

Evaluating approaches to public engagement in saiga conservation

First Annual Report

May 2006 - March 2007



Pics: Dancers rehearse the traditional Crane Dance before the opening of the CWA Visitor Centre; saiga calves in the Chernye Zemli Biosphere Reserve.

Imperial College London
Centre for Ecological Projects
Centre for Wild Animals
Stepnoi Sanctuary
Chernye Zemli Biosphere Research
Yashkul School
Dharma Centre
Arshan Children's Home

Darwin Initiative Annual Report

Project Ref Number	EIDPO18
Project Title	Evaluating approaches to public engagement in saiga conservation
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UK Partner Institution(s)	
Host country Partner Institution(s)	Centre for Ecological Projects (leader), Centre for Wild Animals; Chernye Zemli Biosphere Reserve; Stepnoi Sanctuary; Dharma Centre; Yashkul School; Arshan Children's Home.
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Project Leader Name	E.J. Milner-Gulland
Project website	http://www.iccs.org.uk/Saiga%20public/public.htm
Author(s), date	E.J. Milner-Gulland, 23 rd April 2007

1. Project Background

The project is located in the Republic of Kalmykia, Russian Federation. Kalmykia is a small Autonomous Republic in southern Russia, to the west of the Caspian sea. It is the only Buddhist state in Europe, and is predominately steppe. The area is home to the European population of the Critically Endangered saiga antelope. The saiga population worldwide has collapsed to about 5% of its 1980s size since 2001, and this is primarily due to illegal hunting for its horns and meat. The project is a follow-up to our successful previous Darwin project "*Using saiga antelope conservation to improve rural livelihoods*", which aimed to understand the link between local livelihoods and poaching pressure, and to make recommendations for action to reduce poaching. In this current project we are implementing some of these recommendations, building on the strong collaborations which developed between our team and civil society in Kalmykia.

2. Project Partnerships

When the project was originally submitted, we had the Institute of Ecology and Evolution in Moscow as our partner, as Anna Lushchekina had been the project leader in Russia for our previous Darwin project and we worked well together. As we informed the Darwin Initiative, Anna resigned from this post just after the start of the project for personal reasons, and the position of Project Leader in Russia was taken by Olga Obgenova, the Director of the Centre for Ecological Projects. The CEP had been very successful team members in the previous project, and we agreed that this move would be an excellent opportunity to build local capacity for international conservation projects in Kalmykia itself, rather than via Moscow.

Moving from an established partnership to a new one, particularly when our new partners are not experienced in international conservation, has been a challenge. We have had excellent interactions when we have been able to meet, and the work has proceeded according to schedule. However there has been less full communication between us than we would have hoped and some administrative delays, with issues including the lack of a reliable internet connection for the CEP, difficulties in setting up new money transfers to Russia and the need to develop a new MOU and sub-contract. However, we are making progress towards developing a long-term partnership, both with the CEP and with the other project teams in Kalmykia. Anna Lushchekina has very generously helped and supported us in many ways to get through this transitional period.

The project has made spectacular progress in terms of **regional and international partnerships**:

- We enabled our key collaborators to travel to a the First Meeting of the Range States to the **Convention on Migratory Species** MOU on saiga conservation, at which the MOU came into force. This was a milestone in saiga conservation, and the inclusion of our Kalmykian partners in the meeting enabled them to highlight the excellent work that they have been doing for saigas in an international forum. This has also allowed them to link up with others working for saigas in the region, as well as with international policy-makers. Project partners were heavily in preparing the scientific documentation for the meeting and facilitating the associated Technical Workshop. As a result of this, the CMS has sub-contracted us to monitor range states' progress towards fulfilling their obligations under the MOU over the next two years.
- We have now published four issues of our 6-monthly e-bulletin **Saiga News** (see Annex 3), which appears in 6 languages electronically and in hard copy. This newsletter carries information about saiga research and conservation actions throughout its range, and is a major channel of communication about the species. This publication is particularly important for capacity-building because its editorial board (with the exception of E.J. Milner-Gulland) is made up of range state nationals, because it encourages contributions from all who work on saigas (in any range-state language) ensuring that marginalised groups can disseminate information about their work, and because it is distributed at all levels and to all interested parties - from local villagers in the saiga range in their own languages to representatives of international NGOs and conventions in English. The Darwin project is supporting some of the costs and the bulletin is highlighting their work.
- We have founded the **Saiga Conservation Alliance**, a network of professionals working together to promote the conservation of the saiga at all levels from the grassroots upwards, and both locally and internationally. This organisation is growing fast and Darwin project members are key to its success. The SCA has been made a "start-up partner" of the Wildlife Conservation Network in recognition of our achievements in saiga conservation. This gives our team access to donor networks and planning, marketing and strategic support. The WCN has also (March 2007) awarded one member of our Kalmykian team, Nadezhda Arylova, a Sidney Byers scholarship to support her PhD research on saiga antelope ecology, which is a prestigious award that will help her to complete her research and build partnerships internationally (Fig 1).



