Project Update: July 2019

<u>Spring Monitoring Report</u> (April - May 2018)

Study work of geese and branta migration characteristics on the region of 8 administrative regions of North-Kazakhstan oblast. 29 lakes were reached through field missions. More than 5 temporary spillages were studied on the wheat fields and geese were detected. The condition of examined reservoirs had one-directional dynamics of the hydrological regime due to the high level of the water table and the big amount of temporary spillages.

Spring field season was characterized by massive geese passage in quite short terms. Very first goose chases appeared in the middle of April. Intensive migration of geese started from 30th of April and its peak was on 9-13th of May. Most massive crowds from 5 000 to 60 000 were detected on the following lakes: Kumdikol, M. Kak, Mengiser, Keltesor, Noname lake near Letovka village, and on spillages between Kotovskoe and Sovietskoe villages. Geese were detected on a lot of studied spillages but the amount of them was fewer. Allocations of geese and branta on sillages during days and nights directly depended on the type of the spillage and weather conditions (wind power and direction).

During the period of spring monitoring cumulatively 179 659 species were studied. Amount of local gray geese is 1729 species.

289 samples were processed to calculate the number of geese - the result is 10 584 geese and branta. Amount of the Greater white-fronted geese is 159 180 species, lesser white-fronted geese amount is 120 and red-breasted geese amount is 18 612.



Red-breasted geese on the shore of the national boundary Karatau. © I. Zuban.

Results of Catching and Marking Geese and Red-Breasted Geese (May-2018)

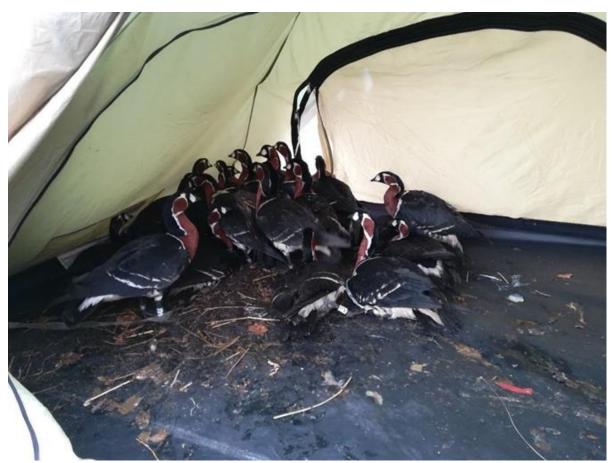
Among possible options to organization bird culling the option of the stationary trap was chosen. It has a name "The Stash", its construction and detailed instruction of use are published on the website: http://rusgeese.ru/index.php?r=298&id=2034. Some of the special characteristics were discovered during the creation and following using of the device - according to the results of this process few additions were made.

According to the results of work 29 red-breasted geese were caught and marked by color anklets.

One species was caught on 30th of April near Chirikovka village in water area of the national boundary Karatau. Here, on the 18th of May, 28 more species were caught. While on 18th of May all 28 birds were covered by a net - white geese and grey geese couldn't be caught at once.



Red-breasted geese trapped. © K. Zhadan.



Red-breasted geese marked using anklets. © I. Zuban.

<u>Summer Monitoring Report</u> (2018)

Monitoring of the number of grey geese nesting population was organized. Information about the spatial-biotopic distribution of grey geese nesting population areas in conditions of anthropogenic transformation in Northern Kazakhstan was obtained. Photo and video, cumulatively 25 lakes were studied, 13 of them have grey geese. According to biotopical classification, 8 studied lakes were curb-type (with reed beds along the coastline) lakes and 5 were curtain-type (with reed beds along the coastline and some curtains all over the water area).

Because of using unmanned aerial vehicle 10 nests of grey geese were found and characteristics of the dimensional distribution of nests, building nests characteristics and morphology indicators of the nesting spots were studied.



Grey geese brood. © I. Zuban.

