Association of the Conservation of Biodiversity in Kazakhstan (ACBK) and the Saiga Conservation Alliance (SCA) to provide technical support to catalyse urgent saiga conservation activities under the medium-term international work programme of the MOU.

The participants discussed priority actions for Kazakhstan such as the coordination of research on saiga diseases and emergency measures to prevent future mass mortality events. Law enforcement was also identified as another priority. As

communication is essential to highlight the species' cultural and economic value to local people and its fundamental role in the steppe ecosystem, improving information flow is a key objective of ACBK and SCA in their new role as technical coordinators of the MOU. "Saiga News" will continue to communicate project results and progress on the implementation of the CMS Saiga agreement, while a new webpage, the Saiga Resource Centre, will be developed as a hub for saiga-relevant information. An online database of saiga conservation projects will document progress towards implementing the medium-term international work programme.

Further information on the workshop, including the report and recommendations, is available at http://www.cms.int/species/saiga/other_saiga_meetings.html

The medium-term international work programme (2011-2015) is available here:

http://www.cms.int/species/saiga/2ndMtg_Mongolia/Mtg_Rpt/Annex_5_MTIWP_2011_2015_E.pdf



Participants in the Astana workshop

Another saiga die-off in the Western Kazakhstan province

Bakytbek Duisekeev, Committee for Forestry and Hunting, Ministry of Agriculture of Kazakhstan, cites@minagri.kz

On 27 May 2011, the Head of Borsinskiy region, in the Zhanibekskiy district of Western Kazakhstan province, reported a mass die-off of saigas to the regional office of the Department of Forestry and Hunting Management. This took place in the Aidarly area of the district. 441 saigas were found dead in an area of about 5 by 10 km.; 354 females and 77 calves. Pathological samples were taken for testing from

dead saigas, soil, water and plants by the appropriate Research Institutes. The preliminary results of the tests indicated that the saigas died from pasteurellosis (*Pasteurella multocida*) like last year (see the articles in *Saiga News-11*).

The Committee on Biodiversity has asked international and national experts to study the results of laboratory tests

from the 2010 and 2011 mass die-offs, so as to draw conclusions about their causes and make recommendations on the prevention of similar situations in the future.

They have also developed a scientific research programme together with the Institute of Biological Security of the Committee for Sciences under the Kazakh Ministry of Education and Science, entitled "Ecological and epidemiological monitoring and the development of specific prophylaxis and diagnostics for the most important diseases of saigas".

The regional wildlife inspectors and Okhotzooptom have been monitoring the status of the Ural population of saigas, and report that the population is stable. Since 30th May 2011, no dead saigas have been reported.



Photo by the Kazakhstan government's Committee for Forestry and Hunting Management

Saigas dead from pasteurellosis in the Ural population, May, 2010

Results of aerial counts of saigas in Kazakhstan in 2011

Yury A. Grachev, Institute of Zoology of Kazakhstan, teriologi@mail.ru

Aerial counts of saigas in Kazakhstan were carried out from 7th to 27th April 2011. The participants were from the Institute of Zoology of the Kazakh Ministry of Education and Science, the Committee for Forestry and Hunting Management of the Kazakh Ministry of Agriculture, Okhtozooptom, the regional wildlife inspectorates of the Department of Forestry and Hunting Management and the Association of the Conservation of Biodiversity in Kazakhstan. Some changes were made to the counting methodology compared to previous years. The strip width within which counting took place was reduced from 2 to 1.2 km (600 m on each side) and was designated with markers (long thin posts) fixed to the tension cables of the plane's wings.

The aircraft flew at an altitude of 120 m. For a more precise count, which is crucial for large groups, photo



Photo by A. Salemgareev

Members of the survey team for the Betpakdala population, Torgai, April 2011

cameras were fixed to the front windows and aimed at the 600 m count line. In order to compare methods, simultaneous counts were conducted using the previous method with a 2 km strip width. This showed an increase in

precision with the 1.2 km strip width, which led to an increase in the extrapolated count of between 1300 and 1800 individuals, depending on the population. This increase in estimated population size is probably due to distant herds not being detected when too large a strip width is used.

The counts suggest that the total number of saigas in Kazakhstan is 102,000 (compared to 85,500 in 2010), with 78,000 in the Betpak-dala population; 6,100 in Ustyurt; and 17,900 in Ural. Compared to the previous year, the Betpakdala population estimate has increased; the Ustyurt population remains around the same and the Ural population has declined.



Photo by A. Salemgareev

One of the saiga herds photographed during the aerial count

Wildlife Rescue showcases unique species from around the world

Jessica Holdcroft, Science Intern - Travelling Exhibits, holdcroft@sciencenorth.ca

Wildlife Rescue is a timely exhibit about real animals and the people who are dedicating their lives to helping these animals survive. It was created by Science North, a science centre in Sudbury, Ontario, Canada. After being displayed for 10 months at Science North, it will travel to science centres and museums throughout Canada and the United States.



Photo by Science North

Entrance to Wildlife Rescue at Science North in Sudbury

One of the exhibits in Wildlife Rescue is a four-foot diameter rotating globe with photos of 30 threatened and endangered species from around the world. Visitors use touchscreen computers to learn more about these species. They can browse through photos, videos and text to learn interesting facts about each animal, why each is threatened and what is being done about it. The saiga antelope is featured in this exhibit, allowing visitors in North America to learn about this critically endangered antelope from the Eurasian steppe. Visitors can read about the Centre for Wild Animals of Kalmykia and browse through photos contributed by the centre. Through Wildlife Rescue, visitors learn about the important work the Centre is doing to breed, study and monitor saiga antelope and to educate the public about the importance of saving this unique species.

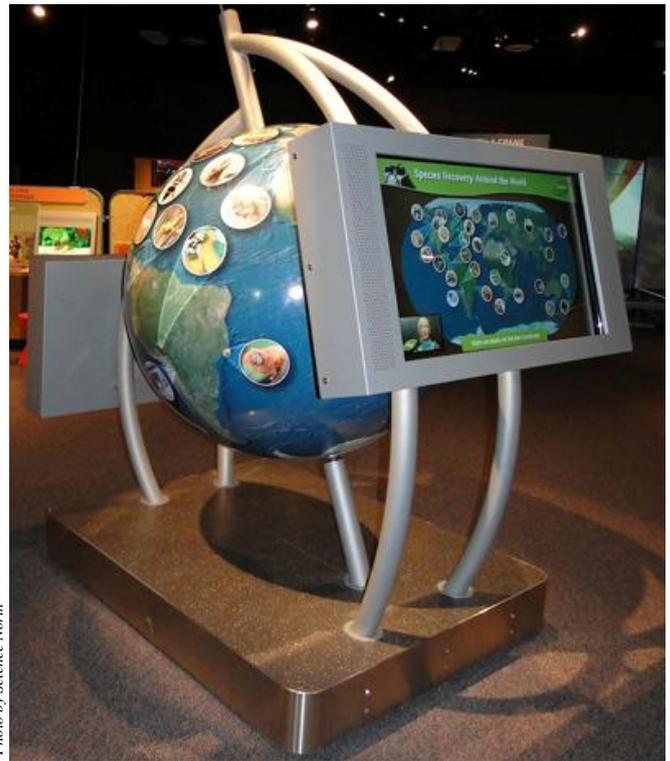


Photo by Science North

Animals featured in the globe exhibit

For more details please contact Kirsti Kivinen-Newman at kivinen@sciencenorth.ca.



Photo by Science North

Page featuring the Centre for Wild Animals of Kalmykia

Saiga protection by everyone!

