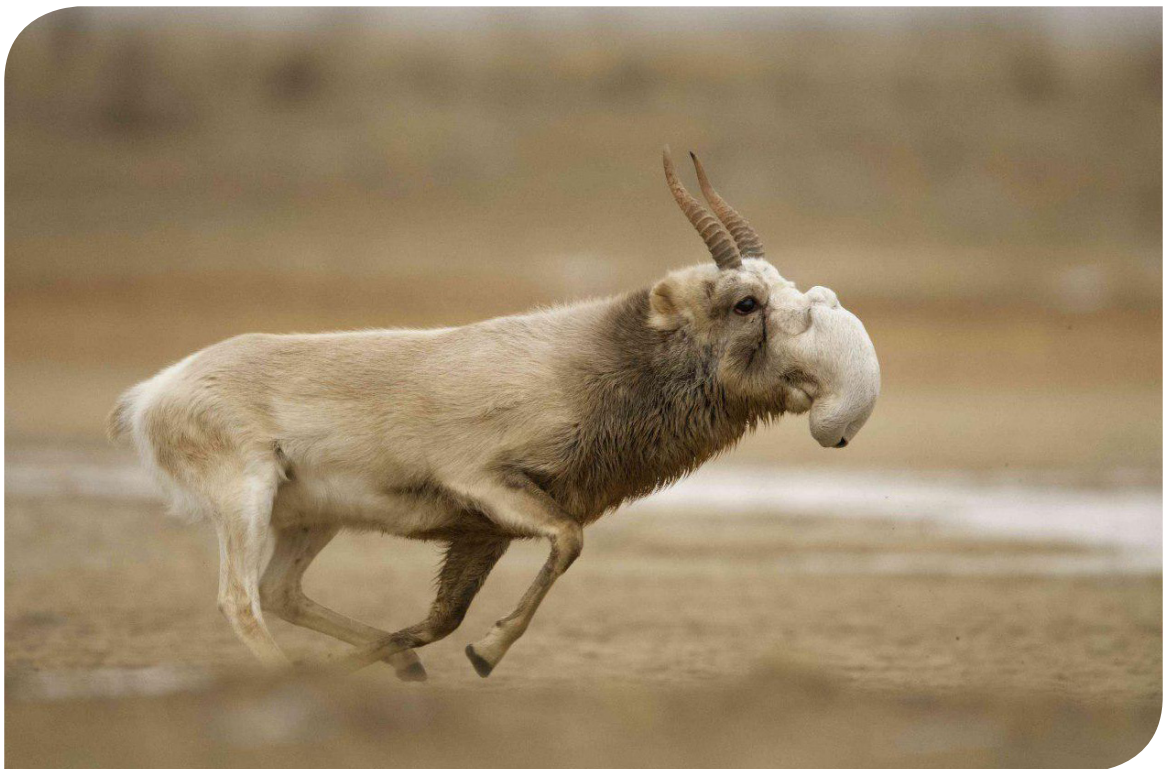


SAIGA NEWS

Published by the Saiga Conservation Alliance



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



"Magnificent male!". Stepony Reserve, Astrakhan Region. Photo by Valery Maleev

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Editorial team: **China:** Guihong Zhang (guihongzhang@foxmail.com), Qulong Education Ltd & Professor Zhigang Jiang (zhigangjiang@vip.sina.com), Institute of Zoology, Chinese Academy of Sciences. **Kazakhstan:** Dr. Yu.A. Grachev & Professor A. Bekenov, Institute of Zoology (teriologi@mail.ru). **Mongolia:** B. Buuveibaatar, (buuveibaatar@wcs.org), WCS-Mongolia, B. Chimeddorj, (chimeddorj@wwf.mn), WWF-Mongolia. **Russia:** Professor Yu. Arylov, Centre for Wild Animals of the Republic of Kalmykia (saiga-center@mail.ru) & Dr. A. Lushchekina, Institute of Ecology & Evolution (saigak@hotmail.com). **Uzbekistan:** Dr. E. Bykova [Executive Editor] (ebykova67@mail.ru) & A. Esipov, Institute of zoology, Uzbek Academy of Sciences (esipov411@gmail.com). **UK:** Professor E.J. Milner-Gulland [Advisory Editor], Oxford University (ej.milner-gulland@zoo.ox.ac.uk) & Dr. David Mallon [Reviewer], IUCN Antelope Specialist Group (d.mallon@zoo.co.uk). Graphic design by Dinara Adilova (4dinaa@gmail.com).

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Feature article

Reflections on the CITES decision about the international saiga trade: is it a positive move?

Editor's Note: In August 2019, the saiga was discussed at the 17th Conference of the Parties to the Convention on Endangered Species of Wild Fauna and Flora (CITES). The decision was made by the Parties to CITES, with the unanimous support of the Range States, to keep the saiga on Appendix 2 (regulated trade) but to impose a zero quota. This effectively prohibits international commercial trade in wild saigas and their derivatives. Here we have two perspectives from colleagues who were directly involved in this decision.

Although CITES recognises two species of saiga (*Saiga tatarica* and *Saiga mongolica*), IUCN and the SCA follow the best available genetic evidence in recognising one species; *Saiga tatarica*, with two sub-species, *tatarica* and *mongolica*.

Enkhtuvshin Shiilegdamba Wildlife Conservation Society, Ulaanbaatar, Mongolia eshiilegdamba@wcs.org

The saiga is of great cultural, historical and ecological importance to Mongolia. The saiga, until recently classified as Critically Endangered on the IUCN Red List, used to inhabit vast areas in Eurasia, including the Mongolian steppe. But disease and poaching have taken their toll on this ancient animal, which historically ranged into the Yukon area and Alaska and co-existed with the woolly rhinos and mammoths in the Ice Age.

In Geneva, where the 18th Conference of the Parties (CoP) to CITES was held between 17th and 28th August 2019, 128 Parties to the CITES from around the world gathered to regulate trade in threatened species. At this meeting, the Mongolian government introduced a proposal to transfer the saiga from Appendix II to Appendix I, in order to strengthen protection for the species. This proposal was supported and co-introduced by the government of the United States. All saiga range states discussed the current status of saiga populations in Russia, Kazakhstan, Uzbekistan, Turkmenistan and Mongolia and raised the question of saiga trade. As saiga populations are increasing in some range states, such as Kazakhstan, the idea of transferring the saiga to Appendix I was not supported, although all range states agreed with it staying on Appendix II, where it was placed in 1994, and with the introduction of a 'zero export quota'. Generally, Appendix II lists species for which trade must be limited. But now, with the additional protection of no saiga being allowed to be taken from the wild for international trade, the species has a better chance of avoiding extinction.

This is a critical issue for the government and people of Mongolia, and we appreciate the support from all

range states and most of the parties to CITES, as well as the assistance of the US government in the promotion of saiga protection. Mongolia has been a party to CITES since 1996, and this is the country's first proposal to CITES. Though quite small and still developing, Mongolia is rich in precious biodiversity specific to Central Asia. In the past, global saiga populations were widespread and the species numbered well over 1 million individuals in the 1970s. However, the species has repeatedly experienced drastic declines, reaching an all-time low of 50,000 individuals in the early 2000s.

Much has changed since saiga were first listed in Appendix II of CITES a quarter century ago. Most recently saiga antelopes have undergone significant mass mortalities throughout their range. In 2015, more than 200,000 saiga died in central Kazakhstan due to a disease caused by the bacterium *Pasteurella multocida*. As a result of an outbreak of Peste des Petits Ruminants (PPR) virus in 2016, approximately 80 percent of the saiga population in Mongolia died in a very short period and population estimate in April 2018 suggests about 5,142 individuals across the entire range (Privot et al., 2020).

The PPR virus is currently spreading widely in our region, and the mortality rate in saigas is up to 80-90 percent of the population. Although research is underway, it is only a matter of time before PPR spreads into other saiga populations. This and other diseases constantly threatening the saiga population, as well as other threats including poaching and illegal trade, may prove too much for the species.

We are very pleased that saiga populations have in-

Feature article (cont.)

creased in Kazakhstan in the last 4 years, but based on previous experience, we are afraid of further diseases that may result in mass mortality in all saiga populations. They are still vulnerable to numerous threats, such as infectious diseases, poaching for illegal horn trade and infrastructure development, which they are facing in all range states.

Saiga males are hunted and killed for their horn, which is used in traditional medicine in Asia. With a total population of less than 3,000 individuals in Mongolia, we are deeply concerned about either illegal or any other potential trade. Any trade in other range states may stimulate high demand for saiga horn and lead to uncontrolled poaching and trafficking, which may wipe out the remaining Mongolian saiga population, which is small and struggling to survive. Recently two rangers were killed by poachers in Kazakhstan, which was a great tragedy.

Mongolia is a vast country with a very small human population, which makes the work of patrols much more difficult. Given the high demand for saiga horn and this animal's susceptibility to diseases leading to high mortality, the step taken in Geneva to protect the species is of great importance.

Mongolia is deeply thankful to all the saiga range states for agreeing to accept the 'zero export quota' for all individuals taken from the wild for commercial purposes. Mongolia is not against the sustainable use of wildlife, if populations are stable and viable. But now is not the time for a trade in saiga horns, especially given the extremely low population and critical situation of the species in Mongolia.

As the CITES Secretary General highlighted in her opening speech, CITES makes decisions based on reliable scientific data and often focuses on less known species, such as saiga. We are very happy that the plea for support of the saiga has been heard by all saiga range states and supported by most of the parties to CITES. We are proud to be a generation that has undertaken to protect one of the most historically, culturally and ecologically important species in Central Asia. We are also glad that decisions are made based on evidence and appreciate the support and empathy of saiga range states, which will allow this incredible species, which has lived on this planet for many thousands of years, to continue to be a symbol across Central Asia.



Plenary in Committee Room I is full as delegates discuss saigas, giraffes and elephants, among other species. Photo by IISD (International Institute of Sustainable Development)

Feature article (cont.)

Anton Mezhnev Ministry of Natural Resources and Environment of Russia amezhnev@mail.ru

Since the saiga apparently suffers from poaching stimulated by high demand for saiga horns in consumer countries outside the antelope's range, prohibiting any commercial use of the species by transferring it to Appendix I seems, on the face of it, to be the best and only way to solve all the species' problems at one go. However, some strong counter-arguments emerge upon more detailed examination. All the aspects and potential consequences of the saiga's uplisting are analysed most comprehensively in an article by E.J. Milner-Gulland in Saiga News 24.

In the Russian Federation the possibility of proposing the transfer of the saiga to Appendix I was considered in 2012, prior to the 16th Conference of the Parties to CITES (Bangkok, 2013). There was even a draft proposal, which was never completed, however, partly because of doubts about the positive effect of this step and partly because of a lack of time. At the 17th Conference of the Parties to CITES (Johannesburg, 2016) the saiga's uplisting was not discussed, despite the catastrophic decrease in the Betpak-Dala population in 2015.

