## **Darwin Initiative**

## Half Year Report (due 31 October each year)

PLEASE NOTE: Due to the increased number of reports expected in 2005, we <u>will not be able to confirm receipt of reports</u> but will contact you individually should any questions arise

**Project Ref. No.** 162 / 11 / 025

**Project Title** Cross-border conservation strategies for Altai Mountain Endemics

(Russia, Mongolia, Kazakhstan)

Country(ies) UK, Russia, Mongolia, Kazakhstan

**UK Organisation** University of Sheffield

**Collaborator(s)** Tomsk State University (Russia); Hovd branch of Mongolian State

University; Altai Botanical Gardens (Leninogorsk, Kazakhstan)

**Report date** 31 October 2005

**Report No. (HYR 1/2/3/4)** HYR 4

Project website <a href="http://www.ecos.tsu.ru/altai">http://www.ecos.tsu.ru/altai</a> (Currently only available locally in Tomsk)

# 1. Outline progress over the last 6 months (April – September) against the agreed baseline timetable for the project.

## Key milestones for first 6-months of Year 4 (April 2005 – Sept. 2005):

May 2005 Field workshop in Ridder (formerly Leninogorsk), Kazakhstan

Field workshop took place at the Altai Botanical Gardens in Ridder 27–28 May, 2005. > 25 participants including staff of the Botanical Gardens, the local Administration, Forestry Service the West Altai State Nature Reserve and a local NGO. *See programme in attached file* Program\_kz.doc.

## May 2005 (UK staff in host country) (2 weeks)

Two UK project staff (Dr. S. Shaw & Dr. J. Hodgson) spent two weeks in E. Kazakhstan together with Tomsk colleagues (A. Pyak, A. Ebel, A. Zverev), participating in workshop, field survey and project discussions. Areas of visit: Kyzylkum sands, Djilitau Dale, Narymski and Kalbinski mountain ranges, Kiin-Kerish Dale, Bukhtarma Reservoir.

### Sep 2005 Final Symposium in Tomsk at which findings will be presented and disseminated.

Final Symposium was moved to Kyzyl (Tuva Republic) and combined with VII International conference "Environmental Conditions, History and Culture of West Mongolia and Adjacent Regions", September 19-23, in order to increase the amount of publicity for the project (see below).

## Project outputs for first 6-months of Year 4 (April 2005–Sept. 2005):

Sept. 2005 Enhancement of the plant collection from Mountain Altai in the Herbarium of Tomsk University. 3 herbarium collections of endemic species established (for Mongolian, Kazakhstan & Russian Altai).

More than 400 herbarium vouchers of endemic and rare plants of the Altai have been added to the collection of vascular plants in the Herbarium after P.N. Krylov at TSU. Separate collections of Altai endemic plants have been prepared to be handed over to the authorities in 3 host countries (Russian Altai collection – 50 vouchers, Kazakhstan and Mongolian Altai – 20 each). Each specimen has been fully identified, mounted, labelled and additionally supplied with a label which includes the Darwin Initiative Logo and Project name. An example of a

herbarium voucher specimen is shown in the attached file *Mertensia.jpg*.

Sept. 2005 Publication of the illustrated scientific book "Endemics of the Altai" (in English)

The book will be published in the UK by 'WILDGuides' (planned for Spring 2006). Preparations are taking longer than originally anticipated, but work is well advanced, and the text should be with the Publisher by Christmas.

Sept. 2005 2 Videos, 10 information leaflets about rare Altai species, dedicated web site, photo collection of endemic species and typical habitats

One video film and one PowerPoint presentation on endemic plants of the Mongolian Altai have been prepared to use in teaching students in Tomsk and Hovd Universities. 10 information leaflets about rare Altai species and sites with high level of biodiversity are being prepared and printed (see example in attached file *saussaurea\_7.pdf*). Over 1400 photographs of endemic and rare plants and their typical habitats are available in digital form from the ECOS server in Tomsk and the project WEB site (http://ecos.tsu.ru/altai) is being updated. [Unfortunately, due to server problems, the photos and website are currently only available locally in Tomsk].

Sept. 2005 25 species action plans (c. 25% of Altai endemics) and 10 site management plans produced, for use by public authorities, local administrations and scientists.

13 species action plans have been completed and 10 are currently in draft and under consultation. These, and the remaining plans, will be completed once work on the book is further advanced.

Sept. 2005 GIS electronic maps of species distributions handed over. 3 databases handedover (for Russia, Kazakhstan and Mongolian Altai). The local databases will be amalgamated into one general database covering the whole area.

Using the database on species locations, climatic and topographical data for the area, GIS technologies and GARP (Genetic Algorithm for Rule-Set Production) modeling program, maps for 79 Altai endemic species were generated. Each map shows actual species locations together with predicted distribution (see example in the attached file *Rhodiola\_algida.doc*). It has been decided that it would be better not to split the database with information specific to each country, but to keep all of the data together. More species location data will be added and the database will be handed over at the end of the project, together with herbarium collections and GIS maps.

Sept. 2005 1 national / local press release issued in the UK and in each of the 3 participating host countries at the end of the project.