Danara Zharbolova, ACBK, danara.zharbolova@acbk.kz

To drive for hundreds of kilometres in hot and cold weather to tell people about the importance of protecting saigas and other steppe inhabitants - this is the goal of the monitoring and awareness team of the Association of the Conservation of Biodiversity in Kazakhstan (ACBK). They have been conducting public education and awareness events in villages near the range of the Betpakdala saiga population for the past two years with support of Stamp Fund of the

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of Germany. In every village the ACBK team holds meetings for schoolchildren, rural administrators and the general public. They have prepared presentations, documentary films and information materials for each type of audience. For junior schoolchildren they also use games and activities that help to bring knowledge and information to this most important audience in an accessible and

interesting format. In the last two years, this project (funded by the German Ministry of Environmental Protection) has made significant progress in showing that public awareness work must be carried out on an ongoing basis, rather than occasionally, alongside protection and anti-poaching activities.

Over the project period the team has visited more than 50 settlements in Karaganda, Kostanai, Kyzyl-Orda and Western-Kazakhstan provinces, and has held more than 110 meetings with different target groups, totaling 6000 people. These meetings are aimed at promoting dialogue with local people, not just educating them. Villagers participate freely in discussions of the direct and indirect issues of saiga conservation. The most pressing issues raised in these dialogues include the reasons behind poaching, habitat changes, saiga life-history, the importance of their conservation for ecosystems and biodiversity in general, and

cooperation with hunting managers. The experience gained in this project, as well as the materials developed, were used in a large-scale public awareness campaign by the Committee for Forestry and Hunting Management, which took place between 12th and 25th March 2011. The campaign had the slogan "Saiga protection by everyone!" Two teams were formed to hold events in villages within the saiga range, including members of ACBK, the press and law enforcement agencies. Their two vehicles, equipped with projection equipment, moved between towns and villages in the Karaganda, Kostanai and Kyzylorda provinces, focusing on locations within the saigas' migratory routes or birth areas.

It is clear that all the organizations involved in saiga conservation in Kazakhstan are interested in carrying out events such as these on a regular basis, in collaboration with local people.

Media reports

Increased saiga numbers in China

Since April 26th 2011, captive saigas in the Gansu Endangered Animal Research Centre, in Gansu province, northwest China, have given birth to 31 calves, bringing the total number of saigas in the Centre to 105. Saigas are considered to be extinct in the wild in China, as no wild saigas have been found for decades. The Gansu Endangered Animal Research Centre has imported over a dozen saigas since 1988, and the herd is descended from these individuals. The Centre is keen to breed more saigas in order to reintroduce them into the wild.

More details are available at

<http://english.peopledaily.com.cn/90001/90776/90882/7395693.html>

Kazakhstan's law-enforcement agencies unite to counteract poaching

An inter-regional meeting of representatives of the Ministry of Internal Affairs, the Ministry of Agriculture, international nature conservation organizations, local governors and prosecutors was held at the public prosecutor's office of Kostanai province on 21 May 2011. The meeting considered the problems of saiga conservation and measures for poaching control. It was noted that that poaching is one of the major obstacles to the restoration of saiga populations. Selective poaching of males is of particular concern. The percentage of saiga males in the Betpakdala and Ural populations in 2010 was 12%, and only 6% in Ustyurt.

The first deputy general prosecutor, Iogan Merkel, who chaired the meeting, asked the Ministry of Internal Affairs to

take urgent action on the detection and deterrence of poaching, to increase the proportion of criminal cases that are solved and to improve the quality of investigation of this type of crime, in collaboration with the wildlife protection agencies. The Ministry of Agriculture highlighted the need to improve the effectiveness of the Regional Inspectorates of the Department of Forestry and Hunting Management and of "Okhotzoprom". The public prosecutor's office was given the task of improving the coordination of the law enforcement agencies and improving the implementation of environmental protection laws. The meeting also discussed the necessity of speeding up the establishment of the Altyn Dala state nature reserve Altyn Dala in Kostanai province.

Please follow the link for more details

<http://inform.kz/rus/article/2381977>.

The Committee of Forestry and Hunting Management of the Kazakhstan Ministry of Agriculture has, in partnership with the Committee for the Administrative Police of the Ministry of Internal Affairs, initiated the toughening of laws concerning the illegal hunting of saigas and sale of their meat and horns. According to current laws, poachers have to pay fines. The proposal is to include the confiscation of poaching gear, including vehicles, in the Criminal Code. This step will, according to the Chairman of the Committee of Forestry and Hunting Management Erlan Nysanbaev, enable the elimination of organized hunting groups.

More details are available at <http://vesti.kz/society/79547>.



Enterprising dealers are ready to buy the horns of saigas and rhinoceroses

On May 4, 2011, the public prosecutor's office of West Kazakhstan province hosted an inter-departmental meeting to launch a law enforcement action called "Bekire-2011", and more active control of poaching during the saiga breeding season. The meeting was attended by a range of government bodies and experts from Okhotzooptom. The discussion included a review of methods of poaching prevention and detection and approaches to collaborative action, as well as progress reports from the relevant organisations.

More details are available at

<http://www.zakon.kz/kazakhstan/213154-prokuraturojj-zko-provedeno.html>

Cases of saiga poaching

The Ustyurt population

January 2011 - Uzbekistan

As part of operation Arsenal, officers of the Department of Internal Affairs of Jaslyk village confiscated two unregistered rifles from local residents. A criminal case was instituted according to article 243 "Illegal possession of firearms". The court imposed a fine on the accused. Local residents also voluntarily submitted four unregistered rifles.

Eight unregistered motorcycles were confiscated as a result of an operation by officers of the Jaslyk Department of Internal Affairs and inspectors from the Gosbiocontrol Department of the State Committee for Nature Protection.

June 2011 - Kazakhstan

Officers of the Department of Internal Affairs detained a man, aged 33, on the Saratov-Tashkent train at Atyrau station. The man was from the Samarkand province of Uzbekistan, and was trying to transport 62 saiga horns.

More details are available at:

<http://news.gazeta.kz/art.asp?aid=342637>.

The Betpakdala population

26 December 2010 - 15 January 2011

The Ministry of Internal Affairs carried out an operation entitled "Saiga" in Aktyubinsk, Kyzylorda, Kostanai and Karaganda provinces, along with other relevant organisations. The operation aimed to detect and prevent illegal saiga hunting, and led to the detention of five poachers, from whom saiga carcasses and horns were confiscated. As well as this, forty-five violations of environmental laws, as well as of regulations on the maintenance and carrying of firearms and hunting rifles, were recorded. *More details are available at:*

<http://kt.kz/?lang=rus&uin=1133168098&chapter=1153531179>.

18 January 2011

Environmental policemen and Okhotzooptom inspectors detained poachers with eight newly sawn saiga horns.

A criminal case was instituted according to article 288 of the Criminal Code of the Republic of Kazakhstan (Illegal Hunting). *For more details please follow the link:*

<http://inform.kz/rus/article/2341522>.

February 2011

In a garage in the yard of a block of flats in the town of Kyzylorda, environmental policemen found and confiscated three carcasses and the skin of a saiga. The woman owner of the garage claimed that she bought the saiga carcasses from an unidentified person for personal use. The institution of a criminal case against her, under article 183 of Criminal Code of the Republic of Kazakhstan "Purchase or sale of criminally obtained property" is under consideration.

More details are available at:

<http://kt.kz/?lang=rus&uin=1138536468&chapter=1153533396>.

Okhotzooptom officers found several types of hunting weapons, six hare carcasses and seven saiga skins while examining two UAZ vehicles 30 km from the town of Zhezkazgan. Nearby, they found pieces of saiga meat in packets, four cut-off heads, nine legs and three pairs of new horns. The detained drivers claimed that they had not killed the animals but had found the carcasses along the Zhezdinka stream and decided to butcher them. The meat and skins were submitted for forensic veterinary examination, while the firearms were submitted for ballistic examination to see if they had been used to shoot the saigas. Depending on the results of examinations, the institution of a court case will be considered. *More details are available at:*

<http://kt.kz/?lang=rus&uin=1138536468&chapter=1153532553>.