After the founding of a saiga breeding centre by Chinese investors in Kherson Province, Ukraine (see Saiga News 24), it became particularly evident to the authorities in Kazakhstan and Russia that the prohibition of international trade using CITES mechanisms would not yield any noticeable results, since it hardly added anything new to the existing trade bans in the species'

range states. Meanwhile, the effective protection of saigas in Kazakhstan led to rapid growth in the two transboundary Russian-Kazakh populations (Volga-Ural and Betpak-Dala), which currently total 300,000 individuals and will increase to 500,000 individuals within two years. Beyond this threshold, the question of sustainable use arises. Population growth leads to additional risks and conservation problems which require additional expenditure to address. An export ban does not allow range states to combine population management with fund-raising to conserve the species and its habitats. In other words, in the medium and, even more so, long term an uplisting would be destructive for the two largest saiga populations, comprising over 95% of the global population of the species.

This is why Kazakhstan and Russia not only avoided proposing the saiga for transfer to Appendix I, but have consistently objected to such attempts by other countries. When Mongolia (where a harsh winter and PPR had reduced the saiga population to a critical level, and poaching threatens to destroy the remainder) made an official request in late 2018, the Committee of Forestry and Wildlife of the Ministry of Agriculture of Kazakhstan and the Ministry of Natural Resources and Environment of the Russian Federation reasonably refused to support the uplisting. Moreover, the Mongolian proposal was formulated incorrectly because it related to Saiga tatarica, meaning it would not have applied to Saiga borealis (the population inhabiting Mongolia).

The proposal, however, was supported by the United States which, represented by the Wildlife Conservation Society (WCS) and the U.S. Fish & Wildlife Service (USFWS), was probably its actual mastermind and proponent. Kazakhstan and the Russian Federation voiced their firm position twice during the preparations for the 18th Conference of the Parties to CITES – at the seminar for saiga conservation experts organised jointly by the CITES Secretariat and the Convention on Migratory Species on Vilm Island, Germany (1st-4th April 2019) and at the Regional Workshop for the countries of the Commonwealth of Independent States (Minsk, Belarus, 23rd-25th April 2019). In both cases they were supported by Uzbekistan, another saiga range state. At the seminar on Vilm, representatives from China (the main consumer country) also spoke against the proposal and highlighted the serious steps being taken in



Anton Mezhnev, a delegate from the Russian Federation, is speaking. Photo by IISD

Feature article (cont.)

their country to control illegal trade, such as registering legal stockpiles of saiga horns and microchipping the horns in these stockpiles. A representative of the CITES Secretariat indicated that the proposal conflicted with many of the criteria of Appendix I, as well as with the clauses of the Convention and its Regulations. Though unsupported, Mongolia and the United States persisted in their devotion to the proposal and insisted that it referred to both saiga species.

The proposal was also discussed in two video conferences between the Ministry of Natural Resources and Environment of the Russian Federation and USFWS (at the second it was suggested that the uplisting should be replaced with a zero export quota) and at a meeting with representatives of EU embassies, who voted for a more careful and comprehensive approach to making a decision. Therefore, by the opening of the 18th Conference of the Parties to CITES there was apparently no consensus with respect to the transfer of saigas to Appendix I.

Two side events preceded the 18th Conference of the Parties to CITES, both organised on the same night, 18 August. These enabled interested parties to again exchange their views of the situation. First, Mongolia and the United States organised a meeting to promote their proposal. Rosemarie Gnam (USFWS, Scientific Department, CITES USA) gave an opening speech, followed by Susan Lieberman, a representative of WCS and the actual developer of the proposal, and Tsogtsaikhan Purev and Enkhtuvshin Shiilegdamba from Mongolia, who presented on the proposal, the status of the saiga in Mongolia and the disease Peste des Petits Rumi-



Tsogtsaikhan Purev, representing Mongolia, proposed the uplisting of the saiga. Photo by IISD

nants. Comments in support of the proposal from the floor were made by M.N. Vorontsova, representative of IFAW, and representatives of other two international NGOs. R. Gnam's reaction to Russia's position on this issue was quite strong, and she repeated her basic arguments in support of the proposal.

The meeting was immediately followed by an event entitled "Successes & Challenges in Implementing the CMS Memorandum of Understanding (MoU)", organised by the CMS Secretariat. The event aimed to emphasise the role of the MoU in the conservation, restoration and sustainable use of the saiga antelope. The opening speech was delivered by Emi Frenkel, after which Melanie Virtue presented the MoU. Then E. J. Milner-Gulland gave an overview of saiga's situation in every range state and A. Mezhev made a presentation on the implementation of the MoU in Russia. Although the uplisting was not on the agenda of the meeting, the participants returned to this subject many times in the course of the discussion. The EU representative confirmed that their position towards this issue was still uncertain.

Before the main business of the CITES Conference began, other Parties to CITES discussed a zero export quota as an alternative to uplisting with the main interested Parties (range states and consumer countries), and this idea proved 'almost satisfactory' for everyone. Therefore, when US representatives asked whether this substitution would be acceptable before the debate and received an affirmative answer, they assured the assembly that they would agree to this option unless their proposal gained enough support.

The debate proper was held in the morning of 22nd August. A Mongolian representative presented the proposal, after which US representatives expressed their vision of the proposal's scope as including both saiga species. This resulted in a short but heated discussion, in which the CITES Secretariat opposed this interpretation. A nomenclature expert from the Animals Committee spoke about current opinions on the taxonomy of the species, and the Chair of the meeting decided to agree to the United States' position. The Russian Federation protested against this approach but expressed a willingness to continue the discussion.

Next various Parties to CITES spoke. A number of countries with no connection to either the saiga range, trade or consumption, such as Afghanistan, Bahrain,

Feature article (cont.)

Cote d'Ivoire, Guatemala, Israel, Qatar and Senegal supported the proposal. Kazakhstan was strongly against the proposal. Russia expressed their disapproval of it, but suggested that, in order to meet Mongolia's ambition to conserve *Saiga borealis*, this species alone should be transferred to Appendix I, with a strict export quota on both species. China and the EU supported Russia's approach.

Faced with such strong opposition from other range states, the United States resorted to its back-up position and suggested that, 'upon agreement with Mongolia', the saiga should be left on Appendix II with the following annotation: 'A zero export quota should be set for wild individuals transported for commercial purposes'. This formulation, with minor editorial amendments suggested by the CITES Secretariat, was approved by all range states (Kazakhstan, Russia and Uzbekistan) and the European Union, as well as Afghanistan and Israel which had earlier supported the uplisting. China did not oppose this approach either, but again suggested that it should be restricted to the Mongolian saiga. As a result, it was decided by consensus that the two saiga species should remain on Appendix II. The decision came into effect on 26th November 2019.

There was another saiga-related issue on the agenda of the Conference; Document 86, which had been pre-

pared by the CITES Secretariat. This stated the common goals of and cooperation between CITES and CMS and the necessity to implement the saiga MoU's Medium-Term International Working Programmes (MTIWP) for 2016-2020 and 2021-2025.

The United States suggested that the following message to range states should be added as a subparagraph to Document 86: 'In conformity with steps to be taken by range states as part of the MTIWP for 2016-2020, we call upon the range states to establish control over internal markets in saiga parts, including registering stocks, marking parts and products, registering manufacturers and sellers, and imparting this information to the CITES Secretariat.' This extension met no opposition. It is not an issue for range states, but seems somewhat illogical because of the completely illegal character of current internal saiga product markets in range states. Currently, internal markets are controlled (more or less successfully in different countries) by the law enforcement agencies of the range states. When discovered, stocks are registered and products are marked. Then they are forwarded to the court for further consideration. Traders are treated as criminals. This information was given to the US representatives, who had a chance to revise their wording at the plenary session but chose not to. Document 86 was therefore approved together with this statement.



Saiga male. Photo by Rastislav Mashin

Updates

A co-management council for the conservation of the Mongolian saiga is to be set up

Buyanaa Chimeddorj WWF Mongolia chimeddorj@wwf.mn

Sharga-Mankhan Nature Reserve was established by the Mongolian Parliament Resolution in 1993 to protect the critically endangered Mongolian saiga antelope. The Nature Reserve has two parts; Mankhan, in two soums (sub-provinces) of Khovd province, and Sharga, in four soums of Gobi-Altai province, Altai Sayan Ecoregion. Though disconnected from each other, the two cover the majority of the range of the Mongolian saiga.

The Nature Reserve (NR) is managed by the local (provincial and sub-provincial) governments, with no state funding is allocated to it. NR management is weak due to shortage of funding and the lack of enthusiasm of the provincial Governor. To date, there is no administration, or even a full-time ranger, working in Sharga-Mankhan NR.

Having considered the current situation, the Protected Area Management Department (PAMD) of the Ministry of Environment and Tourism (MoET) and WWF-Mongolia held a consultation about the management

of saiga conservation on May 8, 2019. The meeting was attended by representatives from central and local governments, including the Director and officials from PAMD/MoET and the Departments for Environment and Tourism and NR administrators from Khovd and Gobi-Altai provinces, as well as researchers.

The issues discussed at the meeting included the possibility of upgrading the status of the Sharga-Mankhan NR to a National Park (NP), which was proposed to PAMD. If the NR is upgraded, an administration will be established and state funding will be allocated. However, the PAMD representatives responded that this was quite challenging at the moment due to weak economic situation in Mongolia.

The meeting participants recommended that local stakeholder engagement should be increased in order to improve the management of Sharga-Mankhan NR. To achieve this, a co-management council needs to be set up, as well as a working group to draft the regulations for the Council and agree its structure.

Saiga Day 2019

In April to June, Saiga Day was held by Steppe clubs in Uzbekistan, Kazakhstan and Russia, as well as in Mongolia. This celebration has already become a tradition, and continues to gain popularity. This year, more than thirty Steppe clubs were involved, and more than two thousand people participated.

Saiga Day in Uzbekistan

Alexandra Bukvareva Saiga Conservation Alliance bukvarevaa@gmail.com

In Uzbekistan, Saiga Day was held in May, organized by four Steppe clubs. In Jaslyk, the festival was held on the summer stage in the village centre. On the eve of the festival, several events were held, including the symbolically named "Saiga Cup 2019" football championship, an essay competition on the topic "How can I help saigas", lessons for different classes about the saiga's characteristics, and a quiz called "What? Where? When?". The quiz was also held in the city of

Nukus and the village of Karakalpakia.

On Saiga Day itself the results of the essay competition were announced. The children watched the cartoons «Steppe Tale – 1 and 2» and talked about their impressions. New members were accepted into the Steppe clubs, there were a lot of song and dance numbers, and in conclusion, children, their parents and teachers all sang the saiga hymn.

Updates (cont.)



