

January 2007

## **Mongolia Exit Report Raleigh International**

### **Project Information**

<b>Project Title</b>	Large Mammal Conservation and Sustainable Resource Use in the Khan Khentii Special Protected Area
<b>Country</b>	Mongolia
<b>Contractor</b>	Raleigh International (RI)
<b>Project Reference No.</b>	09/013
<b>Grant Value</b>	£164,264
<b>Original start date</b>	June 2000
<b>Original project length envisaged</b>	Three years
<b>Project finish date</b>	March 2002

### **1. Explanation for premature finish date**

The Darwin Initiative (DI)-funded project in Mongolia ran successfully for eighteen months. This was done in conjunction with Raleigh International (RI) who were the grant-holders of the project. Due to the logistical capacity of RI, the DI research was carried out in remote areas of Mongolia. In addition, RI provided approximately 150 young volunteers (aged 17-25) known as 'venturers' who collected data for the project. This meant that a large amount of data was collected over a short amount of time and a big geographical area was covered. However, due to the fact that RI operates with young volunteers, it reviewed its responsibilities and decided that it was no longer able to operate in Mongolia.

Mongolia is a large country with little infrastructure, particularly in terms of internal transport. Tarmac roads do not exist 60 kilometres outside Ulaan Baatar and internal flights (by helicopter or fixed wing plane) have been shown to be hazardous and have a bad safety record. RI is responsible for the welfare of over 120 people on every expedition and therefore felt that it could no longer operate in a country that was unable to provide effective internal transport or good medical facilities. Thus in September 2001, RI ceased operating in Mongolia. This has obviously had a severe effect on the DI project

## **2. Background to the project**

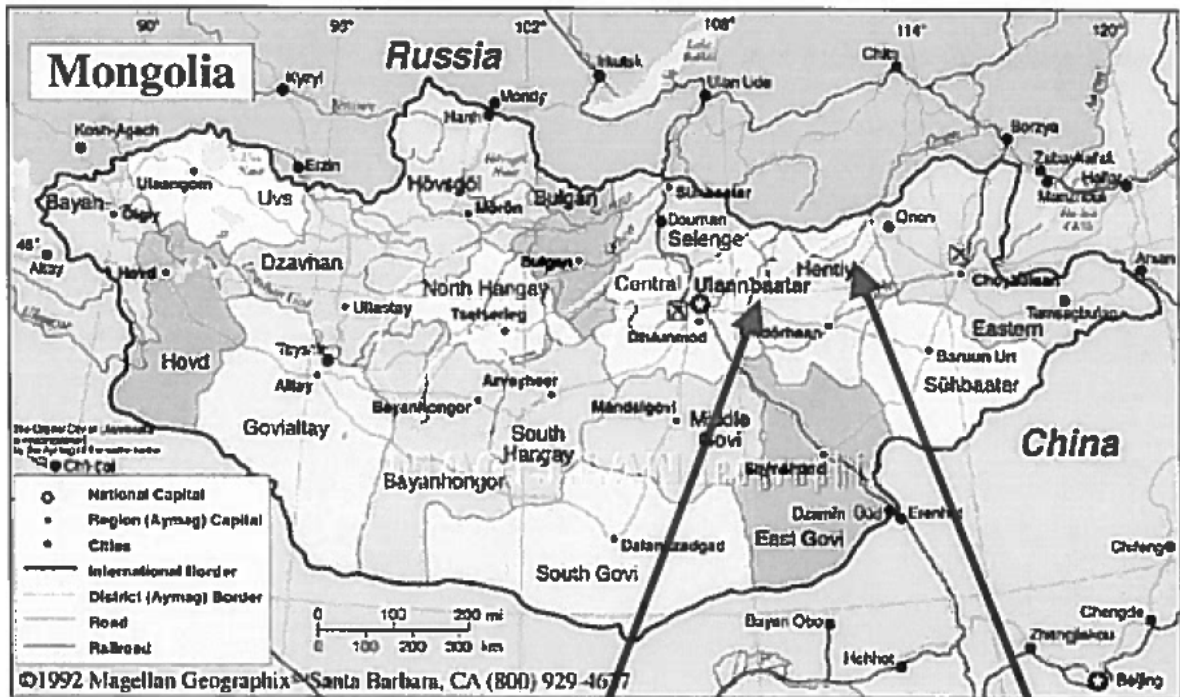
RI worked in Mongolia from 1999 – 2002. It carried out environmental survey work in the Khan Khentii Special Protected Area (KKSPA) for two years prior to the DI project, in partnership with the German technical agency for international co-operation, GTZ. It was during this time that the problem of dwindling numbers of large mammal species became apparent. Two members of RI, Johnathan Cooke and Matthew Foster, went to Mongolia and discussed the problem with members of GTZ, the KKSPA Administration and the Ministry of Environment. They subsequently put together a proposal aiming to promote the long-term survival of large mammal species in the KKSPA. This was submitted to the DI and in March 2000, funding was awarded.