18 March 2011

An investigations team of Irgiz District Department of Internal Affairs detained a car driven by poachers inside the Irgiz-Torgaiskiy Nature Reserve. One saiga carcass and a hunting rifle were found and confiscated during the examination. The institution of a criminal case under article 288 of the Criminal Code of the Republic of Kazakhstan "Illegal Hunting" is under consideration. The suspects gave a written undertaking not to leave their place of residence.

Please follow the link for more details:

<http://inform.kz/rus/article/2363159>.

5 May 2011

Officers of the Kostanai branch of the Department of Forestry and Hunting Management detained poachers who had been chasing saigas using three jeeps. An investigation is under way. Reports suggest that these poachers killed 225 saigas in Kostanai province in 2010.

For more details please follow the link:

<http://vesti.kz/society/84621>.

The North-West pre-Caspian Population

23 April 2011

A 49 year-old resident of Yashkul province, who had been transporting two saiga carcasses, was detained in Astrakhan

province. He confessed that after an illegal hunt he was transporting the saiga meat to Astrakhan city. As well as a large fine, he is potentially liable under the article "Purchase of criminally obtained property".

For more details please follow the link:

http://www.elista.org/index.php?option=com_content&view=article&id=11290:2011-04-25-12-14-35&catid=1:latest-news&Itemid=2

Mongolia

The appeal court has confirmed the decision of the trial court in imposing a fine of 4 million Mongolian tugriks (around 3200 USD) and imprisonment of 1.5 years, in the case of a poaching incident involving one saiga, which took place last November in Bayan-Uul province, Gobi-Altai province.

Articles

The Year of the Saiga in Kalmykia: Key Results and Future Challenges

Vladimir N. Miroshnichenko

The Ministry for Natural Resources, Environmental Protection and Energy of the Republic of Kalmykia,
v.miroshnichenko@rk08.ru

A decree issued by the Head of the Republic of Kalmykia declared 2010 the Year of the Saiga in Kalmykia. One of the main challenges facing conservationists in Kalmykia is the protection of this ancient representative of the Pleistocene mammalian fauna. In the last few years there has been a significant reduction in saiga numbers from 270,000 animals in 1997 to 14-16 thousand at the beginning of the present decade. According to expert evaluations and the results of a count conducted in 2009 by specialists from the Federal body on Hunting Control, together with specialists from the Ministry of Natural Resources, Environmental Protection and Energy for the Republic of Kalmykia (Ministry of Nature), the current population is as low as 8-10 thousand.



Photo by G. Vinogradova

Newborn saiga

An action plan for the Year of the Saiga was put in place on 15th December 2009 by order of the Government of the Republic of Kazakhstan. Coordinators of the plan included governmental bodies in Kalmykia, Federal State Organisations, research teams and educational institutions.

Given that one of the principal objectives of the National Strategy for Biodiversity Conservation is the conservation of animals "in situ" (in their natural habitat) much attention was given to measures that would support the protection of the saiga in their natural range. For this purpose, a special Department of Saiga Conservation was established within the Ministry of Nature, with funding from the Shell Oil and Gas Development Company.

Inspectors from the Ministry of Nature carried out regular raids throughout the Republic in order to monitor and control compliance with animal protection legislation. 63 visits took place in 2010 during which ten breaches of hunting legislation were recorded. Criminal proceedings

were instigated in 7 cases under article 258 of the Criminal Code of the Russian Federation (Illegal Hunting), and 3 individuals were prosecuted for poaching 19 saiga.

During these saiga protection raids, the Ministry of Nature officers carried out public awareness activities among the local population. However, the level of illegal hunting is still high in the eastern regions of the Republic where saigas live. This is chiefly due to economic instability, unemployment and the desire for easy profit. In addition to this, investigative work and preventative educational work is not sufficiently well-developed within the Republic's law enforcement and environmental structures.

The year 2010 saw the creation of interdepartmental commissions and groups designed to stimulate cooperation between interested parties on issues of saiga protection and population restoration, including the Federal Hunting Control body, the Chernye Zemli State Biosphere Reserve, the Centre for Wild Animals of the Republic of Kalmykia,

Kalmykia State University and the Institute for the Study of Arid Regions.

Employees at the Centre for Wild Animal of the Republic of Kalmykia are conducting research into saiga biology and developing captive breeding techniques. The Centre's work is severely hampered by lack of funds, despite the fact that such captive breeding centres may become the only depository of the population's gene pool should the species be exterminated in the wild.

Throughout the Year of Saiga, large-scale events and campaigns were staged to promote saiga protection. The Ministry of Education, Culture and Science of the Republic of Kalmykia conducted a seminar for the Republic's biology teachers, a youth ecological forum, an exhibition of innovative projects, a children's art competition and a "Songs of the Saiga" festival.

A remaining challenge is the need to intensify scientific research into saiga biology and ecology. It is essential to put in place a system for counting and monitoring saigas, which requires the involvement of research organisations and planning at the Federal level.

An interdepartmental conference held to assess the overall success of the Year of the Saiga concluded that it is now essential to develop and ratify international agreements with Kazakhstan, Uzbekistan and Turkmenistan on measures to restore the saiga within its entire natural habitat. In addition, there is a need to ensure that the customs service strengthens measures to prevent the illegal export of saiga horns, and to recommend that the People's Parliament (Khural) of Kalmykia approaches the State Duma of the Federal Assembly of the Russian Federation with a proposal that the Duma considers introducing amendments to the relevant legislative acts, making provision for stricter penalties for illegal saiga hunting.

The preservation of the saiga population in Russia is not only an ecological problem, but a social and economic one, which must be tackled using a range of methods at all levels of state authority. Only then will it be possible to guarantee that future generations will also be able to admire large herds of these unique antelope in the feathergrass steppes of the North-West pre-Caspian region.

Saiga conservation progress in the Great Lakes Basin of Western Mongolia

Buyanaa Chimeddorj

WWF Mongolia, chimeddorj@wwf.mn

WWF Mongolia is grateful to the MAVFA Foundation for supporting its saiga conservation project in the Great Lakes Basin, Altai Sayan Ecoregion in western Mongolia. The long term goal of the project was to maintain and restore the Mongolian saiga in the Great Lakes Basin and to extend its range into its former habitats. The status of the species has improved significantly to about 8,000 animals, thanks to the serious and efficient conservation efforts of the funding organization, which provided crucial support in the period 2007 to 2010 for law enforcement, mobilizing local support for saiga conservation and establishing livestock-free areas of saiga habitat.

We are extremely happy to report that the community-based network of volunteer rangers and mobile anti-poaching units operate throughout the saiga range; the decline of the saiga population has ceased and numbers have started to increase.

Herder community groups were established in critical saiga habitats with the objective of reducing competition between livestock and saigas for pasture and open water, by introducing environmentally friendly pasture management. The first herder communities agreed in 2009 to leave their pasture free for wildlife during the late spring (the saiga breeding season) and summer. The benefit of this measure became obvious to them on their return in the autumn – excellent winter pasture for their livestock, with the result that they faced no losses of livestock despite a hard winter in 2009-2010.

Populations of several other species such as goitered gazelle, small mammals and birds of prey benefited from

improved protection and rangeland management and responded with population increases. The return of the Mongolian gazelle to Shargin Gobi is one of the remarkable side achievements of the project.

The project was a significant contributor to environmental education. Youth clubs operate throughout the project area with support from the saiga rangers and qualified local teachers. The involvement of schools and youth clubs has helped to spread the message of conservation into herder families and improved local support for the project.