Saiga Day, Zhaslyk, Uzbekistan. Photo by SCA



Saiga Day, Muynak, Uzbekistan. Photo by SCA

Saiga Day in Kazakhstan

Mukhit Suttibaev Association for the Conservation of Biodiversity of Kazakhstan mukhit.suttibayev@acbk.kz

In Kazakhstan, eleven steppe clubs celebrated Saiga Day in June as a part of school field camps. The children were split into teams and competed with each other. Within the interesting programme developed by ACBK (Association for the Conservation of Biodiversity of Kazakhstan), kids solved various tasks. They used materials specially developed for the event; posters, presentations, booklets. Children participated in various competitions with great pleasure, showing their level of knowledge about saigas. The tasks included determining the role of a particular species in the steppe ecosystem. Emphasis was also placed on explaining some interesting animal activities, such as a saiga jump called «the candle». The children did a «join-the-dots» saiga drawing and coloured it in, then tried to explain what the animals in the picture were doing. In another task, children learned to identify ani-



Saiga Day, Begimbet. Photo by ACBK

mals from their silhouettes. Another activity was called «young trackers». Thus, the main theme of Saiga Day this year was training club members to identify steppe species from afar by based on their characteristics and peculiarities.

Saiga Day in Russia

Nadezhda Pyurvenova Saiga Conservation Alliance arylova@gmail.com

In Russia, Saiga Days were celebrated between late April and late May, and six steppe clubs participated. Each club developed its own celebration, under a unified structure: an informative part (lecture, presentation, video about saigas); an intellectual and creative part (ecological quest, quiz, competition); a musical or sports part; an awards ceremony (diplomas, prizes); and a refreshment break. In addition, there were danc-

ing flash mobs, bike rides, and a theatrical procession. Quests about nature conservation, especially about saigas, were popular in almost all the clubs. The kids got the opportunity to show off their talents and learn something new. This year, along with experienced clubs, newly-founded clubs were actively involved in organising the festivities.

Updates (cont.)



Bicycle race in Liman village. Photo by "Vozrozhdenie" Wildlife Club



"Friends of nature" club at a procession, Elista. Photo by N. Purvenova

Saiga Day in Mongolia

Buyanaa Chimeddorj WWF Mongolia chimeddorj@wwf.mn

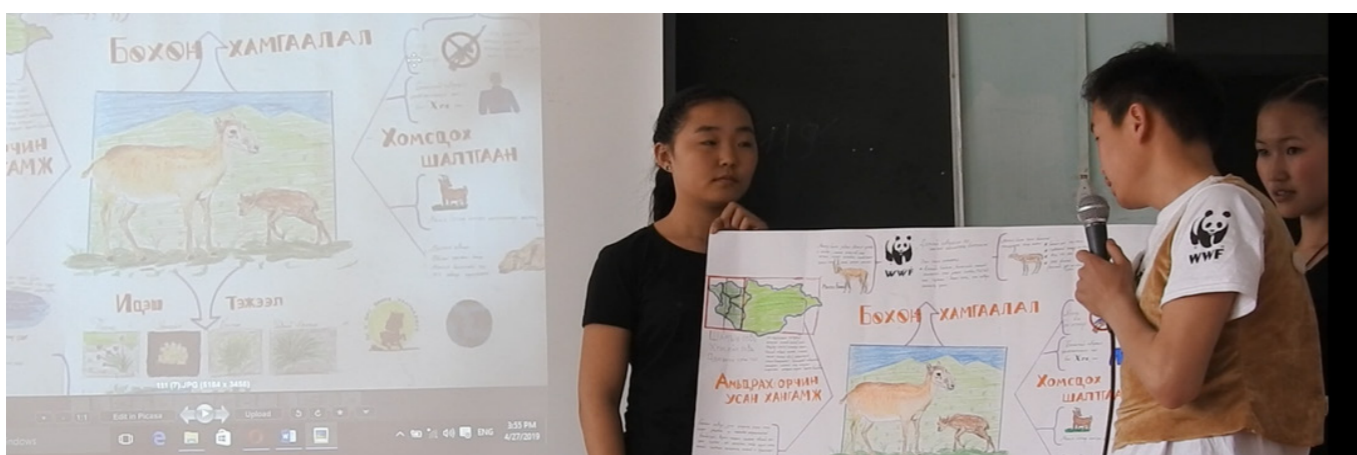
WWF-Mongolia traditionally holds Saiga Day in April. This year the festival was held in the village of Tugrug (Gobi-Altai province). More than 100 members of 13 eco-clubs in the Altai-Sayan region participated and presented the results of their work over the past year.

In 2018, the kids came up with, and successfully carried out, a campaign to protect the natural springs that wild animals, including saigas, use for drinking. This was the first initiative by schoolchildren in Mongolia, and WWF eagerly supported it. The children managed to involve local shepherds in their campaign, which

was a very inspiring start to their nature conservation activities.

The eco-club participants also talked about their "no to plastic packaging" campaign, which was much appreciated by Mongolia's Minister of Environment and Tourism, along with their other activities. The members of Mongolia's eco-clubs are proud of their achievements and enthusiastic to keep working to protect nature and the saiga in particular.

Follow this link for more information, <http://mongolia.panda.org/en/news/?uNewsID=346412>



Presentation of thematic posters at Saiga Day in Mongolia. Photo by WWF Mongolia

All Saiga Days in all countries ended with awards ceremonies, at which the most active children received prizes, diplomas, books and much, much more. All participants in Saiga Day 2019 have many colourful memories and probably already have ideas about how to celebrate Saiga Day next year.

Updates (cont.)

A marathon for 3800 Mongolian saigas

Buyanaa Chimeddorj WWF Mongolia chimeddorj@wwf.mn

To draw the attention of the public and decision makers to the need to conserve the Mongolian saiga, WWF-Mongolia and students from the Law Enforcement University in Mongolia joined an international running marathon held on May 18, 2019 under the slogan "Let's Safeguard the Mongolian Saiga, unique species only found on Earth in Mongolia".

The student runners said: "We are running for the Mongolian saiga and we have joined voluntarily. If we do not pay attention right now to protect a species with a global population of just 3,800, this last chance will disappear. Thus, we are calling on the public: "let's join together and safeguard the Mongolian saiga».

To safeguard the Mongolian saiga, we need a strategy that takes the species' rutting and calving under state protection and mitigates risks from weather and other factors. Furthermore, researchers are discussing the option of re-introduction of the species and maintaining a separate population within its historical range to reduce the risk of extinction.

For more details follow this link: <http://mongolia.panda.org/en/news/?uNewsID=348171>



The 12th Marathon race supporting the conservation of Mongolian saigas. Photo by WWF-Mongolia

The Stepnoi Surveillance project has begun!

Babette Fourie Saiga Conservation Alliance babette971@hotmail.com

With support from a 2019 Saiga Conservation Alliance small grant, our project, entitled «Stepnoi Surveillance», has begun! New camera trapping equipment has been installed in Stepnoi Reserve, and is being used to monitor local fauna including saigas. The images and videos are being used for educational materials about the saiga as well as for a study of the distribution and behaviour of animals. The focus of the Stepnoi surveillance project is to increase public awareness about saigas in the hope of reducing threats such as poaching.

The camera trap data collected is being uploaded to a citizen science platform called InstantWild, run by the Zoological Society of London. This allows members of the public around the world to help with camera trap

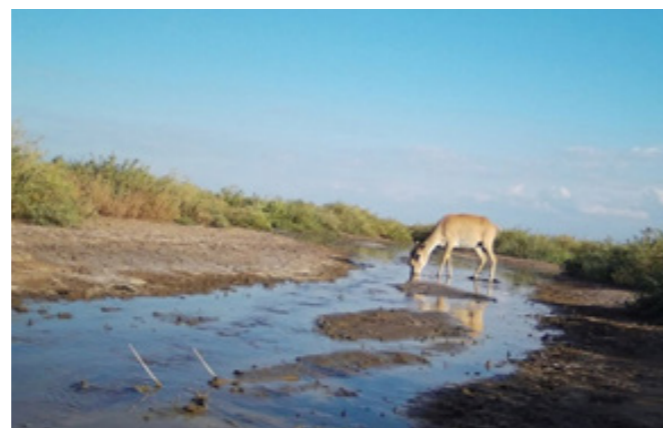


Vladimir Kalmykov and Babette Fourie setting up new camera traps to monitor artesian wells in Stepnoi Reserve. Photo by Galina Kalmykova

Updates (cont.)



A small group of saigas including 2 adult females and 3 young males born in 2019. Photo from camera trap, Stepnoi reserve.



Lone saiga female drinking water from an artesian well. Photo from camera trap, Stepnoi reserve.

image analysis. The images are displayed and users say what species the animals in an image are, how many, and (where possible) what sex. The InstantWild project page has links to the Saiga Conservation Alliance website, to promote awareness of and support for the species.

Currently we are studying the diurnal and seasonal patterns of use of artesian wells by fauna, with an interest in how species partition their use of the water (which species come at different times of day). Additionally, by monitoring across the reserve, we hope to collect more sightings and document rarer animals such as the elusive steppe wildcats. Individual wolves are also being identified to help understand Stepnoi's wolf packs. These data are very useful in providing a wider context of which species saiga antelopes live alongside, and how this affects the patterns of saiga behaviour at different artesian wells. From the first batch of photos, we have already seen repeated instances of individual wolves and foxes at some of the smaller artesian wells, as well as different saiga group sizes that could correspond with the size of the artesian well.

In addition to biodiversity, the flora and weather are being monitored using camera trap temperature readings and time lapse photographs to show changes in the seasons. With threats such as climate change, this will allow us to record environmental parameters that could impact on saiga movement.

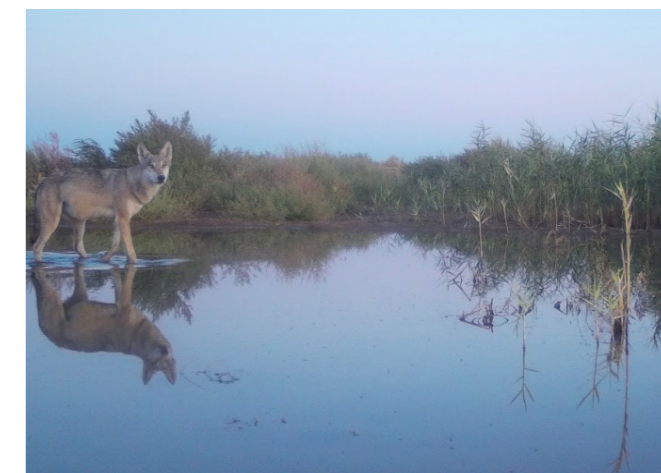
As part of the project, we are also increasing the involvement of people that live near Stepnoi Reserve. In September 2019, a group of children from the "Vozrozhdenie" Steppe Wildlife Club visited Stepnoi for the first time. The children observed the saiga antelope in its natural environment and learnt about scientific research being carried out at Stepnoi. Research equipment was demonstrated and photographs taken in Stepnoi were shown, of saigas and other fauna such as foxes and wolves. The aim was to inspire young researchers and show the children that they can participate in monitoring wildlife through citizen science. They also had the chance to view a large group of saigas by an artesian well through binoculars.

One of the Steppe club members, 17-year-old Masha Porokhnina, wrote a short summary of the trip: "Arriving at the reserve, we were met very well. After such a warm welcome, we had wonderful impressions of the reserve, its director and employees. After drinking tea with sweets, we went to look at saigas from afar with binoculars. We were surprised when we saw them close by. A steppe eagle and other rare birds soared high in the sky. Thanks to this trip, our knowledge was enhanced, with new and interesting facts about endangered species, and we also felt a lot of positive emotions. Everyone enjoyed the trip!"

