УДК 821 DOI 10.25587/SVFU.2023.91.44.008

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Образ стерха в якутской культуре: проблемы экологического воспитания

Аннотация. Стерх - священная птица для коренных народов, населяющих гнездовой ареал в северо-восточной части Сибири. В его отношении до сих пор действует система табу и запретов. Все это, несомненно, играет позитивную роль в его охране. Мы считаем, что бережное отношение к экологии стерхов необходимо воспитывать в людях, начиная с раннего возраста. В этом несомненную положительную роль играет литература и, на наш взгляд, бережное отношение к экологии стерхов, особенно в раннем возрасте, можно привить с помощью якутской литературы, где стерх – это символ культуры и мифологии, красоты и изящества, воплощение свободы и отражение неизведанной стороны бытия и бескрайнего облика Срединной земли, посредник между небом и землей. Мы использовали эмпирический метод: проведение анонимного опроса с целью определения отношения людей к стерху как биологическому виду и как священному символу культуры народа саха. Данные нашего исследования показали, что большинство людей понимают, что состояние экологии стерхов далеко от удовлетворительного, что для сохранения видовой численности популяции стерхов необходимо увлекать детей в дело защиты природы и что одним из действенных способов воспитания в детях бережного отношения к данным краснокнижным птицам является знакомство с образом стерха в якутской литературе, например, в Олонхо – древнем эпическом памятнике и других якутских произведениях.

Ключевые слова: стерх, образ стерха, якутская литература, экология, природа, исчезновение стерхов, популяция, численность, Олонхо, народные произведения, экологическое просвещение.

Для цитирования: Сокрут Н. А., Григорьева И. А. Образ стерха в якутской культуре: проблемы экологического воспитания // Арктика XXI век. Гуманитарные науки. 2023, № 1(31). С. 74–88.

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The Image of the Siberian Crane in Yakut Culture: Ecological Education problems

Abstract. The Siberian crane is a sacred bird for indigenous peoples inhabiting its breeding range in north-eastern Siberia. The system of taboos and prohibitions still applies to it. All this undoubtedly plays a positive role in its protection. We believe that a careful attitude to the ecology of Siberian cranes should be fostered in people from an early age. Literature plays an undoubted important role in this. In our opinion, a careful attitude to the ecology of Siberian cranes, especially at an early age, can be instilled through Yakut literature. In Yakut literature the Siberian crane is a symbol of culture and mythology, beauty and grace, the embodiment of freedom and a reflection of the unexplored side of existence and the boundless face of the Middle Earth, the mediator between heaven and earth. We used an empirical method: conducting an anonymous survey to determine people's attitudes toward the Siberian crane as a biological species and as a sacred symbol of Sakha culture. Our study showed that most people understand that the ecological condition of the Siberian cranes is far from satisfactory. They also understand that it is necessary to involve children in the cause of nature protection in order to preserve the species population of Siberian cranes. One of the most effective ways to educate children about the careful treatment of these Red Book birds is to introduce them to the image of Siberian cranes in Yakut literature. For example, in Olonkho – an ancient epic monument and other Yakut works.

Keywords: Siberian crane, the image of Siberian crane, Yakut literature, ecology, nature, the extinction of Siberian cranes, population, number, Olonkho, folklore, environmental education.

For citation: Sokrut N. A., Grigorieva I. A. The Image of the Siberian Crane in Yakut Culture: Ecological Education problems // Arctic XXI century. Humanitarian sciences. 2023, No. 1(31). P. 74–88. (In Russ.)

Relevance. Work on the building a respectful attitude for the environment among the population is far from satisfactory. The existence of the Siberian Cranes depends on the conservation of the East Siberian or Yakutian population, which is of the particular value, since it is almost the only source of the gene pool of wild, white cranes. This population of the cranes has about 4000 individuals. At present, the need to involve people in protecting the ecology of the Siberian Crane is an acute issue.

