

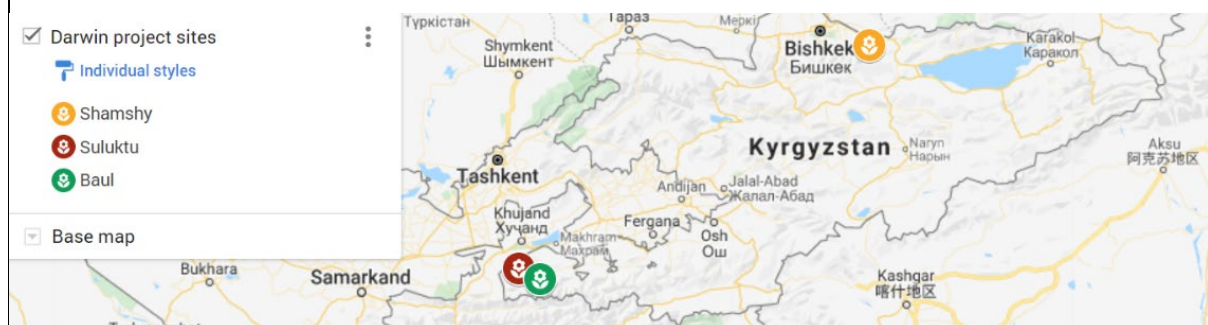


## Darwin Initiative/Darwin Plus Projects Half Year Report (due 31<sup>st</sup> October 2020)

<b>Project reference</b>	26-020
<b>Project title</b>	Securing wild tulips and pastoral communities in the Kyrgyz mountains
<b>Country(ies)/territory(ies)</b>	Kyrgyzstan
<b>Lead organisation</b>	Fauna & Flora International (FFI)
<b>Partner(s)</b>	<b>Delivery:</b> Association of Forest Users and Land Users of Kyrgyzstan (AFLUK); Bioresurs & Cambridge University Botanic Gardens (CUBG). <b>Key stakeholders:</b> National Academy of Sciences of the Republic of Kyrgyzstan; National Pasture Users Association of Kyrgyzstan "Kyrgyz Jayity" & Gareev Botanical Garden (GBG)
<b>Project leader</b>	<i>Jarkyn Samanchina</i>
<b>Report date and number (e.g. HYR3)</b>	30 <sup>th</sup> October, 2020, HYR2
<b>Project website/blog/social media</b>	<a href="https://www.fauna-flora.org/projects/securing-wild-tulips-montane-grasslands-kyrgyzstan">https://www.fauna-flora.org/projects/securing-wild-tulips-montane-grasslands-kyrgyzstan</a>

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

The project team convened a ZOOM meeting in May 2020 to review the Y2 workplan. Close communication was facilitated by frequent phone calls, e-mails, and messages through the established 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 Sulyuktu; 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:** Bioresurs conducted tulip surveys during the late end of the flowering season (late April-May-June 2020) in 22 wild tulip habitats in Osh, Jalal-Abad, Talas, Issyk-Kul and Chui regions (including our project sites). Data were collected on floral composition, range, abundance and threats. Species monitored in Y2 include: *Tulipa heterophilla*, *T. kolpakowskiana*, *T. tetraphylla*, *T. binutans*, *T. zenaidae*, *T. ostrowskiana*, *T. sp.*, *T. platystemon*, *T. ferganica*, *T. dasystemon*, *T. gregii*, *T. jacquesii*, *T. talassica*. The group has now collected samples from most tulip species in Kyrgyzstan. Sheet material was dried using silica gel for genetic studies and samples will be shared with CUBG and NAS.

**Testing conservation interventions:** To better understand whether reduced grazing benefits tulips species and habitat, the project team collected various data from six non-fenced control pilot sites and five of the six fenced pilot sites (10x10 m<sup>2</sup>) that were erected in Shamschy gorge in 2019 as part of Brett Wilson's PhD work (unfortunately, fencing in one site had been removed). Data were collected on tulip abundance in May 2019 (to compare to a May 2019 baseline) and new baselines were collected in July-August 2020 on species diversity, vegetation, and pasture condition and productivity by pasture experts and FFI Central Asia ecologist Ormon Sultangaziev. In August 2020, a microbiological soil analysis was conducted in three fenced areas to provide an additional baseline indicator for soil health.