Figure 1. Nadezhda Arylova at work on her PhD on non-invasive monitoring of saiga reproductive status, which she is carrying out at the Institute of Ecology and Evolution, Moscow.

3. Project progress

3.1 Progress in carrying out project activities

The project has two sets of activities; ongoing support of conservation actions by our partners, and new activities specific to the project. The two new activities scheduled for this year were a study into the relationship between conservation activities and public attitudes to saiga conservation and preparation towards the UK/Kalmykia cultural exchange, which is due to take place in May and June 2007. The ongoing activities include monitoring of saiga herds, anti-poaching patrols in Stepnoi Sanctuary, support to the CWA visitor centre and rotating cow project and engagement with local schools and temples and with the local media. All activities have been carried out as planned, and to time.

Report on public attitudes to conservation

In September-October 2006, the data collection took place for this collaborative research project. The project was carried out by Caroline Howe (Imperial College London) and Ruslan Medzhidov (Centre for Ecological Projects), with additional help from other project partners, particularly Yuri Arylov (Centre for Wild Animals) and Anatoly Khludnev (Stepnoi Sanctuary). This highly collaborative research together with local partners is important in capacity-building.

Eight villages were visited, in three areas, each of which had had different levels of conservation intervention: high intensity community engagement via our previous Darwin project; low level media coverage only; traditional conservation emphasising law enforcement. The aim of the study was to evaluate the success of community involvement in terms of people's knowledge of, and attitudes towards, saiga conservation. The team conducted individual interviews with a semi-structured questionnaire, and 252 responses were received, representing 10-20% of the households in the study villages. They also facilitated the schoolchildren of Yashkul school to carry out their own version of the survey as a school project; this enthused the children and opened dialogue between the generations as children asked their parents and grandparents to reminisce about the enormous herds of saiga which were common in their childhoods. Although this part of the study did not form part of the formal data collection, it was an excellent opportunity for community engagement and capacity-building, and was written up as a school project by the children.

The data were entered into a database and analysed using both simple descriptive statistics and General Linear Models. Preliminary results have been obtained (see below), and a report and journal paper are due to be completed by the end of May. The report will be translated into Russian for dissemination in the study area.

Cultural Exchange

The aim of the exchange is to promote grassroots interactions between the UK and Kalmykia, which would continue into the long-term and provide a means for ongoing support and friendship for saiga conservationists in Kalmykia. In September-December 2006, an extensive publicity campaign was launched with the aim of attracting UK-based participants. Leaflets were distributed by e-mail and in hard copy to all the major UK NGOs. The campaign coincided with the World Chess championships which were held in Kalmykia, but unfortunately the UK press coverage of Kalmykia was universally disparaging, which may not have helped generate interest. A number of expressions of interest were received, but only four formal applications were received for three places. One of these was unsuitable, leaving three participants; Rosa Baik, Helen Galland and Alison Milner-Gulland. Alison is EJM-G's mother but as her application was of high quality it was felt unfair to discriminate against her on this basis.

- **Rosa Baik** is a talented young wildlife filmmaker, who will be making a documentary about the exchange. She has been awarded a grant from Filmmakers for Conservation towards her costs and her trip has generated local media interest in Wales. Her inclusion is particularly appropriate because there are many similarities in the recent cultural histories of Wales and Kalmykia.

- **Alison Milner-Gulland** is a successful artist, with a particular interest in landscapes and Russian culture. She is prominent in her local community, and is keen to share aspects of British rural life with her counterpart (including morris dancing!) and to exhibit paintings of her visit to raise awareness of Kalmykian culture.

- **Helen Galland** is farmyard manager of Spitalfields City Farm. This farm is an important asset to the local community in a deprived area of East London, and Helen has an interest in conservation and rare breeds. She hopes to mobilise the Farm's volunteers to support saiga captive breeding efforts in Kalmykia, and has already highlighted the plight of the saiga as part of Spitalfield's "Love an animal" week in February 2007 (see Annex 3).

Following the selection of these participants in January, appropriate counterparts were selected by our Kalmykian team members, with the aim of maximising the potential impact of the exchange for capacity-building in Kalmykia. The following participants were chosen:

- **Olga Obgenova** will partner Rosa. She is the Director of the Centre for Ecological Projects, and her work involves promoting sustainability among local communities in Kalmykia. She is also the leader of the Darwin project in Russia. The choice of Olga will help greatly in the capacity-building aim of our project, helping her to make connections in the UK, hopefully including a visit to the Darwin Initiative team at DEFRA.

