Project Update: November 2017

After consultation with various experts, we decided to go with geolocators from Biotrack (2.8 g) attached to darvic plastic leg rings. Unfortunately, only four WhDs (all males) were caught and tagged during four catching attempts, however some important lessons were learned and now the team is better prepared for the next year. Below are some details and conclusions.

Catching was conducted during the last week of July 2017, at two sites known to be used by WhD for moulting. All sites represented relatively shallow steppe lakes (1.5-2.5 m) with brackish water.

For catching we used a method previously used by Russian colleagues for successful catching WhD in southern Russia and two members of the Russian team took part in three of four attempts in Kazakhstan.

This method involved the following:

After selecting a relatively compact group of WhD, with possibility of "cornering" them (i.e. a narrow bay, "corner" of a lake) a 600 m long synthetic fishing net was set at a distance of over 500 m from the birds to avoid flushing them in opposite direction. Then a small motor driven inflatable boat would slowly drive the group of birds towards the net, with two additional motor-less boats guarding the sides to prevent birds from escaping. In the beginning of each attempt, 50-150 birds were driven towards the net.

Although many escaped during the process (mainly by diving under and between the boats), in the end at least 20-30 (max around 50) birds were seen within 10 to 20 m from the net. Yet, every time only one male was extracted from the nets, with others diving under or swimming over the net, as side observers reported. Therefore it is very likely that the net was visible enough for ducks to avoid it. The first two catches were made on a lake with sandy bottom, therefore water was very clear despite relatively strong wind. The other two attempts were made on a lake with normally muddy/silty water, however there was no wind then.









Lessons learned:

- 1. All four birds caught were in a complete moult, just starting to grow all of their primaries and tail fathers. Therefore the option of gluing more heavy tags (e.g. GPS GSM) to tail feathers would not work, unless birds were caught later.
- 2. It is possible that catching in a very muddy water (following few days of strong wind) will increase chances of catching more birds.
- 3. Possibly, placing nets in a v- shape and raising them slightly (20 cm) above the water and having them reaching the bottom, will also increase the catch. The former will require a longer net, the latter will require more effort and extra material. Also, as net will be more visible when raised on poles, this could deter birds from moving towards it.
- 4. We are now confident, even with the method as it is, that we can catch two to three birds in 3 days to deploy satellite tags, if harnessing issue is resolved.
- 5. This is possible to drive up to 50 birds up to the net, with minimum bycatch. Despite many other waterfowl species present at the catching site, many flew away, whereas grebes somehow avoided getting into nets. The only other bird caught in all 4 days was a moulting shelduck.
- 6. We are confident that three to four teams in boats will need less than 15 minutes to extract 20-30 birds from nets. As nets do not have heavy sinkers (only light ones), birds strangled when diving can easily reach the surface.









Plans for the season 2018:

We still have 29 tags left, which were put into sleeping mode and will still work up to 3 years. Therefore, we will:

- 1. Try to catch more moulting birds in July 2018, after we have improved catching methods.
- 2. Try to find two to three nests and catch females. This will increase the chance of re-catching as anecdotal evidence from Russia suggest females are site-faithful.

To learn some more about the project please follow the links:

Web article at Birdlife International website:

https://www.birdlife.org/europe-and-central-asia/news/tagging-elusive-white-headed-duck?utm_source=sidebar&utm_medium=topnews

Short movie at TV2 Russian TV channel (in Russian): https://www.youtube.com/watch?v=IE7HfLvPUBc

Long article in ACBK web news (in Russian): https://acbkvestnik.weebly.com/84708-105510771088107410991081-108610991090-108610901083108610741072-1080-1084107710951077108510801103-10891072107410821080-1074-1050107210791072.html