A project entitled "Aerial Counts, A New Approach to Conservation of Large Mammals in Mongolia" was successfully conducted for the first time in Mongolia, producing a population estimate for saigas using internationally recognised methods. The result and methodology of this aerial survey (a population of 8016 with a 40% confidence interval) have been accepted by Mongolian and international saiga experts. Based on this result, a ground survey methodology will be developed for further population monitoring.

These achievements demonstrate that the project has contributed significantly to the stabilisation and restoration of the saiga population. As we have support for another three years, this process will continue, leading to the sustainable growth of the saiga population in the Great Lakes Basin, as well as further expansion into its former range. Phase II of the project will build upon activities started during Phase I, focusing on:

- maintaining anti-poaching and other law enforcement activities, including capacity building for rangers and

conservation staff in critical government agencies.

- establishing environmentally-friendly pasture management for livestock and wildlife, by consolidating and expanding cooperation with herder communities in critical Saiga habitats such as birth areas.
- education and awareness for young people and rural populations, to maintain and increase support for the project's objectives with a special focus on sustainable rangeland management.
- This will lead to decreasing pressure on the rangeland and the establishment of livestock-free pastures, which act as emergency pasture reserves for herders - the key innovative approach of this project.

Phase II aims to increase saiga populations in the Shargiin and Khuisiin Gobi by 30% (compared to 2010) by the end of 2013. This goal will be achieved by cementing the successes achieved to date in reversing the downward spiral of Mongolian saiga populations, through continuing support from herder groups in improving and expanding critical Saiga habitats. The Phase II project will be implemented by WWF-Mongolia through its field office in Khovd. At a national level, WWF-Mongolia will establish an Advisory Board consisting of key stakeholders including MNET, the Ministry of Food and Agriculture, the Academy of Sciences, WCS, and representatives of local government. This will ensure effective management, coordination, and political support for the project.

An impressive visit to the saiga rangers in the Stepnoi Reserve

Dominik Thiel & Conny Thiel-Egenter

Fish and Game Department, Aargau, Swiss CIC, dominik.thiel@ag.ch

A late May afternoon in the endless prairies of the Stepnoi Reserve in Southern Russia, southwest of Astrakhan. The air is filled with songs of different lark species, feather grass is swayed by the wind like waves in the ocean. Our binoculars are scanning the horizon from north to south with the bright yellow sunlight in our back. Anatoly Khludnev, director of the Stepnoi Reserve, interrupts the silence: "Here they are". Indeed, some pale brown bodies are moving through the grassland on the horizon like ships crossing an ocean. They are all trotting in the same direction, as if they were being towed by a rope. Saigas, our first wild saigas. During the next few days camping in this prairie, we see saigas every day. However, the big herds, as described in reports from only a few years ago, are missing.



The director of the Steppnoi Reserve, Anatoly Khludnev, observing a small herd of saigas in May 2010

The goal of our trip in May 2010 was to visit the saiga conservation project in the Stepnoi reserve and to talk to the local people responsible for saiga protection in the field. We wanted to learn about potential conservation problems, the relationship of the people to this antelope species, the efficiency of conservation efforts and how well equipped the rangers were.

This 800 km²-reserve was founded in 2000 and lies in the pre-Caspian region, bordering the Republic of Kalmykia and at the south-west corner of the Astrakhan province. The nearest village, Liman, is 80 km away. The local saiga population declined from 380,000 in 1980 to less than 12,000 in mid-2010. Recent observations estimate the number of surviving saigas at less than 8,000 individuals. Poaching is the main threat for the saiga nowadays. The horns of three saiga males equal a monthly salary. Unemployment is very high in this area, self-employment is widespread and good salaries and prospects can only be found

in the cities. Therefore it is not surprising that poaching pressure is high and is the only hope for many young villagers.

The many fruitful discussions with Anatoly Khludnev, his rangers and other locals opened our eyes to the difficulties of saiga conservation in the field. Our experience of living in the steppe without running water or any shady tree or building, helped us to understand the problems of the Stepnoi reserve. During our various travels throughout Russia we never met such a highly motivated and well organized team of rangers as the one in the Stepnoi reserve under the leadership of its director Anatoly Khludnev. Khludnev was honored for his dedicated work with a prize from the Small Grant programme of the Saiga Conservation Alliance and by further financial support by the Swiss delegation of the CIC (International Council for Game and Wildlife Conservation).

In order to continue their irreplaceable effort in reducing poaching, Anatoly Khludnev's team needs money to afford enough petrol and salaries for the rangers. Without their daily work, saigas will be completely lost from the area and the wonderful steppe will lose one of its most characteristic and beautiful inhabitants. Saiga conservation needs action

out in the villages and in the field. Therefore, further external financial support like the SCA's small grant programme is needed.

We wish to thank Anatoly and his rangers for introducing us to the steppe, the saigas and their successful conservation project!



Photo by Dominik Thiel

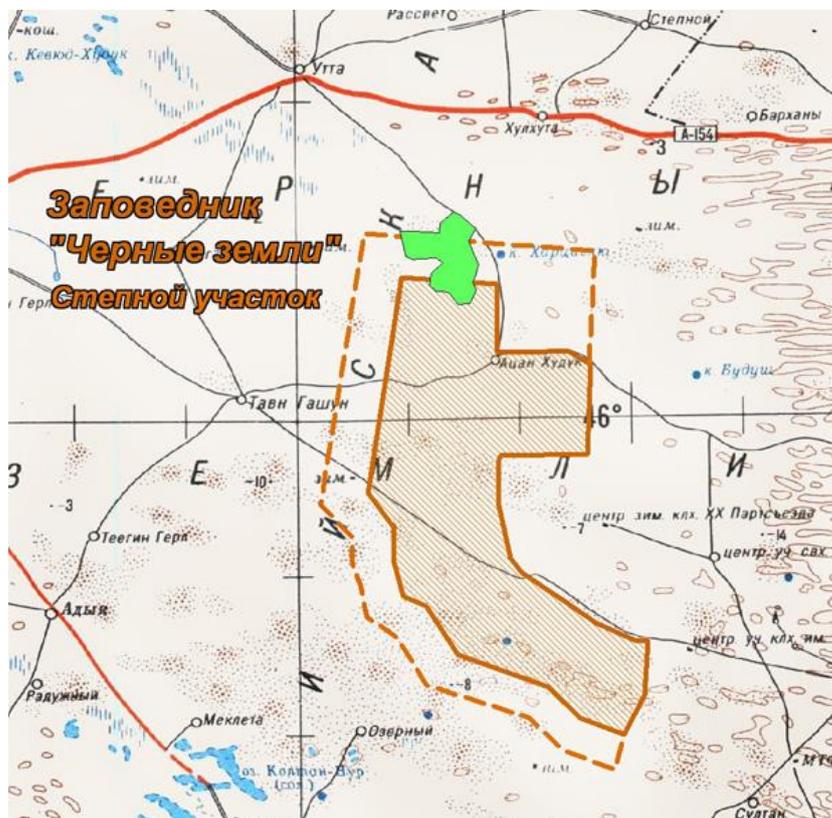
Saiga-rangers in the Stepnoi Reserve, Astrakhan, with the director Anatoly Khludnev (third person from the right)

Preliminary results of saiga monitoring in the North-West pre-Caspian in 2011

Sergey V. Sidorov

Federal State Institution Centrokhotkontrol, in.for_sidorov@list.ru

On 21 April 2011, a meeting was held to discuss the interactions between different agencies (the Russian Ministry of Nature, the Nature Ministry of Kalmykia, the Federal Hunting Control body (Centrokhotkontrol) and the Chernye Zemli State Biosphere Reserve) and procedures for assessing the status of the saiga population in the North-West pre-Caspian. The meeting was headed by Mr. A.E. Bersenev, the Director of the Department of Hunting Regulation and Conservation of the Russian Ministry of Natural Resources and Ecology. This meeting led to the approval and initiation of a saiga monitoring programme under the supervision of the Ministry of Nature of Kalmykia (Yu.B. Kaminov), the operative leadership of the Ministry of Nature and Chernye Zemli Reserve (V.L.G. Dordzhiev and B.S. Ubushaev) and the scientific supervision of Centrokhotkontrol (S.V. Sidorov). The main objective of the survey was to provide a quantitative evaluation of the status of the population and evaluate calf survival in the first few days after birth, using ground and aerial surveys.