The Khan Khentii Special Protected Area (KKSPA) is an area of taiga forest covering 1.2 million hectares. It is located north east of Ulaan Bataar and is part of the larger taiga forest that stretches from Siberia to Scandinavia. It supports the following large herbivorous mammal species: moose, red deer, roe deer, musk deer and wild boar. All of these have a resource value. The demand from the Chinese medicine market contributes greatly to this. After Russia withdrew from Mongolia in 1991, the China/Mongolia border opened up allowing freer movement of people and goods between the two countries. This has enabled animal parts to be smuggled to China with relative ease. The withdrawal of Russia from Mongolia also resulted in the loss of many jobs for the Mongolians. This meant that many previously employed individuals had to start hunting wildlife in order to survive. As a result of these two factors, the above-mentioned animals are hunted heavily and have become locally endangered (except for the musk deer which is globally endangered).

Raleigh International (RI) is a youth development charity that aims to develop young people through challenging community and environmental work on projects and expeditions around the world. Venturers are from the United Kingdom, the 'host' country (in this case Mongolia) and many other parts of the world. RI worked on this project under the scientific guidance of the Macaulay Institute (MI) in Aberdeen, Scotland. Most of the ecological data collection was done by the venturers under the guidance of UK and Mongolian scientists.



The Khan Khentii Special Protected Area, August 2000.



Mungenmort

Batshireet

Map showing the two areas in the KKSPA where the Darwin Initiative work was carried out, Mungenmort and Batshireet.

### **3. Overall Project Purpose:**

The overall aim of the project was to determine the population density and population size of the five above-mentioned large mammal species in different habitat types in the KKSPA. This was in order to promote their long-term survival in the area through effective management.

#### **Outputs:**

##### **Methods employed to determine the population size and distribution of the large herbivorous mammal species present in the KKSPA:**

- Direct survey work took the form of vantage point surveys using binoculars. Surveys from hilltops over-looking valley and river areas were carried out every morning and evening throughout the survey period at dawn and dusk.
- Direct and indirect survey methods were employed to assess the density and size of the populations of red deer, roe deer, musk deer, moose and wild boar in the Batshireet region of the KKSPA. Details of the indirect methods used (in the form of the information sheet given to those carrying out the survey work) and a data collection sheet can be seen in Appendix 1.
- In addition to the ecological work, members of the local community and local rangers were interviewed on a casual basis to get an idea of how they felt population sizes and densities of the relevant mammal species had changed over time.
- Formal interviews of this nature were conducted by Dorcas Pratt, a Masters student from the University of Aberdeen. The results of these formed the dissertation section of her Masters thesis.
- The results collected from the indirect survey methods are currently being analysed. Once this has been done the work will be written up and submitted to a relevant peer-reviewed journal.

#### **Preliminary results**

- The results of the vantage point surveys showed that there were very low densities and numbers of large mammal species present in the Batshireet and Mungenmort regions of the KKSPA. Despite carrying out surveys every day for entire study periods in various locations, very few animals were actually seen.
- The results of the indirect surveying showed that densities and population numbers were low. Due to this, it proved to be a more successful method of surveying than the direct methods.
- All local people were under the impression that numbers of large mammal species had declined dramatically over the last ten years. They felt that this was due to

changing economic circumstances in Mongolia as well as the increased demand for animal parts from China.

#### **4. Project Objectives**

- A. To devise a management plan based on sustainable hunting for each species using the results obtained (in consultation with the local community).

**Output:**

Although a specific management plan has not been devised, the survey by Dorcas Pratt has greatly enhanced understanding of the problems involved with wildlife management. Her work has thus contributed a substantial amount to our ability to devise a relevant management plan for the area. In addition, the low numbers of animals found during the direct and indirect surveys suggest that hunting levels need to be as low as possible.

