Progress Report
to
The Rufford Foundation

Caption for cover photo: A chick of Saker Falcon whose nest was on the tree in Ikh Nart Nature Reserve. Photo taken on 26th of June, 2020.

Brief information:

Project title:	The initial genetic investigation of Saker Falcon in Mongolia and its electrocution in southern Mongolia
Project ID:	30787-1
Project type:	1st Rufford Small Grant
Reporting date:	December, 2020
Project leader:	Onolragchaa Ganbold, PhD

1) Field surveys

At beginning of the project, we have conducted several field surveys for collecting genetics samples and data on electrocution in period between June and October. First, we were visited to the Ikh Nart Nature Reserve in late June, period when young nestlings in the nests. We checked historically known Saker Falcon' nests (n = 11) within the nature reserve for genetic sampling. Among these nests, four of them were recorded with nestlings, number of nestlings in these nests were varied from 3 to 4 (Figs 1-2). The FTA cards were used for blood sampling in the field.

As part of the southern Mongolia, Khanbogd village in Omnogobi province, and Uulbayan & Munkhkhan villages in Sukhbaatar province were selected for our first electrocution survey in September and October, respectively (Figs 3-7). In Khanbogd village, we did not detect any electrocuted Saker Falcon, whereas several electrocuted Saker Falcon (n = 10) together with other species of raptors (n = 12) were recorded during survey of Uulbayan & Munkhkhan villages. Of 10 detected Saker falcon, 4 of them were fresh (likely found within 1-3 days after electrocuted), while rest of the carcasses were relatively old. Tissue samples were taken from all carcasses and preserved in 70% ethanol for further experiments.

2) Lessons for school-children and undergraduate students

As one of our main objectives, we have organized lessons for undergraduate students from MNUE Highschool in Ulaanbaatar (as Urban schoolchildren) and 2nd, 3rd grades in university students from "Ecological Club" at Department of Biology in Mongolian National University of Education. For these online lessons, we have used MS office 365 TEAMS application. The title of the presentation was "Conservation Issue of Saker Falcon in Mongolia". Because of unexpected covid-19 community lock-down (since 11th of November), we cancelled all workshops at both urban and rural schools in this fall (Fig 8).

3) Planned activities in 2021

In late March and middle July, we will conduct field surveys for electrocution of Saker Falcon in several local region in southern Mongolia. Also, we will check historic nesting sites of the target species in the Ikh Nart Nature Reserve, Khustai National Park, and artificial nests that constructed by our department in Galshar steppe in eastern Mongolia for collecting genetic

samples. In addition, our team will visit several rural schools for our workshops and lessons. We will use stuffed Saker Falcon (Taxidermy) for our lessons. We used fresh carcass of Saker Falcon for stuffing (Fig 9). Finally, second progress report will be submitted in late July in 2021.

Figure 1. Three nestlings of Saker Falcon. Photo taken in 25th of June.

Figure 2. A Saker Falcon nest at the Rock Cliff, we used stair to reach this nest safely. A total of four nestlings in the nest. Photo taken in 28th of June.

Figure 3. 15 Kv electricity distribution line between Munkhkhan and Uulbayan Villages. Photo taken in 15th of October.

Figure 4. An example of electrocuted Saker Falcons.

Figure 5. An action of field work, in the photo: Team member Onolragchaa Ganbold, Khuderchuluun Otgontsetseg, Enkhtuvshin Dechinperlii

Figure 6. Other victims of electrocution at our study site

Figure 7. Common Kestrel and Upland buzzard perching on the poles

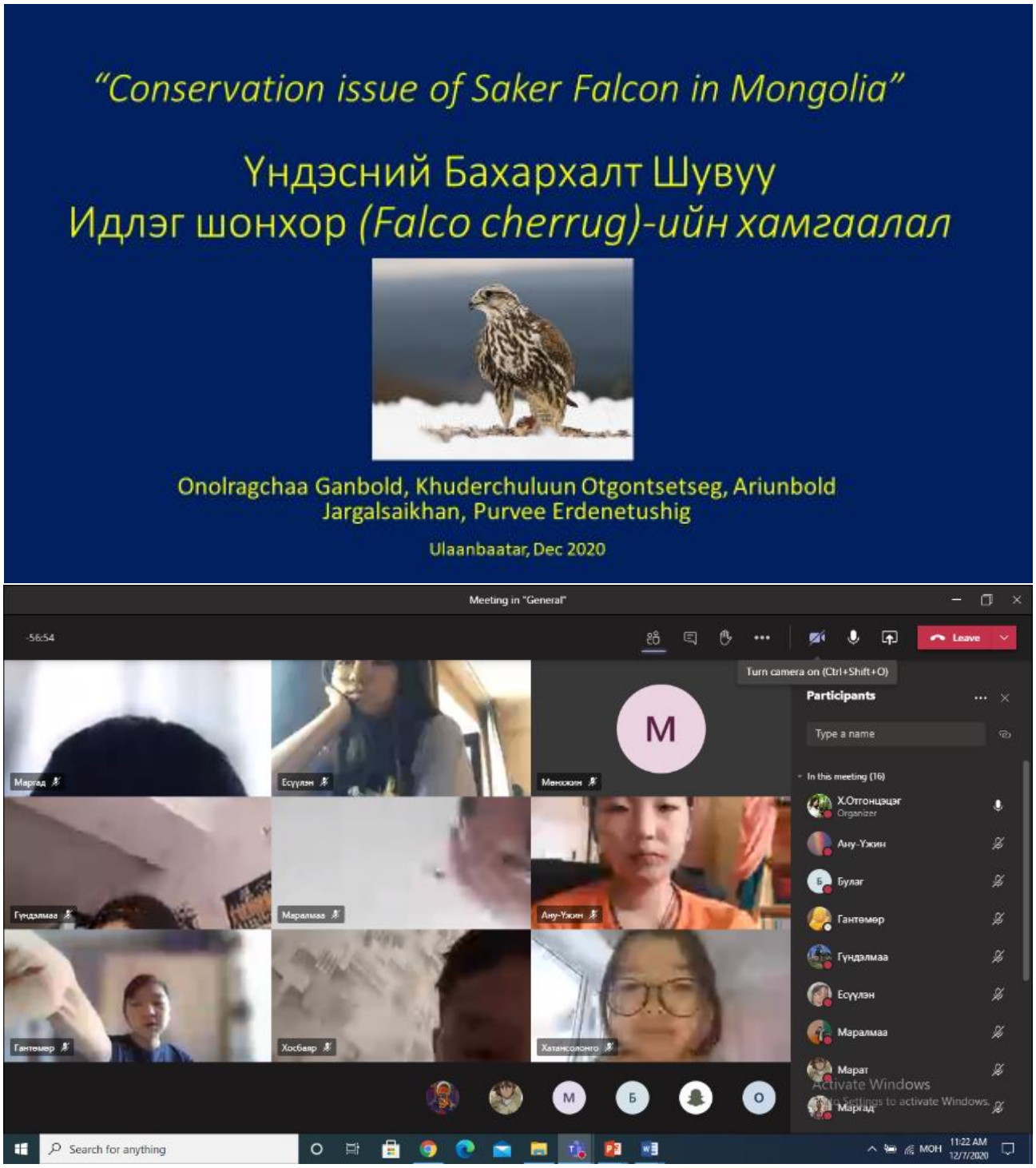

Figure 8. Photos from our lessons

Figure 9. The process of stuffing Saker Falcon using carcass that we found from field. It will be used as raw material for any classes.