<u>Autumn Monitoring Report</u> (September - October 2018)

Autumn migration of geese this year started rather early despite good weather conditions and passed in the short term. First migrations detected on 20th of September, which intensity raised up by the evening of 21st September. By the morning of 24th of September migration finally completed. Long-term congestion of geese and brantain the region of the oblast was not registered. Cumulatively 26 901 species members, 4 species of geese and branta, including 1 013 species members of branta and 11 species members of white-fronted geese.

The largest congestions from 547 to 8 410 species members were detected only in 7 of 36 examined spillages.

Accounting of geese in the autumn period was complicated by the fact the big part of migrating goose chase didn't stop on lakes for a long time – only for drinking and short-time rest. A significant part of migrating birds flew through a region of the oblast by transit on high-level height - 200-300 meters.

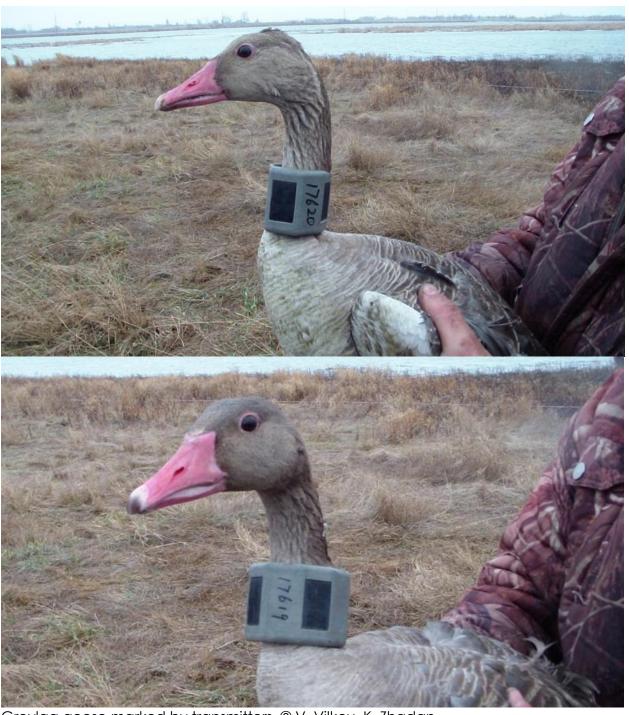
Geese migration took place in a very short area covering the only central part of the oblast.

Results of Catching and Marking Geese and Branta (April - May 2019)

Events of catching and marking nesting and migrating geese and branta were held using safe traps. In the first time in Kazakhstan, a method of putting grey geese in a nest was successfully used. During this period 17 species members of branta were

caught and marked by color plastic and metal anklets, 10 of them were marked too by satellite transmitters by "Microwave". More than that, during this period 10 species members (5 male and 5 female) of greylag geese were caught and marked with GPS/GSM loggers by "Ornitella" company. First data about marked birds movements in the North Kazakhstan region and outside its borders was received. All works are highlighted in the republic and regional mass-media.





Greylag geese marked by transmitters. © V. Vilkov, K. Zhadan.



Red-breasted goose transmitter setting. © M. Iliev.

Media Coverage

<u>Zuban I.A.</u>

Speech in the media about the work of the university (television):

- Republican 200 b. for performance

News Channel One Eurasia (May 20, 2019) "For the sake of science: Flights of geese will be tracked via satellite transmitters";

Link: https://www.youtube.com/watch?v=058MP-3WfFo

Новости телеканала Astana «the latest news (17.05.2019) Link to: https://www.youtube.com/watch?v=s9V5-rCRc7Q.

- Regional 150 p. за выступление

News MTRK 17.05. 2019 "On the implementation of the project for tagging red geese" Link: https://www.youtube.com/watch?v=mhfQ3c-QgoM

Presentation in the media about the work of the university (magazines, newspapers):

- Republican 200 b. for performance

<u>Kazakhstanskaya Pravda (05.28-2019) "For birds there are no borders";</u> - Regional 150 b. for the performance of North Kazakhstan

SC Week number 18 (05/01/2019) "Geese count in the spring"

Week SC №20 (05/16/2019) "Mission is feasible"

Northern Kazakhstan No. 57 (05/29/2019)