**Collecting seeds and bulbs for planting:** 58.2g of tulip seeds and 663 bulbs (including 202 offsets) were collected from 11 species, nine from the wild: *Tulipa ostrowskiana*, *T. zenaidae*, *T. gregii*, *T. heterophilla*, *T. ferganica*, *T. talassica*, *T. kaufmanniana*, *T. jacquesii*, and two from tulips grown in botanic gardens: *T. kaufmanniana* and *T. zonneveldii*. This adds to 1,395 bulbs (including 267 offsets) and 478 grams of seeds collected in Y1. Wild tulips collected in Y2 for the first time include: *T. heterophilla*, *T. talassica*, *T. jacquesii*. Bulbs and seeds of wild tulips were distributed to two experimental sites in Kyrgyzstan in October 2020: one in Bishkek and another in Chunkurchak gorge. These sites have different microclimates, providing different optimal conditions for different species. Seeds from 6 tulip species have been prepared for sending to CUBG (29.1 g) and Gareev Botanical Garden of NAS KR (29.1 g).

Tulips planted in experimental sites in Y1 were monitored in Year 2, with data collected on growth, bulb propagation, health and germination rates. These data are being compiled as part of work to understand best growing conditions for different tulips species.

## **Output 2: Grazing communities are more engaged in pasture planning and management.**

**Development of guidelines for pasture management and monitoring:** Following a planning workshop completed at the end of Year 1 (Feb 2020), the partners agreed that FFI should contract experts from the Livestock and Pastures Research Institute of Kyrgyzstan (LPRIK) to support development of guidelines for monitoring pastures and to enhance knowledge sharing with pasture groups on the ground. Following a scoping exercise to field sites in Baul and Sulyuktu, in May 2020, pasture and invertebrate experts produced guidelines for pasture monitoring and management (developed to be easy to use by pasture users) and presented it to the project partners over a ZOOM meeting.

In August 2020, the AFLUK team, with the help of pasture experts from LPRIK, assessed and monitored summer pastures using the new guidelines: in four experimental plots (150 ha) in Shamschy, five plots (300 ha) in Baul and four in Sulyuktu (100ha) – these methods differ in scale compared to those mentioned under Output 1 (which test impacts on fencing small areas of land), and are designed to pick up effects of changed pasture management across a large scale. Data on vegetation cover, species composition, pasture types, current state of pastures were collected and recommendations were given to the Pasture Committees.

**Improving pasture management:** AFLUK held meetings with the Pasture Committee and pasture users at all three project sites, during which they developed indicators to monitor and evaluate the implementation of existing pasture management plans (of which is there currently poor awareness and implementation). The project also conducted an anonymous survey of 123 respondents on the interaction between pasture structures. The meetings revealed that in Sulyuktu there is no functioning Pasture Committee (meaning that there is no local body to effectively govern pasture use in the area). To help address this, in August AFLUK initiated discussions with the Mayor of Sulyuktu to discuss the possibility of establishing a Pasture Committee, and AFLUK will continue to push for this over the second half of Year 2.

In Y1 AFLUK held consultations with the heads of Pasture Committees and Forestry Units regarding setting aside area of important tulip habitat for no or limited use, and in Y2 this was followed by a series of meetings during which representatives of the community, Ayil Okmotu (local government), pasture users, Pasture Committees and Forestry Units identified and approved the locations and size of pasture areas. In August

2020 agreements were signed to limit use within a total of 550 ha of pasture lands from Shamshy Ayil Okmotu (150 ha), Kulundu Ayil Okmotu in Sulyuktu (100 ha) and Leilek Forestry Unit in Baul (300 ha).