Map.
Location of the saiga calving aggregation in 2011 (green contour)

Saiga birth aggregations were found in the northern part of the Chernye Zemli reserve and parts of the steppe to the south of the Elista-Astrakhan road, approximately in the same place as in 2009-2010, and near the area used for calving aggregations in the late 1980s.

The calving ground in 2011 was just over 50 km² (see map), about the same size as in May 2008. Mass calving began on 12 May, after heavy rains on 7-10 May, and finished on 15 May. The timing of the mass calving differed insignificantly from Centrokhotkontrol's prediction (8-9 May), which was made based on a survey of the saiga population in December 2010. The mass calving confirmed that our data were correct in showing that the sex ratio was adequate for reproduction (up to 10% at the beginning of the rut and 5% in the middle of the rut).

Three ground survey groups undertook daily walks for five days (12-16 May) in order to assess birth rates and juvenile survival in the first three days after birth. This work was conducted in areas of high female concentration, according to the methodology used by Centrokhotkontrol. The total length walked was 100 km; 240 newly born saiga calves (both live and dead) were recorded. The mortality rate of juvenile saigas was up to 4.2%, which was more than twice as low as in 2009 and 2010. Despite showers, weather conditions during the mass calving were relatively good; in particular, there were no significant drops in air temperatures recorded, which was probably one of the reasons for high calf survival.

The aerial survey team for the first time conducted experimental work on the use of a pilotless aircraft for population assessment. A Canon EOS-550 camera was mounted on the aircraft, producing 4000 photographs with an area of 40 m² and a strip width of up to 363 m. The highest altitude of the aerial photography was 600 m and the quality of the photographs was good.

On 17 May a ground-based visual inventory was undertaken along the perimeter of a saiga aggregation in order to count the number of individuals (not calves). The expert assessment was that the aggregation included more than 4000 adults, which was extrapolated to include the unsurveyed area in the centre of the aggregation, producing a total count of 6000 individuals. The total number of saigas, including single animals around the edge of the group and additional groups which were not part of the calving aggregation, was around 7000 individuals. This estimate should be taken with caution as it is only approximate, but it confirms the continuing low level of saiga numbers.



Photo by V. Badmeyer

Preparation of the pilotless aircraft

Thus, the saiga population in the north-western Pre-Caspian remains depressed. There was no sign of deterioration in the ecological parameters of the population (such as reproductive potential or sex-age structure). The mass calving in 2011 confirms that there were enough males to reproduce during the rut, albeit that the sex ratio was probably less than optimal.

This suggests that the population remains depressed due to high mortality during the rest of the year. To reduce the mortality rate (taking into account the high survival rate of newly born saigas in 2011) we recommend that wolf numbers in the North-West pre-Caspian are reduced (including control of numbers in strictly protected areas), that anti-poaching work be improved and that measures are taken to prevent steppe fires, which may occur in summer 2011 due to the current abundant vegetation.



Photo by Centrokhotkontrol

Aerial photograph of a calving aggregation

A trial of infra-red imaging and aerial survey for saiga counts in the Betpakdala population

Albert Salemgareev

Association of the Conservation of Biodiversity in Kazakhstan (ACBK), albert.salemgareev@acbk.kz

ACBK is currently working with Okhotzooptom and the Committee for Forestry and Hunting Management, Kazakhstan, to finalise a study on improving the methodology of aerial surveys and data analysis, in order to improve the accuracy of information on saiga numbers and demography. To that end, the Committee initiated experimental work on the use of infrared imaging for saiga counts. This method has been successfully applied for twelve years for the assessment of the distribution and numbers of marine mammals (*see SN-8*).

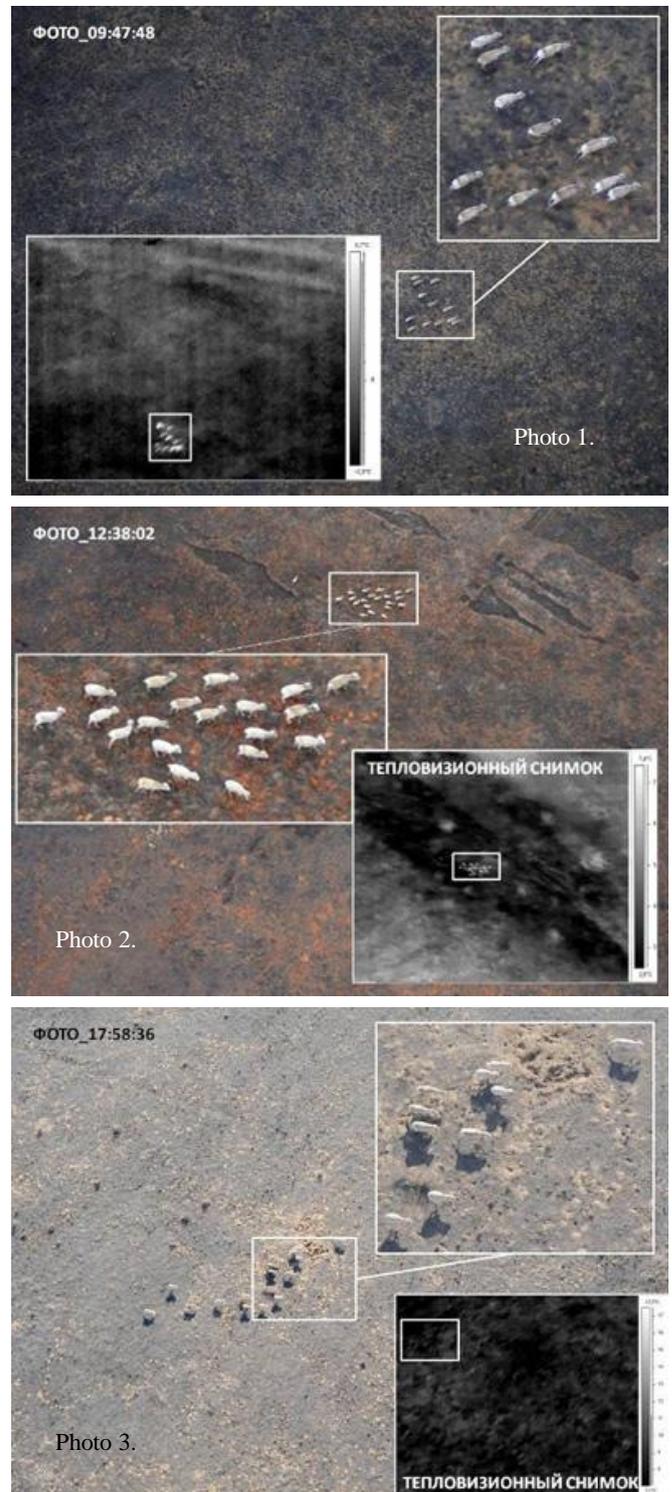
In April 2011, under the UNDP/GEF project on the conservation of steppe ecosystems in Kazakhstan, experimental flights were carried out during counts of the Betpakdala saiga population, to test the FLIR-325 infrared imager. An AN-2 plane was equipped with an on-board automated information collection system, photo and video equipment and an infrared (IR) imager. The work was conducted by specialists from the Institute of Ecology and Evolution of the Russian Academy of Sciences together with ACBK. Three experimental flights were made during which 15 groups of saigas were recorded. The results showed that:

- The thermal contrast of saigas in the images varied. In the morning, when the soil was not heated by the sun, the thermal contrast reached 3-5° and the animals could be clearly identified in the IR images. As the soil became hotter it grew harder to identify saigas. After 12 pm (in April) the IR imaging became ineffective (photos 1-3).
- The sensitivity and spatial resolution of the IR imager enabled individual saigas to be recorded at an altitude of 120 m. At higher altitudes the effectiveness dropped (photos 4-5).