Updates (cont.)



A red fox by one of the artesian wells. Photo from camera trap, Stepnoi reserve.



An adult wolf in one of the artesian wells. This wolf is repeatedly captured in camera trap photos.

This project will continue into 2020, and then we will publish the results. If you are interested in participating in the research, please visit the Stepnoi Surveillance page on InstantWild (<https://instantwild.zsl.org/projects/stepnoi-surveillance>) or contact babette971@hotmail.com with any queries. This research could not be carried out without the help of everyone working at Stepnoi reserve, especially the Director Vladimir Kalmykov and Head of the Educational Department, Galina Kalmykova. Special thanks to Olga Vorontseva for organising the educational visits.



Group photo including Stepnoi Reserve employees and members of the Vozrozhdenie club. Photo by Olga Vorontseva

Media reports

An illegal saiga horn trade channel has been cut off in Kazakhstan

As part of their anti-poaching measures, the National Security Committee of the Republic of Kazakhstan took a series of prompt actions in September-October 2019 in Atyrau, Aktobe, West Kazakhstan, Turkistan and Kyzylorda regions, as well as in the cities of Almaty and Shymkent. The aim was to stop the activities of an organised criminal gang that had been hunting saigas illegally for a long time for horn export to China. The operation resulted in the discovery of a gang in Almaty region which had killed at least 3,000 (!) saigas. The security agents detained 18 people, from whom they confiscated 1,118 kg of saiga horns. Specialists estimated the loss caused by the gang to the state budget to be 664.6 million tenge (over \$14 million). Nine of the criminals were taken into custody. The case was categorised according to the Criminal Code of the Republic of Kazakhstan as 'membership of an organised criminal group' and 'illegal use of endangered species of plants and animals, their parts and derivatives.'

According to the Ministry of Environment, over 6,000 people have been detained for illegal hunting in Kazakhstan since the beginning of 2019. However, only 48 of them have been imprisoned. The others have got away with fines amounting to millions of



Photo by Kazakhstan Today

tenge. The President of Kazakhstan, Kasym Jomart Tokayev, ordered the elimination of illegal saiga hunting. He stated: 'Poachers keep on hunting saigas, our natural heritage. They must be severely punished in accordance with law. Law enforcement agencies must put an end to their illegal activity.'

For detail see https://www.kt.kz/rus/ecology/zaderzhano_18_chlenov_opg_zanimavsheysya_otstrelom_saygi_dlya_1377890560.html and <https://www.ktk.kz/ru/news/video/2019/10/28/132761/>

Ukraine to export saigas to China

Chinese Shenzhen Tanpharmaceutical Company has acquired a 97-hectare plot near the village of Kamysh, Kherson Province, Ukraine, on a 7-year lease to breed saigas. They constructed an enclosure for the animals at a cost of 10 million hryvnas (US\$43,383). In 2018 they bought 23 saigas from Askania Nova Reserve. In spring 2019, some females gave birth, giving a population of 34. The Centre aims soon to purchase 70 more animals from Askania Nova, where the animals have been reared and domesticated. The Chinese paid over 1 million hryvnas (US\$4,338) for the 70 calves. According to Askania Nova's director Viktor Gavrilenko, the money will be used to buy fuel and spare parts for the reserves's vehicles and food for its animals.

Among the company's plans is to export saiga skin

and horns to China and, perhaps in the long term, live animals. Advocates of traditional Chinese medicine believe that, combined with some other ingredients, saiga horns can be used to treat a wide range of diseases.

Ukraine and China have signed a memorandum to agree on a veterinary certificate which legalises the export of saigas from Ukraine to China. This information was published on the website of the State Service for Consumer Protection of Ukraine.

For details see http://kherson-news.info/main-news/kitaiskaia-ferma-po-razvedeniu-saigakov-popolnias-novymi-jivotnymi/?fbclid=IwAR20_F1dyJwS-NB7eFtWFrLJYtXnwjcu9yiEF71iSGZPC03-az2AffWiNE8A and https://www.dialog.ua/business/193121_1572026409

Articles

The 2019 aerial survey reveals significant growth in all of Kazakhstan's saiga populations

Steffen Zuther Association for the Conservation of Biodiversity of Kazakhstan steffen.zuther@acbk.kz

The annual aerial survey of saigas in Kazakhstan has shown a continued high rate of growth for all populations in the country, giving hope for the restoration of the species to its historical numbers. The biggest population is the Ural population in West Kazakhstan, with an estimated 217,000 animals (61% growth from previous year). The Betpak-Dala population continues its recovery after the 2015 mass die-off, now numbering 109,000 saigas (43% growth). And there is also still hope for the Ustyurt population, which managed to grow by 60% since last year, to 5,900 animals.

The survey was conducted from 20th April to 4th May

2019, ordered by the Committee for Forestry and Wildlife of the Ministry of Ecology, Geology and Natural Resources of Kazakhstan (formerly the Ministry of Agriculture) through its wildlife ranger service State Enterprise "Okhotzoooprom". The Association for the Conservation of Biodiversity of Kazakhstan (ACBK) was the implementing organisation. Due to the late start of the survey, three teams worked at the same time to count saigas from Eurocopter EC-145 helicopters, in order to finish quickly with the 200 flight hours available. The survey started with training for all participants, involving the use of markers to delineate the counting strip. Planning sessions were run every day.

In western Kazakhstan in particular, the late start to the survey caused difficulties for the census: Towards the calving period in May, saigas tend to aggregate in larger groups. This had already started at the time of the census. Huge aggregations make an accurate visual count impossible. But photographs, routinely taken for all groups above a certain size, proved to be extremely valuable in checking the numbers and recounting. Furthermore, some animals might cross the border into Russia, which would lower the final result for the Ural population. But reports from rangers suggested that the number of animals which had left Kazakhstan for Russia was rather limited at the time of the survey.

The rather high growth rate of the Ural population could be for various reasons: Firstly, it is difficult to count such a large population. In 2018, the photographs were of much worse quality than in 2019, which diminished the accuracy of the census and in turn might have led to higher numbers this year, despite the aforementioned difficulties. Furthermore, more animals might have crossed the border to Russia in the previous year. And after all, a growth rate of this magnitude is not completely impossible given the saiga's biological characteristics, if the environmental conditions are favourable and threats are controlled more or less efficiently.

The same argument is also valid for the Ustyurt population. However, at such a low population size the survey is usually less precise, as some aggregations



Photograph of saigas from the Ural population, taken from the survey's helicopter. This shows how difficult it is to estimate numbers accurately in a visual count.

Articles (cont.)

might be missed or too many of them might be counted, causing fluctuations from year to year. Nonetheless, the trend is clearly positive, which might also be due to better protection. Observations on the ground and from the air show that both populations have a sufficient number of males for normal reproduction.

In the meantime, the Betpak-Dala population's growth rate is similar to previous years. After the die-off, the population has grown by more than 40% every year, which gives hope for a complete recovery of the population. In addition, rangers have reported another group of saiga living further to the east, separate from the main population. Therefore, approximately 2,500 animals (based on ground observations) could be added to the total from the aerial survey.



One of the census teams for the Betpak-Dala population. Photo by Albert Salmgareev

An update on the estimated population size of the Mongolian saiga

B. Chimeddorj¹, B. Gantulga¹, A. E. Fine², E. Enkhtuvshin², B. Buuveibaatar²

¹World Wide Fund for Nature, Mongolia Program Office, Ulaanbaatar, Mongolia

²Wildlife Conservation Society, Mongolia Program, Ulaanbaatar, Mongolia

Corresponding author: [Buyanaa Chimeddorj chimeddorj@wwf.mn](mailto:Buyanaa.Chimeddorj@wwf.mn)

Background and Methods

The Mongolian saiga (*Saiga tatarica mongolica*) is endemic to western Mongolia and classified as "Critically Endangered" on the IUCN Red List. The main threats to this subspecies include illegal hunting, harsh climate, habitat degradation and disease. Understanding the effects of environmental and anthropogenic factors on the distribution and population dynamics of the Mongolian saiga is critical to conservation planning for the species.

We carried out a ground-based Distance sampling survey on 3rd–10th December 2018 to estimate the density and abundance of the saiga population. Forty-five systematic line transects spaced 10 km apart were surveyed by 4 teams simultaneously (Figure 1). Transects ranged in length from 5 to 99 km, with a total length of 1,887 km, and covered a survey area of 29,012 km². The survey teams consisted of biologists from WCS and WWF, in addition to rangers and inspectors from Gobi-Altai and Khovd provinces.

All data analyses were carried out using the Distance 7.2 software to obtain density and abundance estimates (Thomas et al. 2010). To improve model fit for the detection function, exploratory analyses were conducted to examine options for truncation and grouping intervals. Following Buckland et al. (2001), a variety of key functions and adjustment term combinations were considered to model the detection function. Histograms of the data and goodness of fit tests were used to identify any violations of assumptions. Akaike's information criterion for small sample sizes (AICc) was used in model selection.

Results and conclusions

During the survey, 50 groups and 886 individuals of saiga were observed. Mean (\pm SD) group size was 17.7 ± 20.7 individuals (Range = 1–113). No sick or dead animals were encountered. The survey data were right-truncated at 1,100 m and placed in six equal-sized intervals for the final model (Figure 2). The resulting es-

Articles (cont.)