Purpose: to prove that through the image of the Siberian Crane in the Yakut literature, it is possible to instill in people a caring attitude towards the population of the Red Book Siberian Crane.

Our tasks:

- 1. To study the state of the Siberian Crane ecology;
- 2. To analyze the Yakut fiction, which demonstrates the image of the Siberian Crane;
- 3. To reveal the theoretical aspects of caring for the environment, through the image of the Siberian Crane.

Research method: Empirical. Conducting an anonymous survey in order to determine the attitude of people to the Siberian Crane, both a biological species and a sacred symbol of the culture of the Sakha people.

The Siberian Crane

The Siberian Crane or the White Crane Grus leucogeranus, ranks third among the 15 rare species of cranes in the world, after the American and Japanese. According to the data of counts in the places of accumulation of birds on wintering grounds, today there are 2900–3000 Siberian Cranes. This crane is included in the Red List of the International Union for the Conservation of Birds (IUCN), the Red Books of Birds of Asia and the Russian Federation, in the Red Books of a number of subjects of the Russian Federation, including the Republic of Sakha (Yakutia). In the International Red Data Book (IUCN), the Siberian Cranes are classified as endangered species (Bird Life International 2000) [4]. A special attitude of people to this white crane has developed during wintering in India and Iran, in various places along its migration routes, but this is most clearly expressed in the nesting area in the north of Western Siberia and in Yakutia. This fact is important not only from an ethnographic point of view, but also from a conservation standpoint, since the special status of the Siberian Crane undoubtedly plays a very positive role in its protection [3].

It is known that now there are two isolated breeding areas of the Siberian Crane – eastern and western, each of which probably corresponds to a separate population. The nesting area of the western, or «Ob» population occupies the basin of the lower reaches of the Ob, and the eastern, or Yakut population nests in the lowland tundra of northeastern Yakutia, between the Yana and Kolyma rivers [4, 7].

The West Siberian population of these rare birds is now in a critical situation: its number does not exceed 20 individuals. It bears the main losses during its migration through Afghanistan and Pakistan, where white cranes are hunted illegally [1]. Thus, the existence of Siberian Cranes depends on the preservation of the East Siberian or Yakutian population, which is of particular value, since it is almost the only source of the gene pool of wild white cranes, which has about 4 thousand individuals. Yakutia is responsible for the conservation of birds of this species during their nesting and seasonal migrations [4].

The Siberian Crane is a representative of the most distant migrants among birds, overcoming more than 6000 km during seasonal flights. The flight of birds on the territory of Yakutia coincides in time with the hunting seasons. It happens that the Siberian Cranes die from the shots of hunters who mistakenly take them for geese. Another threat is high-voltage transmission lines crossing Siberian Crane migration routes. In addition, forest fires, which take on extensive proportions in the spring and summer, can also pose a danger to migrating flocks.

In the nesting areas of the Siberian Crane of the Yakut population, the anthropogenic threats to birds are low due to the remoteness of these territories from settlements and their inaccessibility. Predators capable of destroying the nest of the Siberian Crane (wolverine,

wolf, bear) can pose a threat here. Herds of reindeer could theoretically trample on a clutch of Siberian Crane [4].

Approximately three-quarters of the East Siberian Siberian Crane nesting sites are located in the Kytalyk National Park, which was created as part of the Ecology national project in 2019. The name of the national park was given by the Yakut name of the Siberian Crane. The total area of Kytalyk is 1.8 million hectares. The national park was included in the International Network of Specially Protected Habitats of Rare Crane in Northeast Asia, created at the initiative of the International Crane Conservation Fund and the International Bureau for the Conservation of Wetlands, and in 2021 was included in the preliminary list of UNESCO World Cultural and Natural Heritage [1].

Territory protection is one of the most effective methods of Siberian Crane protection. At the same time, environmental education makes it possible to create the most solid foundation for the conservation of rare bird species.