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

As part of the project's work to support improved management of pastures in the field, in June 2020 AFLUK and LPRIK pasture experts completed trainings on pasture improvement methods with pasture committee members and pasture users at three project sites: in **Baul** - 21 participants (24% women), **Sulyuktu** - 12 participants (24% women) and **Shamshy** - 10 participants (2% women).

AFLUK and LPRIK then conducted awareness-raising seminars on the legal framework and procedures of pasture management and use on the pastures. These workshops were completed in June 2020 in **Baul** (34 participants (35% women)) and **Sulyuktu** (40 participants (25% women)) and in August 2020, in **Shamshy** (31 participants (19% of women))

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

Fencing: In addition to the fenced monitoring plots established in Year 1 (see Output 1), the project has also supported community led initiatives to fence known important areas of tulip habitat. This included fencing two further plots (1 ha each) in Shamshy gorge in July 2020 and 3 hectares in near Baul village in September 2020. Altogether, the project has fenced 11 hectares of important tulip habitat. In September 2020, Bioresource created one tulip protection group in Baul – formed of 10 people from a local high school - who will monitor and protect tulips and maintain the fenced sites. Each member was provided with basic equipment (caps, vests and a bag) to use during monitoring work.

Tulip advertising: The project recognises the long-term potential for ecotourism – associated with visiting tulip habitats and vistas - as a potential source of alternative revenue for pasture communities. To begin this work, AFLUK held talks with two touristic companies: "Mountaining Company" and "Silk Way touristic association" and both showed interest in including wild tulip habitats in their program, and in informing tourists about the diversity of tulips, their value and conservation. An agreement to collaborate on tulip conservation has been drafted and will be signed later this year.

### **2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months (for Covid-19 specific delays/problems, please use 2b). Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

In 2020 one of the fenced experimental sites erected by PhD student Brett Wilson, was lost. The reason is not clear; but it seems likely that the materials may have been stolen. A local man from Shamshy has agreed to act as a monitor of the remaining plots to prevent further losses.

Our survey of pasture users confirmed that many were not involved in (or aware of) the development of existing pasture management plans – developed prior to the project - and that they are not satisfied with the work of Pasture Committees. However, the survey also revealed that there is no shortage of pastures and that better planning has potential to improve management of the areas. Our project is working to bring pasture users and pasture committees together to revise and improve exiting plans.

### **2b. Please outline any specific issues which your project has encountered as a result of Covid-19. Where you have adapted your project activities in response to the pandemic, please briefly outline how you have done so here. Explain what residual impact there may be on your project and whether the changes will affect the budget and timetable of project activities.**

Due to the introduction of a state of emergency in the Kyrgyz Republic to mitigate spread of Covid-19, many activities could not be carried out as planned. Activities that we had to postpone or adapt include:

1. Postponement of tulip field trips in April, when many species of tulips were in flowering; trips did go ahead in May and June when it became possible to obtain permission to travel.
2. PhD student Brett Wilson could not travel to the field in 2020, although Bioresurs helped to collect a number of specimens on his behalf.
3. A planned training seminar to identify a tulip protection group in the village of Shamsy was postponed to 2021.
4. Education classes in local schools – including a master class in tulip cultivation - at all three project sites were postponed to 2021.
5. An exchange trip planned to the UK for five Kyrgyz scientists was also postponed and now scheduled for Y3 when we hope that international travel will be possible.

**2c. 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/ No changes yet requested.  
*We had planned to catch-up on postponed activities in the Autumn, following the initial decrease in Covid-19 infection rates. Although we have managed to catch-up on certain activities, a recent increase in Covid-19 infection rates observed over October in Kyrgyzstan will have an ongoing impact on delivery over the coming months in Year 2. As such, we now plan to submit a formal change request to LTS in the coming days.*

Formal change request submitted: Yes/ No changes yet requested. We will submit a change request ASAP to ask permission to carry forward activities and associated budget into Year 3, due to COVID-19 related postponement of activities in Year 2.

Received confirmation of change acceptance Yes/ No changes requested

**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. Please DO NOT send these in the same email as your report.**

**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.**

**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](mailto: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: 25-001 Darwin Half Year Report**