- B. To aid the transfer of control and ownership of wildlife resources from central to local government. At present, central government in Mongolia controls local wildlife resources. They have stated that they would like this control to be transferred to the local communities so that they are able to manage their own resources more effectively.

**Output:**

It has not been possible to do this.

- C. To promote and support additional biodiversity projects run by scientists from the National University of Mongolia.

**Output:**

This has been very successful and several Mongolian scientists worked alongside RI during the last expedition. They were able to use the RI/DI logistical capacity and financial support in order to work in places that were otherwise inaccessible for them. Reports from the scientists can be seen in Appendix 2.

- D. To develop the environmental awareness of young people from different countries. This has been done by involving them in the data collection of the project thus also giving them first-hand experience and training in ecological techniques.

**Output:**

Over 150 venturers from Mongolia, the UK and other countries participated in the field-work. They were trained in the techniques and played a big part in the data collection. Numerous talks were given and informal discussions held so that they learned about the context of the work in terms of the project itself and in terms of a wider international conservation context. For the majority of these young people, it

was the first time that they had been exposed to any conservation issues. However, by the end of their time working on the DI project, their awareness had increased significantly. Many said that their view of the natural world had been completely altered and their minds opened to the value of biodiversity and the threats it faces in the world today.

An ex-venturer from the Batshireet area was subsequently employed to carry out deer faeces degradation time over the winter and spring. This work was essential to the project because without this information, it is impossible to determine the number of animals in the area based on indirect pellet surveys.

E. To provide training and resources for Mongolian scientists, local communities and park rangers.

#### **Output:**

Local rangers worked alongside UK and Mongolian scientists on the DI project and thus learnt a great variety of ecological techniques ranging from faecal pellet counts to the preparation of microscope slides. Mongolian scientists also learnt about distance sampling from the UK scientists.

A lecture course on population and community ecology, with specific reference to sampling techniques and case studies, was run at the National University of Mongolia by two UK scientists, Dr Mark Bulling (University of York) and Dr Javier Perez-Barberia (Macaulay Institute). The lectures were attended by undergraduates, masters students, lecturers, RI staff and volunteers, NGO employees and KKSPA rangers. At the end of the lecture course, Professor Samiya presented both lecturers with a University 'medal' and two books. A CD-Rom of Dr Bulling's lectures is included in this report. Twenty of these CD-Roms were provided by Dr. Bulling and the DI for the National University's library.



**Dr Mark Bulling and Jargal Jamsranjav preparing the delivery and translation of the lectures**



Dr Mark Bulling (left) and Dr Javier Perez-Barberia (right) stand either side of Professor Samiya in their Darwin Initiative t-shirts after the successful completion of their lecture series.

A display of wild plants that possess medicinal value was requested by the local communities in Batshireet and Mungenmort. Jargal Jamsranjav, the Mongolia-based DI project co-ordinator, put these together and they are now on display in the relevant Information Training Centres.

### **5. Local community attitudes to natural resource utilisation**

This work was undertaken by Dorcas Pratt in Batshireet and Mungemort and was submitted in partial fulfilment of the MSc in 'Rural and Regional Resource Planning' at the University of Aberdeen and the Robert Gordon University in September 2001.

#### **Methods**

The study used a grounded theory method of research (Glaser, 1992) which is a qualitative method used to analyse social processes. It does not set out to test an existing hypothesis, but to discover the emergent theory coming principally from the participants as they are the ones experiencing the social process being investigated. There are six basic steps: data collection, note taking, coding, memo-ing, sorting and writing (Dick, 2000).

#### **Results:**

The results showed that there are a number of different underlying forces which determine people's values and attitudes to wildlife utilisation. Many of these have changed over the last ten years. Primarily, wildlife utilisation at a community level has been affected by the difficult prevailing economic conditions, the high prices fetched by wildlife in the Chinese medicine market and the weakening government structures.

## **Conclusions:**

The study concludes that in recent years, hunting pressure on wildlife populations in Mongolia has increased dramatically. In addition, all wildlife resources are being used in a careless and destructive way that is clearly unsustainable. There are four main reasons for this:

1. Large mammals are hunted for financial reasons because animal products can fetch high prices, are easily sold and are 'free to use'.
2. Mongolian families are struggling to find money to meet basic needs. Lack of livelihood security results in people relying heavily on natural resources.
3. Regulations exist but are not implemented for a range of reasons. Enforcement of regulations would mean increased hardship for many.
4. There is a lack of real ownership of the forest resources. Local people have no responsibility or control in management of large mammal resources, and therefore little incentive to conserve them.