Siberian Crane as a character of mythology and religion

Mythology is always associated with the worldview of the people, including ideas about the creation and structure of being. Among the Yakuts, these ideas found the most complete expression in the most ancient epic monument – Olonkho. In the texts of Olonkho, the Yakuts embodied sacred concepts and abstract ideas, expressed their individuality and similarity with other peoples. Olonkho is full of symbols, which are the personification of cosmic forces and objects of nature.

One of the archaic layers of the mythology of the Northern peoples is represented by zoomorphic characters – various animals, fish and birds, associated primarily with the totemic principle and associated with cosmological ideas, as well as rhythms and features of the flow of natural processes. Among the zoomorphic characters, a separate group is made up of ornithological images, which are an important part of the mythology of the Yakut ethnos. A special place among birds is occupied by the white crane or Siberian Crane – a sacred, especially revered bird, a totem, a character of mythology and religion.

In literature and folklore, the Siberian Crane is considered being only a symbol of beauty and grace, while since ancient times, the Siberian Crane has been considered being the embodiment of freedom and a reflection of the unknown side of being and the boundless appearance of the Middle Earth, a mediator between heaven and earth [6].

In the pantheon of deities represented by ornithological images, the Siberian Crane occupies a fairly high hierarchical level, as it is under the auspices of Heaven. The Siberian Crane, living, like many other birds, on earth and in the sky, enters those aspects of reality that are inaccessible to man. Taking off from the ground and flying since ancient times have been sacralized in different cultures at the level of participation of flying characters in the heavenly world and the divine pantheon. From this follows the correlation of birds with the unearthly facet of reality, with which man, by virtue of his nature, was unable to come into contact. People, perceiving what is inaccessible to them, at the level of archetypes tended to correlate it with the mysterious and sacred world. In the history of culture, the flight of birds gave rise to many cults of birds as free, inaccessible and mysterious creatures. In this case, the Siberian Crane is no exception – its beauty and grace have long attracted the attention of the Yakuts, illustrating the archetypal links between the Sakha and nature.

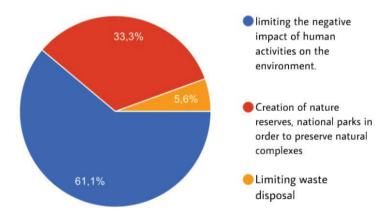
The image of the Siberian Crane, more precisely, its flight, most clearly reflects the boundless appearance of the Middle Earth. Such a correlation is given in the epic «Kyys Debiliye»: «A crane flying high, will stretch its neck / and, not finding borders around, / will anxiously growl – / with such boundless meadows / with boundless valleys / with an boundless-boundless, / stretching expanse-surface» [2, p. 76–77]. The flight of the bird determined the latitude of the valley – for several days and nights the Siberian Crane cut through the air with its wings and did not reach the edge, so elevated and wide was the Middle Fertile Country, where gray cranes nest and white cranes winter [5, p. 5]. Living in two worlds made the Siberian Crane, nesting in the Middle World and soaring in the sky, a kind of connecting principle – an intermediary between heaven and earth.

Thus, the considered aspects of the semantics of the Siberian Crane, which are present in all historical and genetic layers of the culture of Yakutia, have formed a complex spectrum of meanings that continues to exist at the present stage of Yakut cultural genesis. Based on the fact that cultural genesis is not only the process of the origin of culture, but also its further reproduction, including its constant preservation, translation and renewal, the study of the semantics of the Siberian Crane in Sakha culture must be carried out taking into account not only the traditional, but also the innovative component.