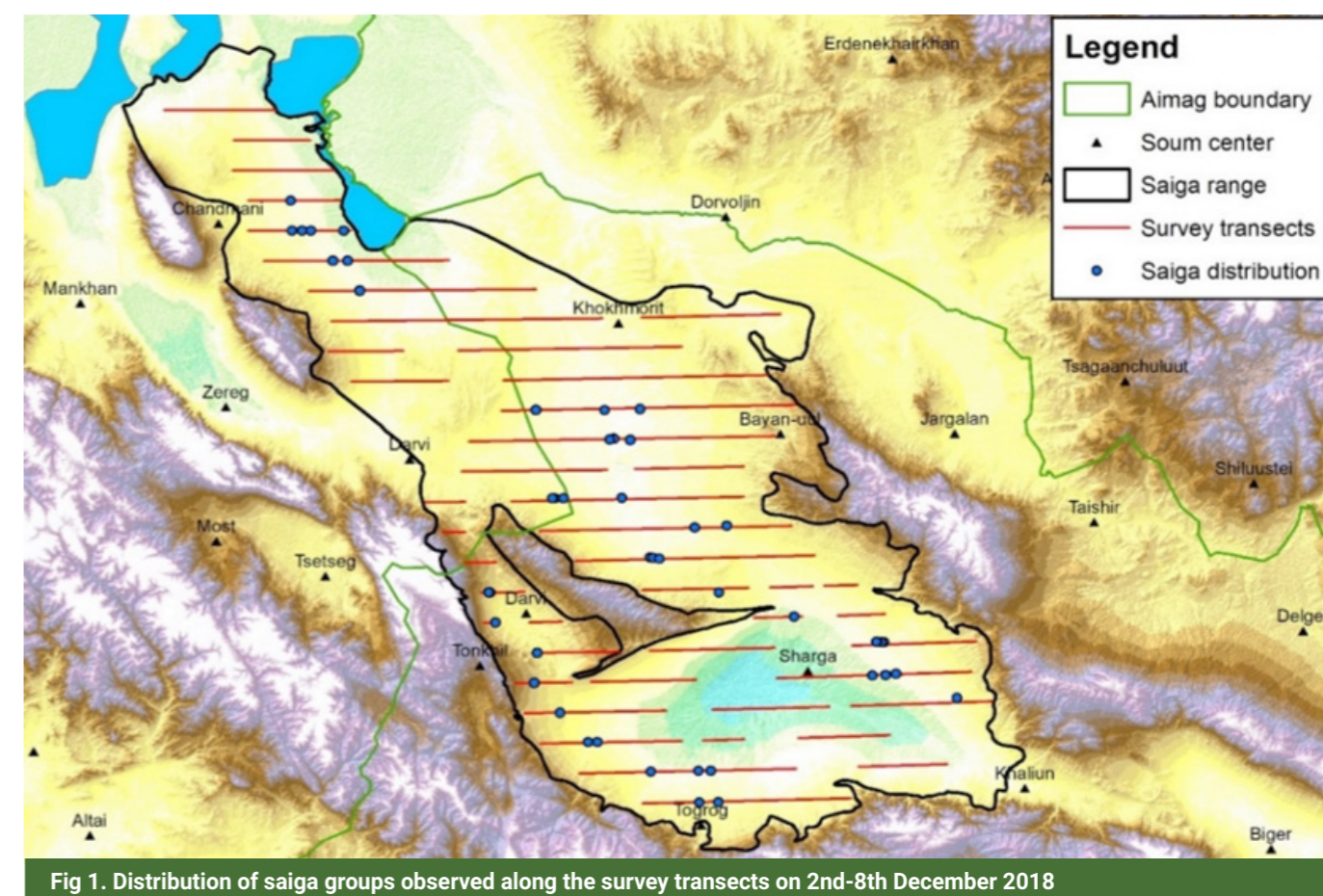


Fig 1. Distribution of saiga groups observed along the survey transects on 2nd–8th December 2018

timate for the detection probability was 0.45 (95% CI 0.30–0.66), with an associated effective strip width of 496m (95% CI 355–734 m).

In the ca. 29,000 km² survey area, the estimated density of saiga individuals was 0.22/km² (SE = 0.06), giving an estimate of 6,411 saigas (95% CI 3,689–11,142, CV = 28.5%) in December 2018. Uncertainties in the density estimates were equally attributable to estimation uncertainty in the detection probability (38%), group size (32%), and encounter rate (31%).

This total is an approximately 20% increase over the last population survey conducted in April 2018 (5,142 individuals, Pruvot et al. 2019). A difficult winter for saigas in 2018/2019 was expected due to poor pasture, preceded by a dry summer. Thus, another round of population monitoring should be conducted to determine the impacts of this winter on saiga population growth. This study was partly funded by the Morris Animal Foundation.

Articles (cont.)

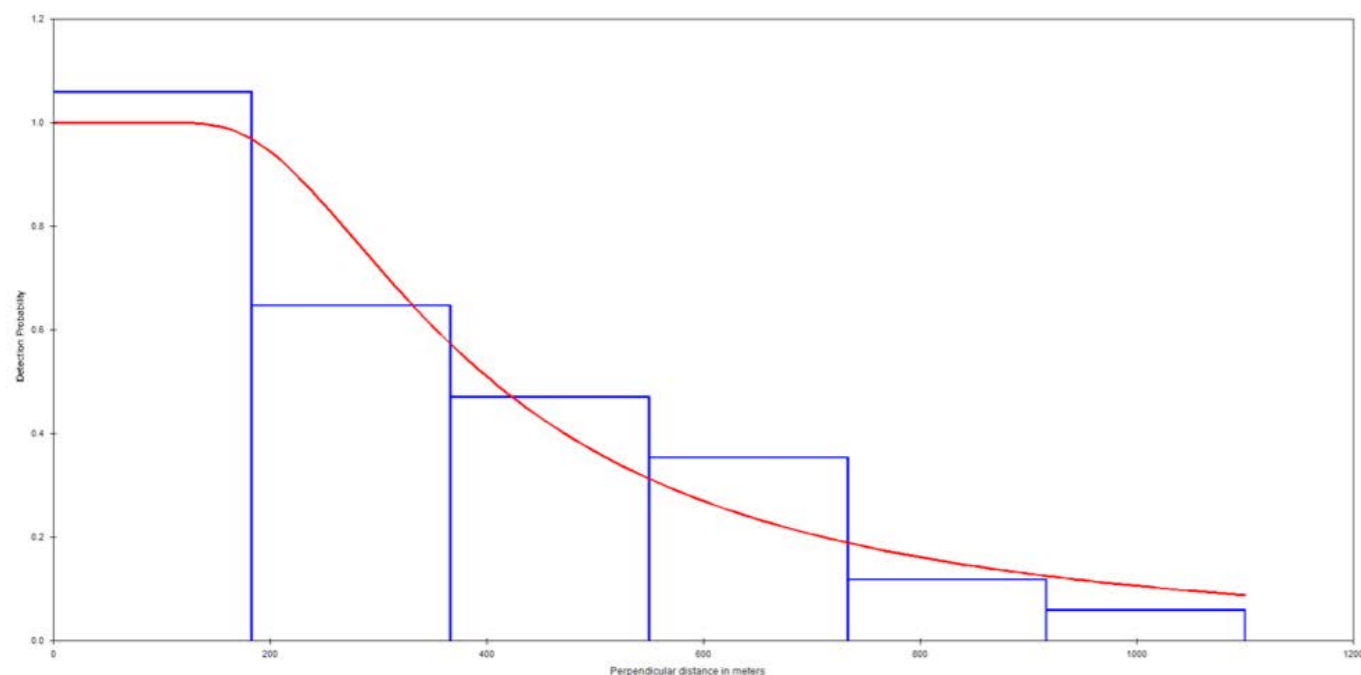


Fig 2. The detection probability function fitted to data for the December 2018 survey

Saiga horn user characteristics, motivations, and purchasing behaviour in Singapore

Hunter Doughty¹, Diogo Veríssimo^{1,2}, Regina Chun Qi Tan³, Janice Ser Huay Lee³, Roman L. Carrasco⁴, Kathryn Oliver⁵, E. J. Milner-Gulland¹

¹Department of Zoology, University of Oxford; ²San Diego Zoo Institute for Conservation Research; ³Asian School of the Environment, Nanyang Technological University of Singapore; ⁴Department of Biological Science, National University of Singapore; ⁵Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine

Corresponding author: **Hunter Doughty** hunter.doughty@zoo.ox.ac.uk

Introduction

Saiga horn is used in many traditional Chinese medicines (TCM), primarily to treat fever and ‘heatiness’ (a TCM state of illness with symptoms like nasal congestion and sore throat). Singapore is recognised as a top saiga horn consumer country (CITES 2018). Saiga horn is marketed most commonly as ling yang (羚羊) (Fig 1) or antelope horn. Sometimes “Cornu Saiga tataricae” is listed as an ingredient (Fig 2). Common alternatives are barley water, chrysanthemum tea, honeysuckle, and goat’s horn.

In June-July 2017, we conducted 2,294 in-person consumer surveys with members of the general Chinese Singaporean population to assess prevalence of saiga horn use in Singapore, trends in saiga horn use, and reasons for use.

Methods

Ethnically Chinese Singaporeans are the largest users of complementary and alternative medicines (inclusive of TCM) in Singapore (Lim et al. 2005), so we fo-

Articles (cont.)



Fig 1. Shavings marketed as saiga horn, for sale in a TCM store in Singapore. Photo by Hunter Doughty

cused our research on them. Surveys were conducted in Government demarcated Planning Areas with the largest Chinese Singaporeans populations. Survey sites were specifically chosen to capture a variety of socio-economic levels, and were stratified across day of week and time of day. All participants were aged 18 or over and we ensured balance across age groups, genders, and socio-economic level. Researchers wore identifiable Nanyang Technological University shirts.

We used neutral questioning approaches to reduce potential biases, including social desirability bias (i.e. inadvertently prompting our respondents to increase or decrease their reported saiga horn consumption depending on what they thought we wanted to hear). Surveys were described as assessing heatiness and fever treatment preferences, with no mention of saiga, TCM, or wildlife. Questions were framed carefully to not prompt respondents into choosing one answer over another. Statistical analyses included model averaging of generalised linear model regressions with sum contrasts applied, 2-sample z-tests for equality of proportions, and Pearson’s chi-squared test for independence. This research was approved by the ethics committees at Nanyang Technological University, Singapore, and the University of Oxford, United Kingdom.

Results

Overall, 438 (19%) of respondents stated that saiga horn was a product they use most often to treat heatiness and/or fever in themselves and/or others. Additionally, 47% of individuals who buy saiga horn for themselves stated they also buy it for someone else.

Saiga horn users were significantly more likely to be aged 36–59 years old and to identify as Buddhist or Taoist. They were significantly less likely to be under 36 years old. We found no specific correlation between education or income level and saiga horn use, though we did find that saiga users were significantly most likely to have been surveyed in our lower socio-economic survey locations. Females were significantly more likely than males to buy saiga horn products for others, as were Buddhists and Taoists, and middle-aged individuals.

Saiga horn is sold in the form of whole horns, horn shavings, pre-made drinks, or as pills (Figs. 1-4). Saiga horn pre-made drinks (a type of ‘cooling water’), often served chilled, is a modern form of the product, and it was preferred by 54% of those who bought saiga products for their own consumption. Cooling water users were more likely to be male. Saiga horn shavings are the more traditional form of the product, requiring at-



Fig 2. Pills containing saiga horn (labelled as ‘Cornu Saigae Tataricae’), for sale in a TCM store in Singapore. Photo by Hunter Doughty

Articles (cont.)



Fig 3. Pre-made drink marketed to contain saiga horn, for sale in a TCM shop in Singapore. Photo by Hunter Doughty

home preparation. These were preferred by 33% of those using saiga themselves, and these individuals were significantly more likely to be middle-aged and female.

Those who use saiga horn themselves said they preferred saiga horn because "It works" (42%), and "Someone recommended it to me" (29%). These reasons were stated significantly more often than any other reason. Those who said that saiga had been recommended to them were most likely to say that the recommender was "Family" (56%) or a TCM shopkeeper (23%).

TCM family-owned stores (46%) and TCM chain stores (43%) were the top two reported locations for purchasing saiga horn for oneself. No respondents purchased saiga horn online, and in fact, there were only 12 reports of online purchases for any fever or heatiness treatment. Saiga horn users were significantly more likely than non-saiga users to think that saiga was a common species in the wild.

