



Darwin Initiative/D+ Project Half Year Report (due 31st October 2019)

Project reference	26-020
Project title	Securing wild tulips and pastoral communities in the Kyrgyz mountains
Country(ies)/territory(ies)	Kyrgyzstan
Lead organisation	Fauna & Flora International (FFI)
Partner(s)	Delivery: Association of Forest Users and Land Users of Kyrgyzstan (AFLUK); Bioesurs & Cambridge University Botanic Gardens (CUBG), Key stakeholders: National Academy of Sciences of the Republic of Kyrgyzstan; National Pasture Users Association of Kyrgyzstan “Kyrgyz Jayity” & Gareev Botanical Garden (GBG)
Project leader	Jarkyn Samanchina
Report date and number (e.g. HYR3)	30 th October, 2019, HYR1
Project website/blog/social media etc.	

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

Discussions on the log-frame and role of each partner were undertaken during a launch event on May 2nd. Subsequently, each partner has focused on their part of the project, with close communication facilitated through regular meetings, email exchange and a much used project WhatsApp group. A map of the project sites is included for reference. Two sites are in the south, Sulyukta and Baul (Batken Region) and one is in the north, Shamshy (Chui region). Each site was selected for presence of Kyrgyz Red Data Book tulip species (3 sp. in Sulyukta; 3 sp. in Baul and 4 sp. in Shamshy).



Output 1: Increased knowledge of wild tulip species for in-situ and ex-situ conservation

Field surveys & monitoring: Tulip surveys were conducted in the flowering season (April-June 2019) throughout Kyrgyzstan (including our project sites). This was led by Bioesurs in collaboration with National Academy of Sciences (NAS) specialists and a PhD student from Cambridge University Botanic Garden (CUBG). The survey team completed four 7-10-day field trips covering 31 habitats for wild tulips in the south and north of Kyrgyzstan (Photos 4 and 5). Data were collected on floristic composition, range, actual and predicted abundance and threats (biotic and abiotic) (see tulip survey records in Appendix 2). The team collected samples from most tulip species represented in

Kyrgyzstan. Leaf materials were dried using silica gel for genetic studies. Some samples are intended for storage in CUBG and others for the NAS. Data were collected on the following tulip species:

T. affinis — subendemic; *T. anadroma* — endemic; *T. bifloriformis* — subendemic; *T. binutans* — subendemic; *T. dasystemon* — subendemic; *T. dasystemonoides* — subendemic; *T. dubia* — subendemic; *T. ferganica* — subendemic; *T. greigii* — subendemic; *T. kaufmanniana* — subendemic; *T. korolkowii* — subendemic; *T. ostrowskiana* — subendemic; *T. platystemon* — endemic; *T. rosea* — subendemic; *T. tarda* — subendemic; *T. tetraphylla* — subendemic; *T. turkestanica* — subendemic; *T. zenaidae* — endemic and *T. aff. zenaidae* — endemic.

At the end of May, in collaboration with Brett Wilson, Bioresurs staff set up 6 fenced and 6 unfenced plots (each is 100 m²) in Shamsy gorge for the monitoring of tulips (more details are given the report in Appendix 1). This will form part of our plans for long-term monitoring.

Development of research methodology and field forms: AFLUK established a working group (involving 8 specialists from AFLUK, the National Association of Pasture Users, the NAS and Bioresurs) which, from June-August, developed all relevant methodologies and survey forms (see: Appendix 3: Pasture Research Methodology, Appendix 4: Pasture Monitoring, Appendix 5: Sociological Survey).

Awareness raising and pasture research: AFLUK travelled to Suluktu, Baul and Shamsy in May and August-September 2019 to meet with and inform government representatives and local pasture users about the project activities (including the consultations scheduled under Output 2). As part of these expeditions, they completed scoping research on pasture management (using methods developed by the working groups in Appendix 3). Highlights from each site include:

In **Baul** the Pasture committee (PC) is responsible for 9,063 ha of pastures (including spring-autumn and winter pastures). In total, 650 pasture tickets (permits given to people to take their livestock to the pastures) are issued each year and users have around 10,000 sheep and goats, 5,775 cattle and 600 horses. Tulips grow in the spring-autumn pastures found in Buul, Bedersia, Ozgorush and Baul. The PC has an annual plan for pasture use and an estimated budget of 448,000 soms (~£5,000).

In **Suluktu** the PC is based in Kulundu and is responsible for 31,000 ha of pasture lands. Users have about 25,000 sheep and goats, 6,000 cattle and 600 horses. The main tulip area is located on Tytty pastures with a total area of 500 ha including 150 ha of land with well-preserved tulips (a potential core conservation area). According to the grazing plan, 1000 sheep and goats, 100 cattle and 50 horses were permitted in Tytty in 2019. The budget of the PC is 1,187,000 soms (~£13,200).

In **Shamsy** the local PC is responsible for 11,000 ha of pastures, of which 512 ha are in the Suusamyр Valley (summer pastures not in use due to their distance from the villages). Users have 2,200 sheep and goats, 2,000 cattle and 700 horses. Tulips grow in Tuura-Kayin, Ak-Zhalpak, Tuyuk, Bogok-Dobo and Chon-Chetindi pastures. Management plans and an annual plan are in place. The PC collects 360,000 KGS pasture fees (~£4,000) although nearly 2/3 of the budget goes to local govt. and land tax. Most of the remaining 1/3 is needed for salaries and running costs; as a result, the PC has insufficient financial resources to fulfill its responsibility on pasture management.