The image of the Siberian Crane in the Yakut literature and environmental education

To make sure what people think of the state the ecology of the Siberian Cranes and to prove that through the Yakut literature it is possible to instill in people a caring attitude towards these Red Book birds, we conducted a survey. The survey involved 54 respondents, among whom were NEFU teachers, students, including foreign students of NEFU. The survey consisted of 12 questions as follows:

1. How do you understand the concept of «environmental protection»? (pic. 1)

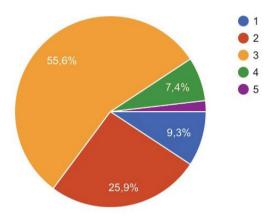


Pic. 1. The diagram the concept of «environmental protection»

The answer to this question has three options. The majority of respondents (61.1 %) chose the option: «Limiting the negative impact of human activities on the environment». That is, the vast majority understands that a person has a direct impact on the environment.

One third of the respondents (33.3 %) chose the answer: «Creation of nature reserves, national parks in order to preserve natural complexes». This tells us that a third of the respondents wants to preserve the natural environment that has not yet been changed by people. And the lowest number of the votes was given to the option: «Limiting waste disposal», which indicates that only 5.6 % of respondents are ready to take responsibility for the daily contribution of each person to improving the environmental situation.

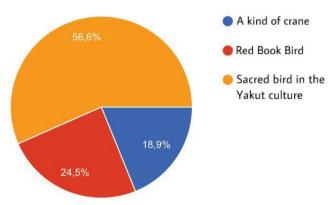
2. How would you rate the current state of the environment on a scale of 1 to 5? (1 - bad condition, 5 - excellent condition) (pic. 2)



Pic. 2. Diagram «The current state of the environment»

The majority of respondents (55.6 %) chose the scale number «3». That is, they rated the state of the environment as relatively satisfactory, which indicates clear problems that can be solved by taking fundamental actions towards improving the state of the environment. One quarter of the respondents (25.9 %) chose scale number «2», which received fewer votes than scale number «3». That is, in this situation the state of ecology is even worse, but it is also not too late to take some steps to improve the state of the environment. 9.3 % of respondents chose a rating of «1», which can be described as the worst condition, where there is nothing to help, since their chances will be equal to zero. 7.4 % of the respondents rated the state of nature as «4», which means that nature is in good condition, but still there are small problems that are easy to solve. To our surprise, some respondents (1.8 %) chose the scale number «5» i.e. Very good condition. It can be concluded that this option could be chosen by foreign students whose state of ecology is much better than ours.

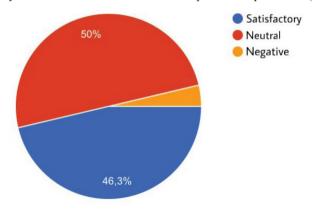
3. What image do you have when you hear the word «Sterkh»? (pic. 3)



Pic. 3. Diagram «The image of the word «Sterkh»

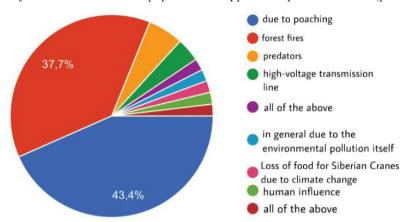
For the majority (56.6 %), the Siberian Crane is associated with the image of a sacred bird in the Yakut culture. That is, it shows that the respondents are familiar and know the Yakut culture, and they associate the image of the Siberian Crane as a sacred, especially revered, totem bird. One quarter (24.5 %) chose the answer «Red Book Bird» so it is clear that they are informed about the existence of the «Red Book» and know that the Siberian Crane is one of the representatives, which belongs to an endangered species. The rest (18.9 %) are either not residents of the Republic of Sakha or do not know that the Siberian Crane is a bird in the Red Book or a sacred bird in Yakut culture.

4. What is your attitude to the Siberian Crane protection problem? (pic. 4)



Pic. 4. Diagram «The attitude to the Siberian Crane protection»

Here the opinions are divided into two halves: the first half (50 %) is neutral towards the problem of resolving the issue of the Siberian Crane, that is, they refrain from making any decision and refuse any kind of intervention in this area. The second half (46.3 %) are satisfied, that is, they are ready to take part in some activities to solve the issue of protecting the Siberian Crane. But a smaller number of respondents (3.7 %) have a negative attitude towards the issue of Siberian Crane protection. They do not want and do not try to solve the problem of Siberian Crane protection.