This will be done to coincide with the publication of the book – planned for Spring 2006.

#### Dissemination of information

One poster and four reports were presented at the VII International conference "Environmental Conditions, History and Culture of West Mongolia and Adjacent Regions", Kyzyl (Tuva Republic), Sep 19-23, 2005. Four reports were presented at the 4<sup>th</sup> International scientific conference "Problems of Botany of South Siberia and Mongolia" in Barnaul. A list of publications is given below.

2. Give details of any notable problems or unexpected developments 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.

Preparation of outputs has taken longer than anticipated, in particular work on the book "Endemic Plants of the Altai Mountains", which we are pleased to say will now be published by WILDGuides in the UK. It is planned to publish the book in Spring 2006. This has affected work on the other outputs, although most of these are either completed or already in draft form. However, we are confident that work on all outputs will be completed within this financial year.

Have any of these issues been discussed with the Darwin Secretariat and if so, have changes been made to the original agreement?

Yes, these changes have been discussed with the Darwin Secretariat, and an extension to the original project deadline agreed (to the end of the current financial year).

Discussed with the DI Secretariat: YES, in August/Sept. 2005

Changes to the project schedule/workplan: YES, in August/Sept. 2005

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

No

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 <u>planned</u> modifications to your project schedule/workplan or budget should <u>not</u> be discussed in this report but raised with the Darwin Secretariat directly.

Please send your **completed form by 31 October each year per email** to Stefanie Halfmann, Darwin Initiative M&E Programme, <u>stefanie.halfmann@ed.ac.uk</u>. The report should be between 1-2 pages maximum. <u>Please state your project reference number in the header of your email message.</u>

# **List of publications in Year 4:**

#### **Published:**

- 1. Ebel A.L., Rudaya N.A (2005). On distribution of some endemic plants of Altai in West Mongolia // Environmental conditions, history and culture of West Mongolia and adjacent regions: VII International conference reports (September 19–23 2005, Kyzyl): Tom 1. P. 318–322.
- 2. Hodgson J.G., Pyak A., Ebel A., Revushkin A., Zverev A., Kotukhov Y., Shaw S.C., Wheeler B.D. (2005). Conserving the rare and endemic species of Altai assessing the impacts of changing land use // Environmental conditions, history and culture of West Mongolia and adjacent regions: VII International conference reports (September 19–23 2005, Kyzyl): Volume 1. P. 335–340.
- 3. Shaw S.C., Ebel A., Zverev A., Pyak A., Oyunchimeg D., Kotukhov Y., Revushkin A., Semenova N., Gaston K.J., Hodgson J.G., B Nagy, A., Wheeler B.D. (2005). Action plans for the conservation of endemic plants in the Altai Mountains // Environmental conditions, history and culture of West Mongolia and adjacent regions: VII International conference reports (September 19–23 2005, Kyzyl): Volume 1. P. 348–351.
- 4. Semenova N. 2005. Land Resources of the Altai Republic; Structure, Use and Protection. *Nature Conservation*, Issue 3. Tomsk.

#### In Print:

5. Revushkin A., Pyak A., Oyuunchimeg D., Kotuhov Yu. (2005). On floristic zoning of Altai on basis of study of features of special distribution of endemic plants // Environmental conditions, history and culture of West Mongolia and adjacent regions: VII International conference reports (September 19–23 2005, Kyzyl): Volume 2.

#### Accepted:

- 6. Pyak A.I., Shaw S.C., Ebel A.L., Zverev A.A., Morenko M.O., Hodgson J.G., Oyunchimeg D., Willis A.J. Wheeler B.D. A new species of Lagopsis (Lamiaceae) from Mongolia // Kew Bulletin
- 7. Morenko M.O. Endemic and rare species of *Chenopodiaceae* in Russian and Mongolian Altai // Problems of Botany of South Siberia and Mongolia. 4<sup>th</sup> International scientific conference. Barnaul, 2005
- 8. Schegoleva N.V., Ebel A.L. About endemic species of *Ranunculaceae* in Altai-Sayan floristic province // Problems of Botany of South Siberia and Mongolia. 4<sup>th</sup> International scientific conference. Barnaul, 2005.
- 9. Schegoleva N., Zverev A. Aspects of geographical distribution of genus *Ranunculus* L. in Altai-Sajan mountain country // Problems of Botany of South Siberia and Mongolia. 4<sup>th</sup> International scientific conference. Barnaul, 2005.
- 10. Zverev A., Nagy A., Goettsch B., Pyak A., Ebel A. Essay on generation of predictive maps of spatial distribution for endemic plants of Altai Mountains // Problems of Botany of South Siberia and Mongolia. 4<sup>th</sup> International scientific conference, Barnaul, 2005.
- 11. Ebel A. On some botanical outcomes of complex expeditions to Western Mongolia // Journal of Mongolian Altai Studies. 2005, Vol. 1.
- 12. Pyak A., Oyuunchimeg D., Myagmarjav U. Results of floristic studies in Western Mongolia under terms of the international project "Cross-border conservation strategies for Altai Mountain Endemics (Russia, Mongolia, Kazakhstan)"// Journal of Mongolian Altai Studies. 2005, Vol. 1.