Social surveys: The CUBG PhD student carried out ten key-informant interviews with expert botanists, conservationists, and pasture management directors across Kyrgyzstan, to help develop a broad national understanding on issues facing tulips. Initial findings confirm that livestock grazing is the greatest threat to tulips and that livestock populations are increasing and being allowed to graze over larger areas than in previous years. AFLUK completed social surveys (using the form developed by the working group (Appendix 5: Form for Sociological Survey)) with pasture users at the project sites to explore their knowledge, attitudes and practices and to develop baselines for the social impact of the project. Surveys were completed in **Suluktu** (46 people (22 men and 24 women) from 9-12 August), **Baul** (46 people (33 men, 12 women and 1 person who did not indicate gender) from 13-16 August) and **Shamsy** (41 people (28 men and 13 women) from 4-5 September and 11 October). Results are presented in detail in Appendix 6 but some headlines include the importance of livestock (89% of people keep livestock); the challenges around regulation (95% of people try to hide the real

number of livestock they keep) and the challenges around incentivizing improved management (75% of people are aware of tulips but only 4.5% believe degradation is a significant problem).

Preparation and analysis of collected seeds and bulbs for planting: All tulip seeds and bulbs collected during the field surveys were cleaned and prepared for sowing and planting (with a small proportion of seeds used for the calculation of seed productivity). In total, Bioresurs collected 1395 bulbs (including 267 offsets) and 478 grams of seeds from 9 tulip species (see more info in Table 1). After the cleaning process, bulbs and seeds were distributed among the partners for planting (Table 2 and 3) which has been carried out in four areas. The purpose of plantings is to provide a number of safe *ex situ* collections for these species, learn more about germination requirements (under different conditions) and provide material for future reintroduction plantings. Planting events are listed below:

- On October 12, Bioresurs planted 163 tulip bulbs in Chunkurchak gorge. This high mountain area, located on the Northern slope of the Kyrgyz ridge, is owned by Bioresurs and provides an excellent place for high-montane species. (Photo 6)
- On October 20, Bioresurs donated 191 bulbs to AFLUK for planting in a demonstration site in Arashan village near Bishkek (Photo 12)
- On October 21, 273 bulbs were planted in the experimental site of the Institute of Chemistry and Phytotechnology of the National Academy of Sciences, located within the E. Gareev Botanical Garden. (Photo 7)
- On October 30, 499 bulbs were planted to Bishkek Botanical Garden in a new plot, established with materials purchased by FFI. (Photo 13)

Output 2: Grazing communities engaged in pasture planning and management.

AFLUK completed a review of current practice and legislation in relation to pasture management (see Appendix 7) which has been shared with the partners as a learning document and will be used to guide activities related to pasture management planning later on in Year 1 and in Year 2.

From August to September 2019, AFLUK facilitated consultation meetings at each project site:

- Suluktu, August 13, 2019, attended by 39 participants (18 men & 21 women) Photo 9.
- Baul, August 16, 2019, attended by 29 participants (23 men & 6 women). Photo 10.
- Shamschy, September 19, 2019 attended by 24 participants (14 men & 10 women). Photo 11.

These meetings were held with representatives from: the local Ayil aimak, Pasture Committee, forestry enterprise, pasture users, NAS, and protected area staff. In each meeting, the participants had the opportunity to listen to the speakers, ask questions, discuss potential issues and provide recommendations. Some recommendations that came from the meetings included: **1.** Proper planning of pasture use; **2.** Include tulip conservation measures in the management plan; **3.** Create a tulip conservation demonstration site; **4.** Reduce the number of livestock; **5.** The subsoil user agreement should include several measures to preserve and restore pastures and endangered species of grasses/plants and **6.** Conduct an information campaign. Next steps for work under this output will focus on supporting better pasture management planning at each site.

Output 3: Pasture users applying skills to support recovery of grasslands

Activities in Output 3 (focused on capacity building) will start later in Year 1 and in Year 2 once the training needs of local pasture users are fully understood.

Output 4: Cultural value of tulips supports community led in-situ conservation of tulips.

As part of the community-led wild tulip conservation work, in June 2019, FFI's Kyrgyzstan team, together with a Senior Researcher from the National Academy of Sciences, held a series of half a day awareness and training sessions at all three project sites. These were largely focused at school children (see photos 1 and 2) but also involved members of the Shamschy Forestry Unit. (Photo 3). A total of 113 children and adults were involved in wild tulip protection training sessions.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

Significant time spent with the pasture users has confirmed that (1) many do not attach importance to the disappearance of tulips, and (2) the planning of pasture use is carried out without considering the protection of wild tulips. A sharp increase in livestock, especially in recent years, has led to degradation of pasture areas where tulips grow. However, many users expressed willingness to assist in the implementation of project activities, and they made several proposals to improve the condition of pastures and measures for the conservation of wild tulips. The project has an opportunity to catalyse a shift in attitudes and behavior towards these ends.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS:	Yes/ <u>No changes requested</u>
Formal change request submitted:	Yes/ <u>No changes requested</u>
Received confirmation of change acceptance	Yes/ <u>No changes requested</u>

3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

None.

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document. Additionally, if you were funded under R25 and asked to provide further information by your first half year report, please attach your response as a separate document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request. **Please DO NOT send these in the same email.**

Please send your **completed report** by email to Darwin-Projects@ltsi.co.uk. The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 25-035 Darwin Half Year Report**