5. Why do the Siberian Crane population disappearance problems arise? (pic. 5)

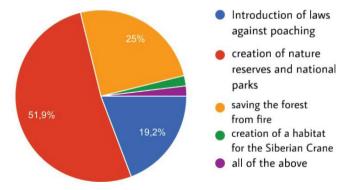
Pic. 5. The diagram «The reasons of Siberian Crane population disappearance»

This question had four possible answers: due to poaching, forest fires, predators, and high-voltage transmission lines. The majority (43.4 %) believe that the disappearance of Siberian Cranes is due to poaching. Then (37.7 %) chose the answer forest fires, which are an urgent problem at the present time; 4.26 % of respondents chose the «high-voltage transmission line» option, and the rest (6.49 %) believe that the disappearance of the Siberian Crane is due to the attack of predators on them. But there was also a «other» section in which respondents could write their opinion on this issue. So they wrote the following:

- all of the above (3.3 %);
- in general due to the environmental pollution itself (1.65 %);
- human influence (1.65 %);
- loss of food for Siberian Cranes due to climate change (1.65 %).

Analyzing the data obtained as a result of the question about the problems of the disappearance of the Siberian Crane population, we concluded that there are those who have knowledge and are interested in the problem of the disappearance of the Siberian Crane population.

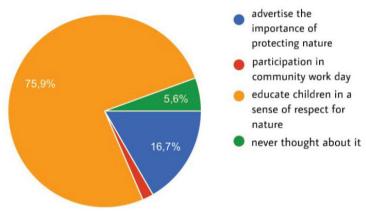
6. What can we do to improve the ecology of Siberian Cranes? (pic. 6)



Pic. 6. Diagram «Ways to improve the ecology of Siberian Cranes»

A half of the respondents voted for the creation of nature reserves and national parks. That is, 50 % of respondents know that in this way it is possible to preserve wildlife and save Siberian Cranes from extinction. One quarter (25 %) chose the option of saving the forest from fire. For example, the consequences of peat fires and the burning of fertile soil contribute to severe air pollution and the destruction of rare populations of birds and animals, including Siberian Cranes. 19.2 % voted for the introduction of laws against poaching, because due to the fact that people harm the animal world, this leads to their extinction. There was also a section «other». There were only two answers to this section: all of the above (1.95 %) and the creation of a habitat for the Siberian Crane (1.95 %), which can be attributed to the first answer option.

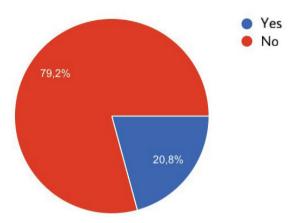
7. How to increase the level of people's responsibility to respect the environment? (pic. 7)



Pic. 7. Diagram «The level of people's responsibility to respect the environment»

The majority of people, or 75.9 % of the respondents, chose the answer: to educate children in a sense of respect for nature, which can be done with the help of literature. That is, if you tell or read different stories about caring for the environment for children, then from an early age they will develop a sense of respect and respect for nature. Then 16.7 % of the respondents chose the option «advertise the importance of protecting nature». This can be done, for example, by filming a social video or writing an article for a newspaper. 5.6 % of the respondents never thought about it, showed no interest in this issue. The option with the answer «participation in community work day» scored the least number of votes.