## **Suggestions for the future:**

- There should be increased participation and devolution of wildlife management to local communities. At present, all wildlife is managed from the capital by the national government.
- If ownership were to be transferred to the local communities, a re-examination of current laws and policies to support community ownership would be required.
- People should be encouraged to increase their income by capitalising on the assets that they already hold
- Other areas of employment (which are extremely difficult to find) would alleviate the pressure on wildlife.
- Effective trade bans or the promotion of substitute products in the international wildlife markets would result in less animals being hunted locally.

## **6. Partnerships**

### **National University of Mongolia and the Mongolian Academy of Sciences**

RI had partnerships with two academic institutes, the National University of Mongolia and the Mongolian Academy of Sciences. This relationship was formalised during the project workshop held in October 2000 in Mongolia. During this workshop, participants were invited to submit proposals for small projects that could be run alongside the main project in the field. Logistical and equipment support was to be offered to successful applicants from RI and the DI.



A steering committee for the project was set up with members from both institutes, the KKSPA Administration, representatives from RI and also from the Macaulay Institute. During the first steering group meeting in March 2001, the small project proposals were assessed and successful applicants chosen.

During the July – September 2001 field-season, these projects ran alongside the main DI work. It was not possible to accommodate scientists from the Mongolian Academy of Sciences because they refused to work without large salaries. However, scientists from the National University of Mongolia were keen to work alongside the project without salaries. They thus benefitted from logistical support (including transport, food and accommodation), equipment and scientific training. Approximately [REDACTED] of equipment was provided to them to use by the DI. This included binoculars, microscopes, chemicals, balances, cameras and general tools.

#### **Khan Khentii Special Protected Area Administration and the Ministry for the Environment**

Good relationships were developed between RI and the KKSPA Administration and the Ministry for the Environment. A 'memorandum of understanding' (MOU) was put together with the Ministry for the Environment. In June 2001 there were major staff changes at both institutions due to illegal mining permits being sold by some of their employees. RI had thus begun building good relations with the new members of both institutions.

#### **7. September 2001 Darwin Steering Group Committee Meeting**

This meeting was extremely successful. All the Mongolian scientists and students who had participated in the RI/DI work (July – September 2001) were present, as were additional steering group committee members, some RI staff and Dr Javier Perez-Barberia from the Macaulay Institute. During this meeting, the Mongolian scientists presented the work that they had done and outlined their chosen directions for future research.

There was a very fruitful discussion regarding the participation of venturers in scientific work. Challenges were addressed and solutions to problems offered. The overall conclusion from the meeting was that most unskilled young people could collect valuable scientific data if a) the methods were simple enough, b) constant motivation was given in the form of general enthusiasm and a reminder of the overall picture and c) hours of working were kept short. All the Mongolian scientists and students were pleased to be working with RI/DI and were looking forward to working with them again in the future.



Members of the RI/DI Steering Group Committee after the meeting in September 2001

## **8. Difficulties**

### **The withdrawal of RI from Mongolia**

This has obviously had a serious impact on the project. However, the future of the project without RI will not be discussed here.

### **Foot and Mouth Outbreak in Mongolia**

After the first field-season, work was planned to re-start in April, 2001. However, there was a foot and mouth outbreak in the KKSPA in March and some parts of the area were quarantined. As a result, no work could be carried out until July 2001.

### **September 11<sup>th</sup>**

Due to events on September 11<sup>th</sup>, Dr Iain Gordon from the Macaulay Institute was not able to come to Mongolia to chair the September 2002 steering group committee meeting or to give his lecture on red deer management to the National University of Mongolia. Dr Alex Lewis chaired the meeting in his place and Dr Mark Bulling filled his lecture slot with an additional lecture on population and community ecology.

## **9. Conclusions**

The RI/DI project had been going well up until September 2001. Many of its aims had not yet been achieved. However, the right processes had been put in place and the project had done well given that it was exactly half-way through its anticipated run-time. The withdrawal of RI from Mongolia was sudden and unexpected and therefore little was able to be done to smooth over the process in terms of the DI

project. The Mongolian scientists have understandably been left bewildered. However, it is hoped that they gained some benefit from working with RI/DI for the short time that it was possible.

### **Authors**

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London, UK, and Ulaanbaatar, Mongolia, January 2002.