Policy implications

The most likely saiga horn users were middle-aged Buddhist or Taoist Chinese Singaporeans, however, saiga horn use was seen across almost all demographic groups. Our survey asked respondents about their most commonly used products, thus we feel confident that high-level saiga horn users compose 19% of the sample, and that overall saiga horn use (including less frequent users) is likely to be higher. It is very possible that a similar proportion of the 2.9 million ethnic Chinese people resident in Singapore buys or uses saiga horn frequently (Singapore Department of Statistics 2017). There are probably also saiga horn users among non-resident Chinese and non-Chinese Singaporeans. This figure cannot easily be translated into a number of horns per year because the amount of horn per dose is not known. This amount is likely to be relatively small, but varies between product types and between stores. Some products marketed as saiga do not contain any saiga horn, though the degree to which this occurs is not known. Overall this study shows that saiga horn use in Singapore is extensive, and non-negligible.

For the full text of this article see: <https://doi.org/10.1371/journal.pone.0222038>



Fig 4. Saiga horns for sale in TCM store in Singapore. Photo by Hunter Doughty

Articles (cont.)

Use of drones to estimate saiga numbers in the north-west pre-Caspian Sea area

D. V. Dobrynin¹, O. V. Sukhova¹

¹Marine Research Centre, Moscow State University, ²Natural Sciences Institute, Perm State National Research University

Corresponding author: **Dmitry Dobrynin** ddobrynin@yandex.ru

In the second half of June 2019 we estimated the number of saigas in the Chernye Zemli and Meklektinsky Reserves (Kalmykia) and Stepnoy Reserve (Astrakhan Province) using drones. Prior to that, in September 2018 and January 2019, we tested estimation methods in the Stepnoy Reserve as part of a WWF Russia biodiversity conservation programme. The test demonstrated that videos and photographs from drones could detect saigas and distinguish their sex and age. Methods of manoeuvring the drones to minimise errors in estimation were developed. The test also helped us to understand how the presence of the machines on the ground and in the air impacted saiga behaviour. Based on the test results, the research team selected a drone type and determined the best load for rapid photography and videoing of saiga distributions over large areas, in both dense and sparse populations.

The drones flew a total of 1,300 km while gathering data. The most detailed surveys were conducted in the areas with densest saiga concentrations near water sources, such as pools around artesian wells, salt pan depressions and areas adjacent to an irrigation canal. Transect video monitoring and selective surveys were

carried out in the rest of the territory. A special focus was on minimising the impact that noise from the drones had on saigas, particularly where the animals had assembled in large numbers (several thousand individuals). To study this issue, test flights were made at heights of 500, 400 and 350 m above the ground. The drones monitored the saigas to detect signs of anxiety, while experts simultaneously observed the animals' behaviour from a hide on the ground. The test showed that surveying from these heights could yield exhaustive information on saiga abundance and distribution, sex and age structure, and activities, while causing no disturbance to the animals and leading to no stampedes. A height of 400 m was selected as optimal, a compromise between the resolution of the images and the area covered by one shot.

When planning survey routes the research team consulted specialists from the above-mentioned protected areas. At the same time as the survey, the Stepnoy Reserve's rangers photographed and counted saiga from hides on the ground and observation towers. Subsequently, these data were compared with the data obtained from the drones to calibrate the drone results based on the characteristics of the landscape and the animals' age, sex and behaviour.

The digital photo and video material was processed immediately after the survey to establish the distribution, sex and age of the saigas. The materials were processed by a group of analysts working independently. Particularly important was developing a way to classify different types of activity, such as lying, standing and moving (fast, medium, slow). Criteria were developed for each type of behaviour and typical positions, in order to identify males, females and juveniles, and estimate the sex and age structure of the groups.

The spatial distribution of the animals in the main areas of interest was recorded in as short a period as possible, in similar weather conditions. High daytime



Preparing a drone for a survey (Meklektinsky Reserve). Photo by Dmitry Dobrynin

Articles (cont.)

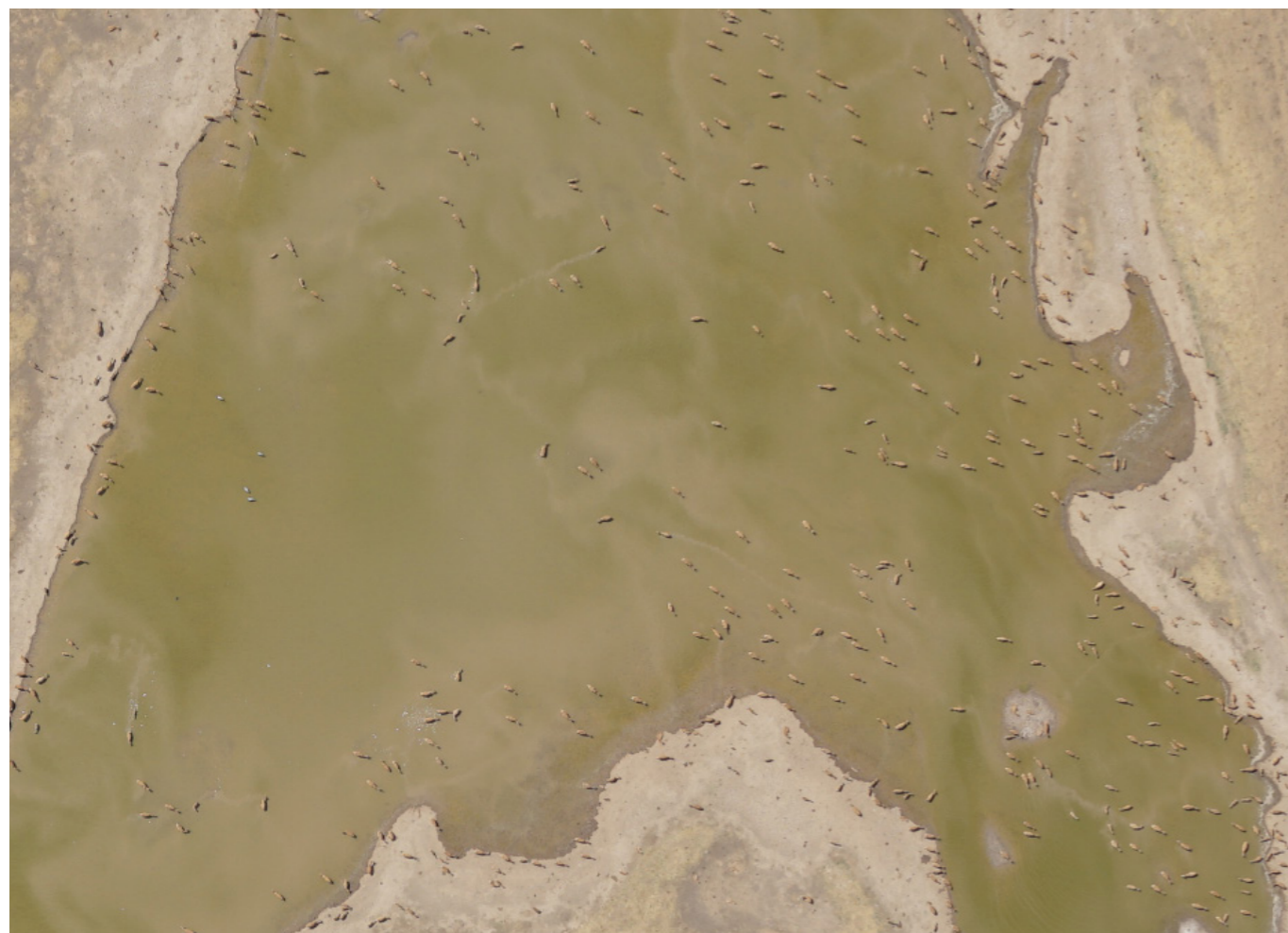


Fig. 1. Part of an aerial photograph of a saiga herd in the Stepnoy Reserve

temperatures of around +37°C between 19 and 25 June made large groups of saiga stay close to flowing artesian wells, temporary pools and the water remaining on the bottom of salt pans. The drones recorded the animals' daily movements of up to four kilometres from these water sources during the evening, overnight and in the morning. During the daytime the saigas remained highly concentrated around those spots. On 19th, 20th and 25th June, the number of saigas counted from the drone images in the vicinity of the big artesian well in the Stepnoy Reserve was 4,003, 4,060 and 3,894. The lower number on 25th June resulted from the departure of some the animals for a smaller artesian well 7 km to the south. On this day observers recorded around 100 individuals near the smaller well, while on 19th and 20th June the drone photographed up to 12 animals.

The accuracy of counting was analysed using records of animals concentrated around the big artesian well in the Stepnoy Reserve (fig. 1). The maximum variation between independent counts by four analysts was seven individuals, from a total count averaging 4,060 animals.

A combination of video and photo monitoring was used to survey areas with low saiga densities (fig. 2). This strategy was dictated by the necessity of recording spatial distributions within a short period, before the saigas moved more than 5-10 km, to minimise error. This combined survey used one drone equipped with a video camera and a photographic camera installed under the drone's wing. The video camera was controlled by operators based on current data on the presence or absence of saigas in the 3-5km wide strip of land over which the drone was flying. Equipped with an

Articles (cont.)

adjustable lens, the video camera could cover a much wider area than the photo camera. However, the quality of the videos was much lower than photographs. Therefore, to ensure high-quality data, the drone photographed a strip of ground 300 m wide directly under the drone. Comparing the numbers of the animals in the synchronous videos and photographs enabled an extrapolation model to be developed, which could be used to estimate the numbers of animals in areas not covered by the drones.

The total number of saiga individuals recorded in the surveyed area was 5,021, with 573 males (11%), 2,399 females (48%) and 2,049 juveniles (41%).

Similar operations are planned for the rutting season (November-December 2019) to obtain more data on the distribution and number of saigas in the protected areas of the north-west pre-Caspian Sea region.

The authors express their deepest gratitude to the management and workers of the Stepnoy Reserve for their support of the development and testing of this technology, and to the administration and workers of the Chernye Zemli Reserve for their assistance in field work.



Fig. 2. Comparative images of a saiga obtained by video and photographic cameras from a drone (left) and from a photographic camera on the ground (right). Chernye Zemli Reserve

Articles (cont.)

Lake Elton: A new biosphere reserve in Russia and its role in saiga conservation

I. Yu. Kalyuzhnaya^{1,2}, S. Ye. Aytkulova², N. S. Kalyuzhnaya³

¹Geographical faculty, Moscow State University; ²Lake Elton Biosphere Reserve – State Institution ‘Eltonsky Nature Park; ³Regional Centre for the Studying and Conservation of Biodiversity’

Corresponding author: Irina Kalyuzhnaya kalioujnaia@yandex.ru

The role of protected areas in saiga conservation across its range was described in detail in Saiga News No. 22 (2017). However, it was also mentioned that there was no protected area either in Russia (Astrakhan, Volgograd, Saratov Provinces) or in Kazakhstan (West Kazakhstan Province) to protect transboundary saiga populations, in particular the Volga-Ural population. The establishment of a new protected area, known as the Lake Elton Biosphere Reserve, which was included in the World Network of Biosphere Reserves in June 2019, is going to change this situation. Another important outcome is that this territory represents a new type of landscape under protection; the zonal desert steppe.