Thus, the infra-red aerial imaging can be effectively applied under these conditions: the absence of solar heating of the soil; no precipitation; wind velocity below 8 m/sec; and at altitudes up to 120 m. Effectiveness may be better in winter as the thermal contrast of saigas against the cold surface will be high (for example, as for seals on ice). However, this suggestion requires confirmation. Overall the approach is not suitable in the spring.

Good results were obtained from photographing saigas from the AN-2 plane, at altitudes of 100 to 200m (photos 1-5). The quality of the photographs enabled individual saigas to be identified and counted in the herds, including distinguishing between males and females.

Video-filming was subsidiary. Its application enabled the recording of dynamically developing scenes: unusual saiga behavior, the effect of different factors on saigas (e.g., poachers). Thus, the specialists from the Institute of Ecology



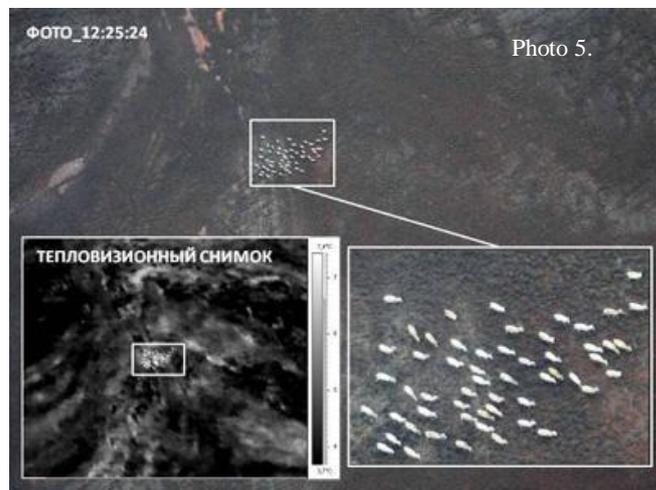
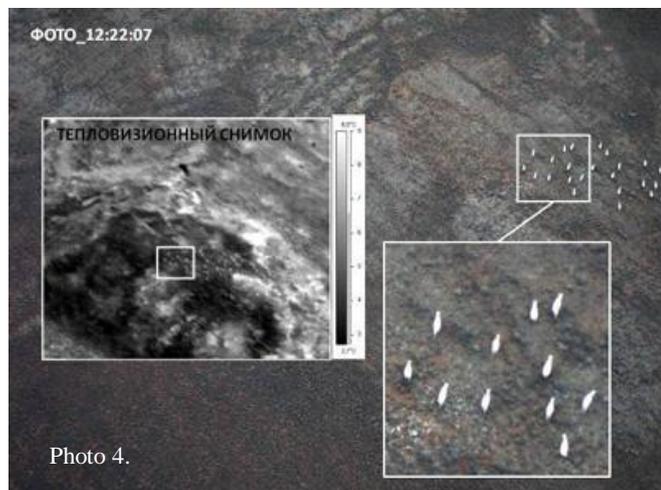
Photos 1-3.
Combined photographs of saiga groups made at different times of day (the time is indicated in the left upper corner of photo). The flight altitude is 120 m

and Evolution recommended the method of visual-instrumental aerial imaging, which included:

- Photography using three fixed Nikon D300 photo cameras, which allows the establishment of the width of the strip of count at twice the flight altitude. The width of the count strip is controlled with a high precision (by the altitude of flight), and detectability depends on the scale of the photography and the

remoteness of saigas from the line of flight;

- Visual observations from both sides of the plane including measuring the distance of the saigas from the line of flight;
- Precise recording of plane coordinates, altitude, audio, photo and visual information, as well as the timing of events.



Photos 4-5.
Combined photographs of saiga groups made at different altitudes
(Photo 4 – altitude 180 m; Photo 5 – altitude 200 m)

Saigas around Lake Baskunchak

Pavel Amosov

Bogdinsko-Baskunchakskii Nature Reserve, Russia, pavelamosov@yandex.ru

The saiga antelopes in the Lake Baskunchhak area are part of the Volga-Ural population which is mostly found in Kazakhstan. The area is an undulating plain with a stream and other freshwater bodies, located in the northern part of the Caspian Depression on the left hand side of the Volga river and is part of the Caspian semi-desert zone. Two reserves have been established in this area, the Bogdinsko-Baskuchanskii zapovednik, or strict nature reserve; and the zakaznik, or wildlife sanctuary, of the same name.

The eastern shore of Lake Baskunchak lies in the path of the saiga's traditional migratory route from western Kazakhstan. In the past decade, saigas have become a rare sight here, but formerly the species was quite abundant. According to local hunters, in spring 1992 approximately 50,000 antelopes migrated along the eastern shore of the lake. In the spring of 1994 the only saiga calving aggregation in the Asktrakhan region was in this area. In subsequent years, saiga numbers dropped sharply and only small herds and single animals were noted around Baskunchak. For example, in the month of July 2001, herds of 11, 10, 6 and 5 individuals were seen in the area (see map). In 2003, one saiga was recorded in May, one in April, and tracks were observed in July. In 2005 and 2006, no saigas were observed in either of the reserves and in 2007 to

2008, no observations were carried out due to the absence of researchers. In subsequent years saiga observations were resumed, and in July 2009, tracks left by two or three animals were seen. In 2010, saiga observation was carried out on the reserve from June to September. Sightings included 7 animals in June, numerous tracks in July, two herds, each comprising about eight animals, in August, a large number of tracks in September, and one adult male in January-February 2011.

Despite the area's special protection status, problems remain in conserving its biota. Due to insufficient funding, the number of reserve wardens has been reduced and there is a shortage of all-terrain transport. Horses are hardly ever used by the wardens for patrolling the reserves.

Before the establishment of the zakaznik in the area around Bakunchak and the subsequent creation of the zapovednik, there were frequent cases of saigas being hunted using barbaric methods (hunting from helicopters, rounding up animals using motorbikes, etc.) Over recent years there has been no information on saiga poaching. However, according to local people, in the autumn of 2010 saiga meat was sold illegally in Verkhnyi Baskunchak village, and in preceding years in the town of Akhtubinsk. The local paper "The Projector", published in Akhtubinsk, carried an

announcement about the purchase of saiga horns. These facts are evidence of ongoing illegal trade both in the Astrakhan region and in the neighbouring territory of Kazakhstan.