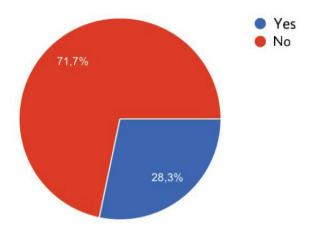
8. Do you know the factors behind the disappearance of Siberian Cranes? (pic. 8)



Pic. 8. Diagram «The awareness factors behind the Siberian Cranes disappearance»

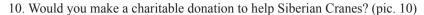
Unfortunately, more than half of the audience (79.2 %) do not know the factors behind the disappearance of Siberian Cranes. This may be due to poor knowledge or lack of interest in the area of Siberian Crane extinction. The remaining 20.8 % know and are informed about the factors of the disappearance of the Siberian Cranes.

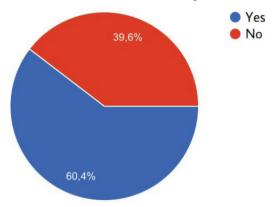
9. Do you know about the existence of specially protected natural areas in Yakutia, where the Siberian Crane nests? (pic. 9)



Pic. 9. Diagram «The awareness of the existence of specially protected natural areas in Yakutia»

The majority of respondents (71.7 %) do not know about the existence of specially protected natural areas in Yakutia. This may be due to poor educational work, as a lot of people are not informed about protected areas. The rest (28.3 %) are aware of the existence of protected areas in Yakutia. An example is the national park «Kytalyk», in which the Siberian Crane nests.





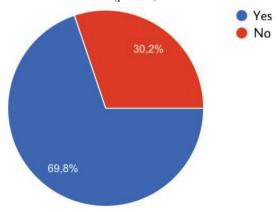
Pic. 10. Diagram «Would you make a charitable donation to help Siberian Cranes»

A charitable donation is not only financial assistance, but also the performance of certain works and services. More than half (60.4 %) are ready to make a charitable donation to help Siberian Cranes. The rest (39.6 %) show indifference towards charitable donations, that is, they do not want to participate in charitable events.

- 11. What Yakut literary works about Siberian Cranes do you know? The answers given by the interviewees:
- Us kuol;
- Khara kytalyk;
- Kyys Debiliye;
- Nyurgun Bootur;
- Kytalyk Uybaan «Kustugu sitterbian»;
- Song «Kytalyktar».

Other options: «I don't remember», «I don't know».

12. In your opinion, is it possible to instill in people a caring attitude towards Siberian Cranes with the help of Yakut literature? (pic. 11)



Pic. 11. Diagram «Caring attitude towards Siberian Cranes and Yakut literature»

The majority of respondents (69.8 %) chose the answer «Yes», i.e. they agree that with the help of the Yakut literature it is possible to instill in people a caring attitude towards Siberian Cranes. The remaining 30.2 % chose the answer «No». That is, they disagree or doubt the method.

Conclusion

As a result of the survey, it can be established that the majority understands that the current state of the environment is in bad conditions. The issue of conservation of the species population of the Siberian Crane is not acute among the current generation, but at the same time, the majority are ready to provide all possible assistance in preserving the habitat and reducing the negative impact on the ecology of the Siberian Crane. For the majority of respondents, the Siberian Crane is primarily a symbol of the culture of the Sakha people, a sacred bird. And more than half or 69.8 % of the people who passed this survey are convinced of the need to instill a caring attitude towards the Siberian Cranes with the help of Yakut literature. That is, according to many (75.9 % of respondents), a sense of respect for nature should be nurtured from childhood, because at this time, children begin to form a holistic image of the environment. An understanding is laid that the weak must be treated with respect and what care and affection are.

Thus, we believe that in order to preserve the gene pool of the Siberian Crane, our main priority is to involve children in the cause of protecting nature and caring for it responsibly. It is necessary to help the child to fully see and understand the beauty of nature, to cultivate in children high moral qualities that are necessary for a subsequent development and formation as a person, as a person. Considering nature and morality as a whole, children develop a need to communicate with nature, to take care of it.

Nature fiction deeply affects the feelings of children. Through it there is an acquaintance with the outside world, which reveals its secrets with the help of a book, brings up the moral, aesthetic and other qualities of a person, begins to form a personality.