The biosphere reserve is over 207,000 ha in size and encompasses the whole of Lake Elton, a unique hypersaline body of water, and most of its basin, including adjacent mixed steppe and desert landscapes which are part of the Caspian Sea or Volga-Ural semi-desert. Moreover, the reserve is a transboundary area both

geographically (Europe – Asia), zonally (steppe – desert) and politically (Russia – Kazakhstan). The regional, national and global significance of this biosphere reserve is therefore beyond any doubt.

The biosphere reserve is intersected by numerous global migration routes and the edges of many plant and animal species’ ranges, including the current and historical boundaries of the saiga range. Until the mid-19th century this species occurred in Volgograd Province, in the desert and steppe landscapes of the Trans-Volga region and in the southern portion of the Volga’s right bank.

No regular saiga survey has been carried out in Volgograd Province for the last 20 years. According to occasional expert reports, in recent years migrating saiga herds have only been recorded in the Trans-Volga region, mostly in Pallasovsky District, where they enter from Kazakhstan and number between 300 and 1,000 individuals in different years and seasons. Lake Elton, in the north-western part of the Biosphere Reserve,

Articles (cont.)

and the upper stretches of the Khara River adjoining the lake from the north, are also known as traditional saiga calving areas. However, in recent decades no calving antelopes have been recorded in the Russian part of this area.

In 2017 saiga was included in the Red Data Book of Volgograd Province (<https://oblkompriroda.volgo-grad.ru/norms/acts/krasnaya-kniga-volgograds-koy-oblasti>), which resulted in the development of a Temporary Manual on monitoring saiga populations in the province and the initiation of activities to generate and analyse archival and current data on this species.

Saiga monitoring and conservation is carried out by the Elton Nature Park, whose directorate manages the Lake Elton Biosphere Reserve. Since 2018 surveying, monitoring and protecting saigas are included in the State Agenda, which has resulted in over 100 patrols by rangers in the Lake Elton Biosphere Reserve in 2018-2019.

The results confirm that saiga herds of different size (from 50 to 5,000 individuals, including juveniles) are recorded on a regular basis in different parts of the Biosphere reserve, including: the upper stretches of the Khara River (see the figure, p. 1); east of Mount Ulagan, near the Karpov farmstead and Utinaya Balka area (p. 4); Baykadan and Sadovaya cattle breeding areas (p. 5); Kalinina farmstead and Sherkesh sheepfold (p. 6); Saygachny and Polynny railway junctions (p.

7). Groups of saiga are also recorded in territories adjoining the biosphere reserve: to the west – near Lake Bulukhta and the Kondrashov Sad area; to the north – near the villages of Savinka and Kumyska and Kulikov farmstead (Palassovsky District) and near the villages of Torgun and Gmelinka (Staropoltavsky District).

Interviews with local people in Pallasovsky District and adjacent areas provided more information on the saiga’s migration routes and numbers. In April 2019, local people observed a saiga herd of 300-350 animals running across the Biosphere reserve (near Vishnevka village) from Kazakhstan. Until the early autumn of 2019, single animals and small groups (from 5 to 40 individuals) were often seen in the eastern part of the Biosphere reserve, mostly near Vengelovka village, Karpov farmstead and Sherkesh sheepfold (points 3, 4 and 6). Those might be animals that lingered in the Biosphere reserve after calving.

Since monitoring has been carried out for just a short period, it is still too early to draw conclusions about trends in saiga numbers in the reserve. Nevertheless, the higher occurrence of saiga in the reserve may testify to an overall increase in the Volga-Ural population (see S. Zuther’s article above).

To raise the awareness of local people and visitors to the reserve, messages about saigas have been published on the official website of the Committee for Nat-



The Trans-Volga population of the Demoiselle Crane (*Anthropoides virgo*), listed in the Red Book of the Volgograd Region, is probably one of the largest in Europe. Photo by Alexander Popov

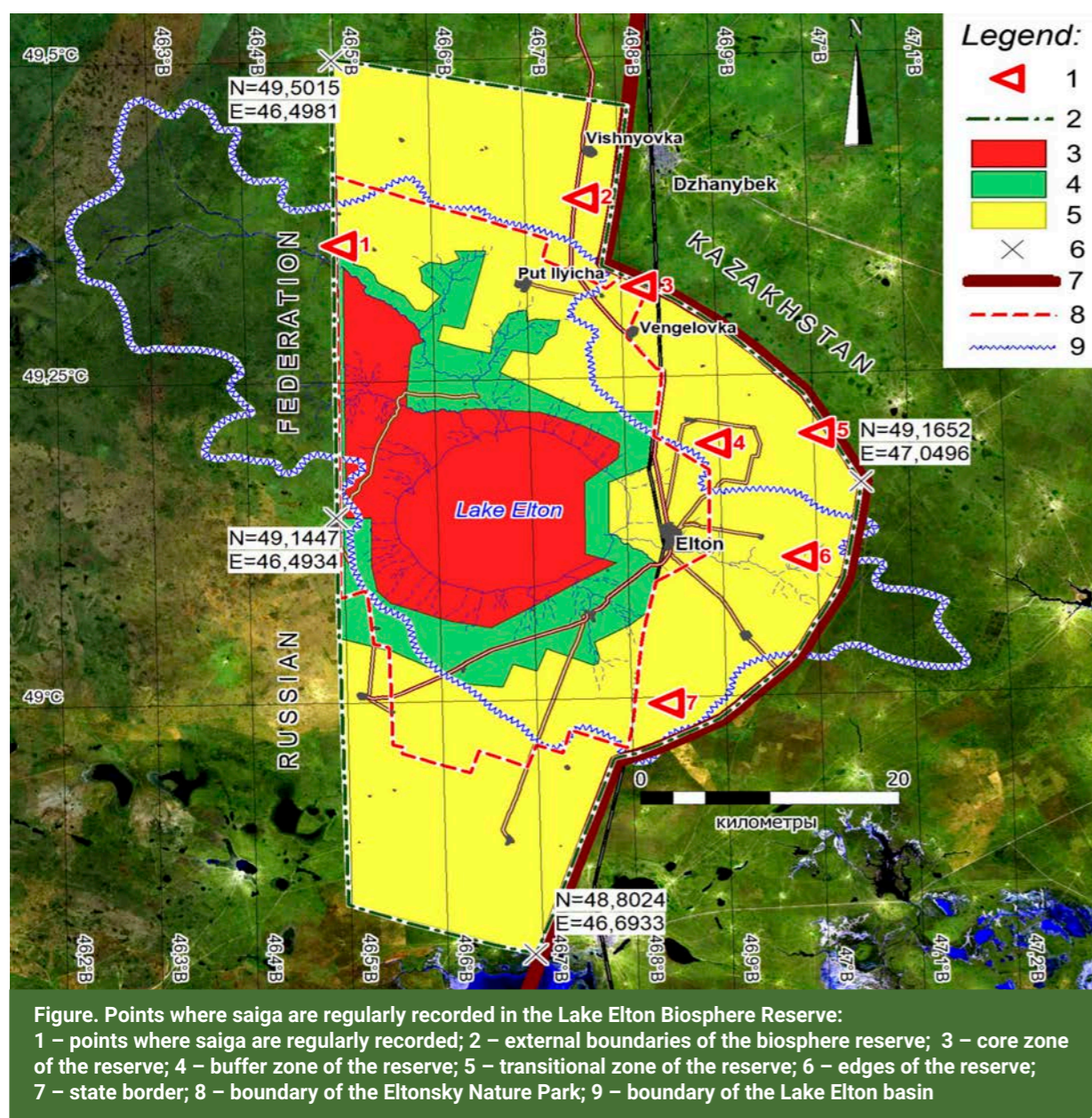


Megacarpaea megalocarpa, listed in the Red Book of the Volgograd region, in the Lower Volga region is found only in the vicinity of the salt lakes Elton and Baskunchak. Photo by Alexander Popov



Semishrub steppe. Photo by Alexander Popov

Articles (cont.)



ural Resources, Forestry and Environment of Volgograd Province and in the municipal and regional mass media. In 2019 the Committee for Natural Resources, Forestry and Environment of Volgograd Province proposed a series of steps to protect and monitor saigas and broaden the range of informational, environmental and educational activities, including educational and creative events at the visitor centre of the Lake Elton Biosphere Reserve. These were proposed to be included in the 'saiga conservation roadmap' developed by the Ministry of Natural Resources and Environment of the Russian Federation within the national 'Ecology'

project to be implemented in 2020 and subsequent years.

In conclusion, it should be noted that the inclusion of saigas in the Red Data Book of Volgograd Province and the organisation of the Lake Elton Biosphere Reserve make it possible to monitor the species on a regular basis and to develop measures to conserve this unique species, both in the reserve and in adjacent areas. There is hope that these initiatives will give a chance, however small, for the population of saiga to be restored in Volgograd Province!

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Announcements

Update on SCA grants program 2019

In 2019, as usual the Saiga Conservation Alliance held two competitions for grants – Young Conservation Leaders and the Small Grants Program.

The Young Conservation Leaders competition received 6 applications from Russia, Kazakhstan and Uzbekistan. The winners are:

Aibat Muzbay, 22 years old, Karaganda city, Kazakhstan

“My research focuses on water resources and the agricultural use of the habitat of the Ustyurt saiga antelope population. It includes saiga monitoring and assessment of saiga presence within the research area. Information about the location of agricultural activities and wells is very important for future wildlife management.”



Kaundak Aikumys. Photo from social networks

Kaundak Aikumys, 15 years old, Baytursynuly village, Zhangeldy district, Kustanai region, Kazakhstan

“My project is about disseminating information on saiga conservation to both local residents and to the tourists who often come to our village to see saigas. To do this, we will make informational handouts, as well as embroidering products that can then be sold.

We also plan to conduct a summer camp.”

In the **Small Grants Program**, from the eight applications received from Russia, Kazakhstan and Uzbekistan, three were selected. The winners are:



Galina Kalmykova, Vasily Parshin, Babette Fourier and Olga Vorontseva. Photo of Stepony Nature Reserve

Olga Vorontseva and Babette Fourier with the project “Stepnoi Surveillance” dedicated to monitoring and research on saigas in the Stepnoi Reserve, Russia (see Update in this issue).

Mukhit Suttibay with the project “Suppression of the dissemination of ads for buying and selling saiga horns online within Kazakhstan”

Alexander Putilin with the project “Assessment of the number of new saiga groups in the Betpak-dala population”.

We look forward to the success of the 2019 winners in implementing their projects, and we also invite everyone to submit applications to the 2020 competitions. Information about these competitions will be posted on the SCA website: saiga-conservation.org.

Announcements (cont.)

Wishing Dr Yuri Grachev a happy 80th Birthday!