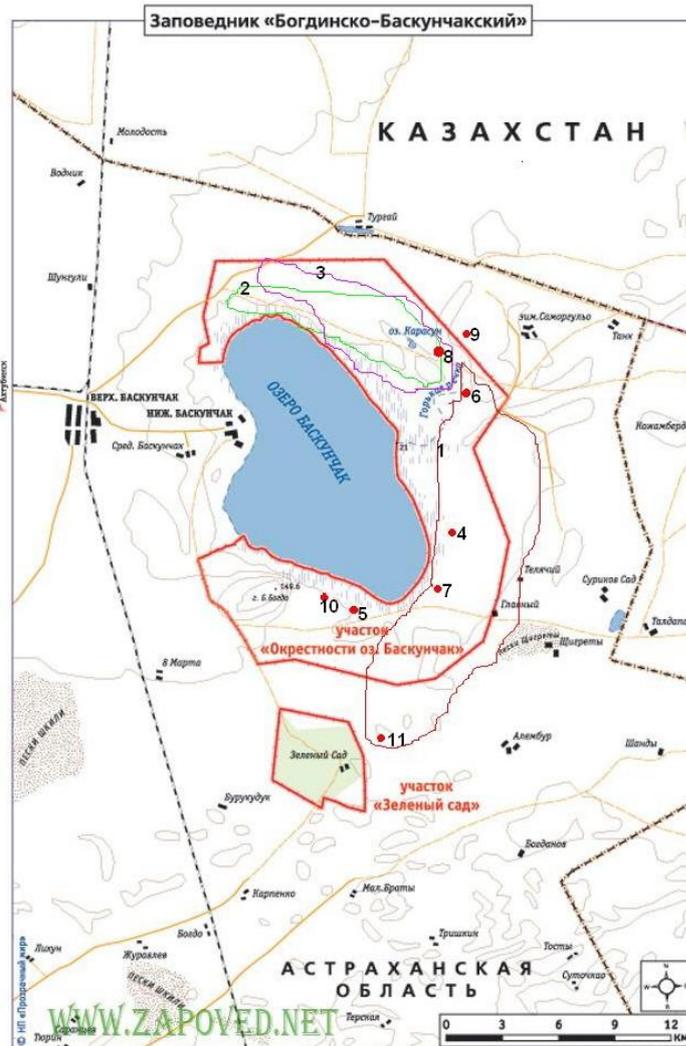
At present it can be assumed that the saiga has all but disappeared from the area around Lake Baskunchak. The restoration of previous numbers will require time and considerable effort on the part of nature conservation organisations and local people.

To this day the socio-economic situation in Akhtubinsk remains complex. During the economic crisis many of those who lived in the surrounding settlements of Nizhnii and Verkhnyi Baskunchak were made redundant due to staff reductions at the “Russalt” company’s salt works in Nizhnii Baskunchak, on the Volga Railway and in other places. This could have encouraged the illegal hunting of animals, including saigas, by local people.

Now it is particularly important to foster a caring attitude towards wild animals and to nature in general. It would be useful to include the saiga in the Red Data Book of Endangered species for the Astrakhan region in order to improve protection of the species and to carry out education programmes to encourage the study and protection of the species among local people.

The State zapovednik does carry out public awareness work in schools and among local inhabitants, but so far this only reaches a limited number of people in the region, so is ineffective. It would be worthwhile to establish a cross-border protected area for the conservation and study of the saiga, linking reserves in Russia and Kazakhstan.

This project was carried out with the support of the SCA Small Grants Programme, 2010.



Map.
Saiga records in the vicinity of Baskunchak Lake in 2001-2004 (points 1-6) and 2010-2011 (points 7-11)

A SWOT Analysis of the Saiga Conservation Alliance

Ceri Rhoades

Imperial College London, cgrhoades@cheerful.com



Since the 1990s there has been an increasing demand for conservation organisations to demonstrate positive results and wise use of the money that funders invest. Many charities in other sectors, such as poverty relief, use evaluation tools to monitor their progress in order to demonstrate to funders that their work is making a difference and that the charity is aware of the areas where it must improve. Conservation organisations, however, are currently lagging behind in this field.

To demonstrate the usefulness of monitoring and evaluation for conservation organisations, a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis of the Saiga Conservation Alliance was carried out. SWOT analysis is a strategic planning tool commonly used by

locally and internationally and in collaborating on saiga commercial businesses. Individuals who had involvement with the SCA were asked to fill out a survey of what they thought the SCA’s internal strengths and weaknesses were, and their external opportunities and threats.

Results revealed that the SCA’s greatest strengths were their strong steering committee and board of trustees, who were thought to combine a diverse range of scientific and practical expertise, their diverse range of activities, including their ability to distribute information through Saiga News, and their successful partnerships with others working in saiga conservation. These successful partnerships were felt to be the SCA’s greatest opportunity for growth in helping them to secure funding for projects, to raise their profile both

conservation projects. The SCA are limited by a lack of funding and a lack of administrative support and these were both high priorities which needed to be addressed. Possible approaches to minimising these weaknesses were to utilise volunteers to help with general administration, and the development of a donor-based newsletter which would engage donors with SCA activities, raise their public profile and potentially attract more donations. The greatest threat to the future of the SCA was felt to be the threats to the saiga antelopes themselves, such as ongoing poaching, rather than

issues with the organisation itself.

This study revealed that SWOT analysis has great potential as a simple and useful tool in evaluating conservation organisations, such as the Saiga Conservation Alliance. Ongoing evaluation will help the SCA to meet both their five year objectives and their overall mission: "to promote for the benefit of the public the conservation and protection of the critically endangered saiga antelope and to advance the education of the public in the conservation and protection of the same".

Saiga heroes

**If put your heart and soul into your work
then the result will also make your heart rejoice**

Note from the Editors: This issue's Saiga Hero is Aslan Baideldinov, an animal husbandry technician who has been working at the Centre for Wild Animals of the Republic of Kalmykia since 2003. The Editorial Team carried out a telephone interview with him.

Ed: Aslan, how did you start working on saiga conservation?

Aslan: I have been fond of animals since I was a kid. We kept ducks, geese, cows and sheep at home. Our parents taught us to take care of the animals day-to-day. I knew all our animals by sight and all of them had names. I first saw saigas when I was at primary school. There were lots of them then and we often observed them passing by our school. When I first saw them I formed a lifelong memory of these animals, the way they run and the sense of a live steppe. This is why when I had the chance to work at the saiga breeding centre I did not hesitate for a moment. I must say I am lucky, because I not only do the job I like, but also have the opportunity to meet scientists and experts from Russia and abroad, who frequently visit our Centre. When the visitors really appreciate our work I feel happy and proud because I, too, have contributed to the successful work of our little saiga "shelter".

Ed: What does your typical day consist of?

Aslan: There is nothing heroic in my work. My work day usually involves several types of work. In the first half of the day and at the end I take care of the saigas, feed them and make a round of the enclosure. Then we make the hay, repair fences, clean enclosures and so forth. Visitors come in the second half of the day; therefore, we aim to get everything ready before their arrival. Usually, if don't have another job to do, I like to conduct excursions to the enclosures and tell people about my pets.

Ed: Can you tell us an interesting story about saigas?



Photo by N. Arlyova

Orphan saigas have found a "new mum" - Aslan with his little pets

Aslan: Yes, of course. I remember when saigas were brought here at the very beginning, from our first temporary enclosure, which was in Har-Buluk village, I used to come to the enclosures to feed and observe the saigas, and clean the enclosures. I would hum a simple tune and the saigas would

usually stay close to me. After a long time I visited the saigas, which had already grown up, humming my tune. Hearing my voice they rushed over to me from a distant corner of the enclosure and started walking around me and smelling the feeding rack. I at once filled it up. It was then that I understood that the saigas were accustomed to my voice and recognized it at once. So, nobody can say that these saigas are wild, after all.

Ed.: What do you like most about saigas?

Aslan: Most of all I like their temperament. They are so free and majestic. It is impossible to describe the energy and force of life coming from them. They can only be felt.

Ed.: What are the main problems in your work?

Aslan: Of course, no work is free of problems. The main one is that we would like to get more support (and not only financial) from the state. The situation is catastrophic. Saiga numbers are declining from day to day.

Ed.: How can obstacles be removed from your work?

Aslan: I believe that, irrespective of what we are involved in, any obstacles can be removed by hard work, responsibility and lack of indifference. People should put their hearts and souls into their work then the result will also make their hearts rejoice.

Ed.: Which is the best part of your work?

Aslan: The first thing is that our work is very noble—protecting these ancient antelopes. We are happy that we can show them to our children. The best thing is to see saigas themselves rather than in pictures and books. Secondly, there is an opportunity to meet people from different countries and thirdly, my work is not banal or dull as this is the first saiga breeding centre in Russia.

Ed.: What hopes do you have for saigas, yourself and colleagues?