Books are a kind of platform where knowledge about nature is concentrated. On the basis of these books, the child's ideas about what should be the attitude towards the world around him are developing. To explore the world with the help of a book means to be able to introduce a child to many aspects of life that are important to him.

In this work, the stories of writers are of great help, who in their texts teach children not only to see the beauty of nature, but also to treat it with care.

In our opinion, there are several ways to instill in children an interest in the protection of the Red Book Siberian Cranes with the help of literature and art. For example:

- 1. Literary works. There are a number of works about Siberian Cranes. It is reflected especially well in Olonkho. Examples can be: «Khara kytalyk», «Kyys Debiliye», etc.
- 2. Theatrical performances. Theatrical performances show the beauty and grace of rare birds like the Siberian Crane. Also, the Siberian Cranes are presented as a symbol of goodness and all that is bright in the folk work-Olonkho, reproduced in performances. For example: «Kytalyktar kyrdallara» («Valley of Siberian Cranes»), «Nyurgun Bootur».
- 3. Poems. Children learn by heart or read different poems about the Siberian Cranes and their environment, thus laying the foundation for caring for this endangered species. There are many Yakut poems, for example: Lilia Sannikova «Kytalyktar», a collection of

poems by Ulyana Vinokurova and Arkhan Artamonov «The Cult of the Siberian Crane in the Culture of the Sakha People» this book includes poems by famous poets and folk legends of the Siberian Crane.

- 4. Cinema. On the Internet you can find the short film «Dreams». This film is about the ecology of endangered Siberian Cranes and their future, that is, after watching this film, children form their thinking about how the world around them will look like, the ecology of Siberian Cranes if they do not take care and protect their environment at the present time.
- 5. Dancing. Folk dance is not only a cultural phenomenon that reflects the surrounding reality through artistic means, but is able to influence the formation of ethnic identity and solidarity.
- 6. Conducting interdisciplinary lessons at school. Conducting integrated lessons in biology and literature aimed at developing interest in the study of the diversity of the animal and plant world, the conservation of rare species, fostering love for nature and the desire to preserve it.

That is, the future state of the environment and the species number of Siberian Cranes will depend on our future generation. Thus, we see that the formation of an ecological culture and an aesthetic attitude of a person to the Red Book Siberian Crane is possible and necessary through the Yakut literature.

As an epilogue to our article, we want to cite the Yakut poem by Petr Evstratov «Kytalyk»:

Мне поведал столетний якут: Каждый год прилетают в Усть-Кут И садятся в болотной глуши, Где не видно вокруг ни души Журавлей небывалых отряд. Это стерхи, что строем летят. Вот вожак начинает обход. Завлекает подруг в хоровод, Выгнет шею, расправит крыло И гогочет легко, весело. А другие по кругу идут, Припадают и плавно встают. Совершают высоко прыжки, Посылают друг другу кивки – Молчаливый сердечный привет – И до вечера длится балет. А на утро, чуть солнце блеснет, Журавли продолжают полет -К океану, на остров Таймыр, Где кончается мир и Сибирь. По всей тундре разносится крик И зовут этих птиц «Кыталык».

A hundred-year-old Yakut told me:

– Every year they arrive in Ust-Kut

And sit down in the swamp wilderness,

Where not a soul is seen around

An unprecedented detachment of cranes.

These are the Siberian Cranes that fly in formation.

Here the leader begins to bypass,

Attracts girlfriends to a round dance,

Arch your neck, spread your wings

And cackles lightly, cheerfully.

And others go around in circles

They fall down and rise slowly.

Make high jumps

Send each other nods -

Silent heartfelt greetings

- And the ballet lasts until the evening.

And in the morning, a little sun will shine,

Cranes keep flying

To the ocean, to the island of Taimyr,

Where the world and Siberia end

A cry resounds throughout the tundra

And the name of these birds is «Kytalyk».

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