You are one of the best mammalogists in Kazakhstan. Your many years of experience, your unusually wide erudition and truly encyclopedic knowledge, as well as your vast expeditionary history, served as the basis for solving a number of problems in research and conservation of individual animal species and biological diversity in general. On your birthday, please accept my most sincere congratulations and best wishes for health, inexhaustible energy and strength, sufficing for many, many more years of interesting travels and wonderful discoveries. **Anna Lushchekina (SCA Trustee)**

Dear Yuri, congratulations and happy 80th birthday, wishing you health, happiness and many happy saiga days! **Aline Kühl-Stenzel (SCA Steering Committee)**

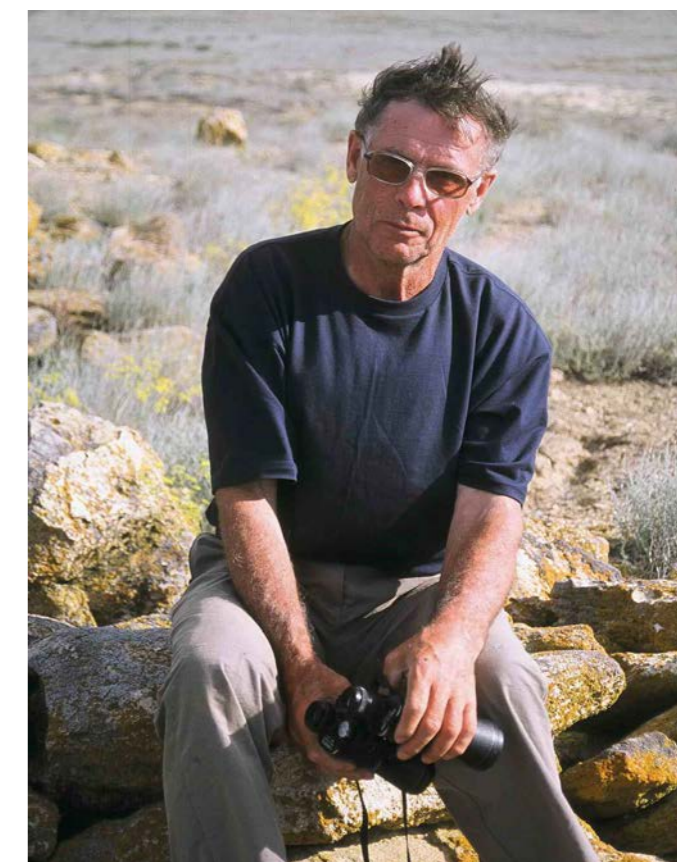
Dear Yuri Alexandrovich! I sincerely congratulate you on this wonderful anniversary! I wish you good health, continued success, great happiness and joy, and a long fruitful life. I am very pleased with our acquaintance and joint creative activity - the conservation and study of the saiga antelope on our planet. Your knowledge and experience are invaluable! Always yours, **Yuri Arylov (SCA Steering Committee)**

Dear Yuri Alexandrovich! I have known you for many years. For me, you are a high standard of professionalism and incredible human qualities - kindness, care, energy, selfless service to science, love of nature and people. I wish you good health, inexhaustible vitality and creative achievements. Yours, **Elena Bykova (Uzbekistan programme, SCA Steering Committee)**

Yuri Alexandrovich, you are a true professional - an expert in your field. I will not be mistaken if I say that you know everything about animals of immense Kazakhstan. You are always ready to help colleagues with advice and generously share your knowledge and experience. I have deep respect for you. Happy anniversary! May you have good health and great success! **Alexander Esipov (SCA Steering Committee)**

Dear Yuri, you have a special place in my heart as the person who introduced me to my first saiga antelope, all those years ago when you took me on an expedition to the Betpak-dala population. I am so grateful that you took under your wing a young British student who had written to you out of nowhere asking to come to Kazakhstan to study saigas, with no experience or understanding of fieldwork. Thank you for being pre-

pared to take me seriously! I enjoyed our discussions of Sir Walter Scott and London smog in the middle of the steppe, as we compared the taste of whiskey and vodka and you showed me how to track saigas and to live in the steppe. You knew both British 19th century literature and the Latin names of animals much better than I did! Your deep ecological knowledge and understanding of the challenges of ecological research and monitoring have been enormously influential on all the saiga researchers and conservationists who have come after you. Your insights and wisdom continue to be the foundation of saiga research and conservation in Kazakhstan. I am really proud of the research that we have done together over the years, and grateful that you continued to collaborate both with me, and with the many students and researchers who I sent to work with you, knowing that you would look after them. Your patience, dignity and kindness are unmatched, equalled only by your scientific expertise and experience. Happy birthday, many happy returns, and best wishes from your friend, **E. J. Milner-Gulland (SCA Chair)**



Saiga heroes

David Mallon, one of most world-renowned saiga experts, is co-Chair of the IUCN Antelope Specialist Group and Associate Lecturer, Division of Biology and Conservation Ecology, Manchester Metropolitan University, UK. He was awarded the Sir Peter Scott Award for Conservation Merit at the IUCN SSC Leaders Meeting in Abu Dhabi in October 2019. The award recognised David's long term & significant contributions through the SSC to large mammal conservation in Asia and Africa over many years, dedicated co-chairing of the Antelope Specialist Group, active participation in the IUCN Red List Committee, facilitation of numerous conservation planning workshops in several languages, and the wit and enthusiasm that he brings to his work. We congratulate David for winning such a prestigious award and would like to ask him some questions.

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

D. M.: I have been interested in the mammals of Central Asia for 35 years.

Editor: When did you start your research and conservation activities for saigas specifically?

D. M.: My first formal involvement with saigas was through making IUCN Red List assessments of Asian and Middle Eastern antelopes in 1990 and working on saiga status and conservation since then through membership of the Antelope Specialist Group. I am also now a member of the Steering Committee and Board of Trustees of the Saiga Conservation Alliance.

Editor: Can you tell us any interesting story about the saiga?

D. M.: Saigas once occurred in Great Britain – several thousand years ago.

Editor: What are the main problems in your work?

D.M.: My work with saigas is mainly limited to work with CMS, Red List and SCA, not field projects. The main problem is obtaining adequate long-term funding to support all the necessary conservation activities.

Editor: How can be the obstacles in your work be removed?

D. M.: Obtaining funding is the most difficult aspect of any conservation work – and there is no easy solution.

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

D. M.: All the range states have committed to protect the species, there have been major investments in conservation especially since 2004 – such as in anti-poaching, establishment of new protected areas, field research projects, education and community outreach. All these activities are covered by the CMS MoU

on saiga conservation which provides a global framework. So in many ways the prospects are good, provided that existing controls on illegal trade are maintained and disease outbreaks can be avoided or controlled.

Editor: You have worked in nature conservation for more than three decades. What has changed over these years and what are current trends in this sphere?

D. M.: The main change is the increase in human pressure expressed through loss and degradation of natural habitats, and subsequent fragmentation; overharvesting, and now the threat from climate change.



David receiving the medal of The Sir Peter Scott Award for Conservation Merit. Photo by Mike Knight

In memoriam

Dr. Badamjavyn Lkhagvasuren

On 1st August 2019, Dr. B. Lkhagvasuren, a member of the Steering Committee of the Saiga Conservation Alliance, passed away at the age of 60.

Since 1981, when he graduated from the biological faculty of the Mongolian State University, Dr. B. Lkhagvasuren worked for the Institute of General and Experimental Biology of the Mongolian Academy of Sciences, where for the last 15 years he was the head of the Mammalian Ecology Laboratory. Under his management, the researchers of the laboratory studied the biodiversity of Mongolia and, based on their results, gave recommendations to the government on conservation and sustainable use. A highly professional expert with an excellent command of English and Russian, Dr. B. Lkhagvasuren took part in a number of international expeditions, while his research resulted in almost 100 scientific publications.

The Mongolian Government appreciated Dr. B. Lkhagvasuren's work, and in 2015 awarded him the title of Scholar of the Year, while the Ministry of Nature and Environment granted him the honourable title of

'Outstanding Nature Protector'. Dr. B. Lkhagvasuren was a faithful servant of his Motherland – the country of Mongolia - which he loved with all his heart and whose interests he, a member of various international societies and commissions, defended at different levels.

Everyone who had a chance to work with, or just be acquainted with, Dr. B. Lkhagvasuren noted his modesty, selflessness and major achievements for wildlife conservation in Mongolia. Members of the Saiga Conservation Alliance and the entire saiga conservation community deeply mourn for Dr. B. Lkhagvasuren and express their condolences to his family. His death is a big loss which will be felt in the global conservation community for a long time.

Anna Lushekina, Saiga Conservation Alliance



Dr. Lkhagvasuren speaks at the Meeting of Signatories of the Memorandum of Understanding on Saiga Conservation in Ulan Bator, September 2010. Photo by A. Esipov

In memoriam (cont.)

Doctor “Tsagaan Zeer”

We here at WWF-Mongolia are saddened to learn the passing of a legendary figure in the world of biodiversity and environmental conservation. Dr. Lkhagvasuren’s work spanned decades, including the creation of generations of environmental scientists and conservation efforts with special focus on Mongolian gazelles, bears, wild ass, goitered gazelle and many other iconic species. However, he was known as Tsagaan zeeriin Lkhagva (‘Tsagaan zeer’ means Mongolian gazelle in Mongolian) because of his dedication to researching and conserving the Mongolian gazelle over decades.

Dr. Lkhagvasuren joined WWF-Mongolia in 2010 and held the position of Conservation Director, based in Ulaanbaatar. His background and invaluable experience had a major impact on the planning, implementation, monitoring and evaluation of all our programmes. These included development of strategic plans for ecoregions and landscapes, and planning and implementing science-based conservation campaigns on topics such as poaching and illegal wildlife trade, community-based nature resource management, values of protected areas and endangered species, freshwater, and general environmental sustainability.

We want to recall one of the great pieces of science-based conservation which he carried out while he was working at WWF. He initiated a baseline survey to analyse the effects of infrastructure on migratory terrestrial mammals in Mongolia. The survey concluded that, after the construction of a planned railway in

2025, the Mongolian gazelle population would be divided into 9 isolated sub-populations separated by the railway and border fences, while the wild ass population would be divided into 5, and the goitered gazelle into 7 sub-populations. Furthermore, the Mongolian saiga population would be isolated as 2 separate sub-populations. Based on this conclusion, he initiated and led the development of a national mandatory standard for steppe ungulate passages along the railways and roads in the steppe and Gobi region of Mongolia. This was approved by the National Standards Council under the Mongolian Agency for Standardization and Metrology in 2015, after 2 years of tireless and consistent efforts by him and his colleagues.

Lkhagva was a great biologist, greatly respected by everyone he worked with, and his loss will be heavily felt within the conservation community both at national and international levels. His work has instilled a respect for the environment in countless numbers of people, young and old, all over the world. Dr. Lkhagvasuren saw a better, brighter future, and his vision of a protected and preserved earth shall continue to live on throughout the years to come.

Dr. Lkhagvasuren was a friend, colleague, and mentor for many years and we will remember him in many positive ways – with a big smile and a great sense of humor, always great with a story.

B.Chimeddorj, WWF Mongolia

Acknowledgements

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SAIGA CONSERVATION ALLIANCE

Saiga Conservation Alliance:
www.saiga-conservation.com

Saiga Resource Centre:
www.saigaresourcecentre.com

Email: mail@saiga-conservation.com

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