Aslan: I am very hopeful that the numbers of saigas will stop declining in the wild and the saiga will not turn into a legend for people.

Project round-up

Updates on SCA projects

E.J. Milner-Gulland, e.j.milner-gulland@imperial.ac.uk



people's trust for endangered species |

صندوق محمد بن زايد
للمحافظة على الكائنات الحية
The Mohamed bin Zayed SPECIES CONSERVATION FUND

In the period from November 2010 to June 2011, the SCA has had three main field-based projects running; saiga conservation in Uzbekistan, participatory monitoring of saiga distributions in the pre-Caspian region, and increasing public engagement in saiga conservation in the Ural region of Kazakhstan.

The project in Uzbekistan is the continuation of our long-term work in the region, funded by the Wildlife Conservation Network (WCN), with additional support from Disney Coins for Change, and since June 2011 the Whitley Foundation for Nature (WFN), and is led by Elena Bykova of the Institute of Zoology of the Uzbekistan Academy of Sciences.

The project in the pre-Caspian is funded by the Rufford Foundation with additional support from the Mohammed Bin Zayed fund (MBZ), and is led by Professor Yuri Arylov of the Centre for Wild Animals of the Republic of Kalmykia, with the participation of Mr Anatoly Khludnev of the Stepnoi Reserve.

The project in Ural is funded by the SOS Species Fund and the People's Trust for Endangered Species, and is led by Olga Klimanova of the Association for the Conservation of Biodiversity in Kazakhstan.

All three projects are collaborations with Imperial College London, with some of the research elements being carried out by MSc students from Imperial jointly with local collaborators. The outcomes of each of these projects will be reported in the next issue of *Saiga News*.

New saiga publications

Howe, C., Medzhidov, R., Milner-Gulland, E.J. (2011) Evaluating the relative effectiveness of alternative conservation interventions in influencing stated behavioural intentions: A case study of the saiga antelope in Kalmykia. *Environmental Conservation* **38**, 37-44

We asked 250 people in 8 villages in the pre-Caspian region how much money they were prepared to pledge towards the conservation of the saiga antelope, as a measure of their willingness to engage in conservation. These villages had received different conservation interventions; some had been part of social engagement projects, some were next to protected areas for saigas, and others had only had media coverage of saiga issues. The amount of money pledged depended on which intervention people were exposed to. Those with social engagement were more likely to pledge something rather than nothing, but the amounts pledged were quite low. Those exposed to media coverage pledged the greatest amounts on average whilst those who were near protected areas had more people who were not prepared to pledge anything and lower amounts if they did pledge something. People who pledged nothing said that the government or international community should pay for conservation. Our statistical models controlled for the effects of other influences on the amount pledged, including how long people had lived in the village, age, wealth and knowledge about saigas. It appears that media awareness-raising is successful in changing people's willingness to contribute to conservation.

Singh, N., Milner-Gulland, E.J. (2011) Monitoring ungulates in Central Asia: Current constraints and future potential. *Oryx* **45**, 38-49

We reviewed the existing methods used for monitoring ungulates in Central Asia, identified the practical and institutional challenges to effective monitoring, and categorized monitoring methods based on different criteria, so that researchers can plan better monitoring studies suited to their species of interest. We illustrate the review using examples including saigas. We recommend that scientific surveys should be complemented by increases in participatory monitoring, involving local people. The future of ungulate monitoring in Central Asia lies in a better recognition of the existing errors and bias in monitoring

programmes and methods, allocation of more monitoring effort in terms of manpower, finances and logistics, and improved understanding of robust scientific methods and sampling theory.

Tyler S. Kuhn and Arne Ø. Mooers Missing saiga on the taiga. *Molecular Ecology* (2010) **19**, 4834–4836

Conservation biologists understand that linking the demographic histories of species at risk with the biotic and abiotic events that cause demographic change should help us predict the effects of ongoing change. In parallel, researchers have started to use ancient genetic information (aDNA) to explore the demographic histories of a number of species present in the Pleistocene fossil record. However, aDNA studies have primarily focused on identifying long-term population trends, linked to climate variability and the role of early human activity. Population trends over more recent time, e.g. during the Holocene, have been poorly explored, partly owing to analytical limitations. Campos et al. (2010a) highlight the potential of aDNA to investigate demographic patterns over recent time periods for the compelling and endangered saiga antelope. The time may come when past and current demography can be combined to produce a seamless record.

von Meibom S., Vaisman A., Neo Liang S.H., Ng J., Xu H. (2010). Saiga Antelope Trade: Global Trends with a Focus on South-east Asia. TRAFFIC project report to the CITES Secretariat. TRAFFIC Europe.

The demand for saiga horns in China and South-Eastern China and illegal international trade in horns is probably the major factor in the catastrophic decline in numbers of this steppe antelope. This report prepared by the international program TRAFFIC includes an overview of the world trade in saiga horns and meat, an in-depth analysis of markets in Malaysia, Singapore and China. For China, an analysis of trade stocks of horns and the management of these stocks is presented, as this country is the most important importer of horns. The status of the major saiga populations, levels of poaching and illegal trade in Kazakhstan, Russia and Uzbekistan are also discussed.

A pdf of the report is available on these websites:
www.iucn.org/dbtw-wpd/edocs/Traf-115.pdf and
<http://savesteppe.org/ru/archives/842>



Saiga females with calves

Acknowledgements

The Saiga Conservation Alliance would like to express its sincere gratitude to the following individuals for supporting our activities over the last 6 months: Kennon and Bob Hudson, IFAW and particularly Jeff Flocken, for their continual support for saiga conservation. We also express our gratitude to Disney Foundation Canada and Club Penguin, and the Whitley Fund for Nature for incredible support for our educational and public work in Uzbekistan, and the Rufford Foundation and MBZ fund for their support for conservation in Russia, the PTES and SOS fund for support for our Ural projects in Kazakhstan, and CIC for supporting our small grants programme. We would like to express our special gratitude to WCN staff and Stacey Iverson personally for her continual support, great ideas and advice on our work.

We are grateful to the organisations that have supported this issue of the newsletter – WCN, MBZ, WWF Mongolia and WCS-China.

Editorial team. China: A. Kang, WCS China (gzhang@wcs.org), G. Zhang British Consulate-General Guangzhou (gzhang@wcs.org); Kazakhstan: Professor A. Bekenov & Dr Iu.A. Grachev, Institute of Zoology (teriologi@mail.ru), O. Klimanova, ACBK (olga.klimanova@acbk.kz); Mongolia: Dr B. Lhagvasuren & B. Chimeddorj, WWF-Mongolia (lhagvasuren@wwf.panda.org; chimeddorj@wwf.mn); Russia: Professor Yu. Arylov, Centre for Wild Animals of the Republic of Kalmykia (kalmsaigak@elista.ru) & Dr A. Lushchekina, Institute of Ecology & Evolution (rusmabcom@gmail.com); Uzbekistan: E. Bykova [Executive Editor] & Dr A. Esipov, Institute of Zoology (esipov@xnet.uz); UK: Professor E.J. Milner-Gulland [Advisory Editor], Imperial College London (e.j.milner-gulland@imperial.ac.uk).

All contributions are welcome, in any of our six languages. Please send them to esipov@xnet.uz or to one of the editors. We publish twice a year. Guidelines for authors are available in English and Russian at www.saiga-conservation.com or on request from the Editors. Please contact the Editors responsible for Saiga News in your country, or the Executive Editor Elena Bykova (esipov@xnet.uz), if you have any questions or concerns.

This publication is available online at www.saiga-conservation.com, <http://saigak.biodiversity.ru/publications.html> and <http://www.wildlifewarden.net/wcs/mini/Saiga-Chinese.pdf>, and as a pdf or in hard copy on request to the Editors, in Chinese, English, Kazakh, Mongolian, Russian and Uzbek.