- **Yuri Kaminov** is a senior civil servant in the Kalmykian Environment Ministry. He is the Deputy Director of the Committee for Natural Resources and Environmental Protection, and is responsible for protected area planning for the Republic. He will partner Alison. Yuri has been a great friend to our saiga projects, supporting us within the Republic's administration. He is keen to learn about protected area planning in the UK.

- **Yuri Arylov** will partner Helen. He is the Director of the Centre for Wild Animals in Kalmykia, and the pioneer of captive breeding for saiga conservation. It is particularly appropriate that he should link up with Spitalfields City Farm, and we hope that his visit will be the start of a long collaboration between the two organisations.

The UK team will visit Kalmykia on 6th-16th May 2007, and the return visit will take place on 10th-20th June 2007.

Saiga Monitoring and protection

Calf monitoring was carried out in May 2006 according to the protocols developed under the previous Darwin project (see Figure 2). E.J. Milner-Gulland (Imperial College) participated in the monitoring for a few days, and the overall leader of the research was Gennady Erdnenov, scientific officer of the Chernye Zemli Biosphere Reserve (CZBR). The staff of both the CZBR and the Stepnoi Sanctuary carried out herd observations throughout the year, and the observations up to the end of February 2007 have already been entered into a database for analysis. Aline Kuhl, researcher on the previous Darwin project, is analysing these data at Imperial College, and they are also being used to link saiga locations to geographical correlates such as vegetation quality, by PhD student Maxim Dubinin at the University of Wisconsin, Madison, under the supervision of Anna Lushchekina.



Figure 2. Ranger at the CZBR weighing a saiga calf, May 2006.

The project has also supported the costs of ranger patrols by the Stepnoi Sanctuary and equipment and infrastructure needed by the CZBR. By helping these dedicated professionals in their everyday work, we are contributing towards the continued stability of the saiga population in Russia.

Support to Centre for Wild Animals

The project has several activities supporting the ongoing conservation activities of the Centre for Wild Animals (CWA). This includes ensuring the continuation of their rotating cows project, deepening the Centre's engagement with local schools and supporting their Visitor Centre. The Visitor Centre was formally opened at a ceremony in May 2006 by the Head of the Republic of Kalmykia, Kirsan Ilyumzhinov (Fig. 3). At this opening, many people viewed the new displays in the Visitor Centre, which were partly supported by this project.



Figure 3. The Head of the Kalmykian Republic opens the new visitor centre at the CWA.

Another key activity by the CWA is the Rotating Cows project, by which poor families in villages committed to saiga conservation are given a cow, whose first-born calf is reinvested in the project to pass on to other families. This was initiated in 2005 under DEFRA's Small Ecological Projects Scheme, and is the main livelihood enhancement programme which we have carried out. It has caught the imagination of the public and press in Kalmykia, and has been enormously successful in highlighting the links between conservation and rural development in people's minds. The Darwin project has supported the continuation of this project, ensuring that it is seen as a sustainable component of our approach to engaging the public in the areas where saigas live (Fig 4).



Figure 4. Krasilka ("Little beauty") the cow, who was donated to a family in Khulkhutta under the rotating cows project.

Finally, we have been supporting the establishment of links between the CWA and local educational and religious groups, particularly Yashkul school, the Dharma centre (a Buddhist educational centre) and the Arshan children's home. This involves excursions, projects and voluntary work by the children at the CWA, and has been very positively received by the Kalmykian public (see press report in Annex 3).

3.2 Progress towards Project Outputs

Overall progress has been very good, and we are set to achieve our goals as originally envisaged. We have major components of the project coming up imminently, and much of our impact will depend on the success of these activities, but our preparations are well advanced and we are confident that the activities will go well. Our assumptions still hold, and the output indicators should all be measurable. Below we lay out some key results of the activities so far.

One minor change is that the **project meeting** which was scheduled for April 2007 will now be held in May 2007. This is ensure cost-effectiveness, by allowing us to combine the project leader's visit to Kalmykia for the cultural exchange with her visit to attend this meeting.

Public attitudes to conservation

Our survey demonstrated significant differences in knowledge about the saiga's population status. Their level of knowledge depended on the length of time that they had been living in the area, which suggests that it is linked to their own observations of changes in saiga status. The level of knowledge about population status and about conservation activities that have been carried out to improve this status were strongly linked. The level of conservation knowledge depended on the type of intervention they had received (Fig. 5). This is heartening, as it demonstrates that our activities have been having some effect!

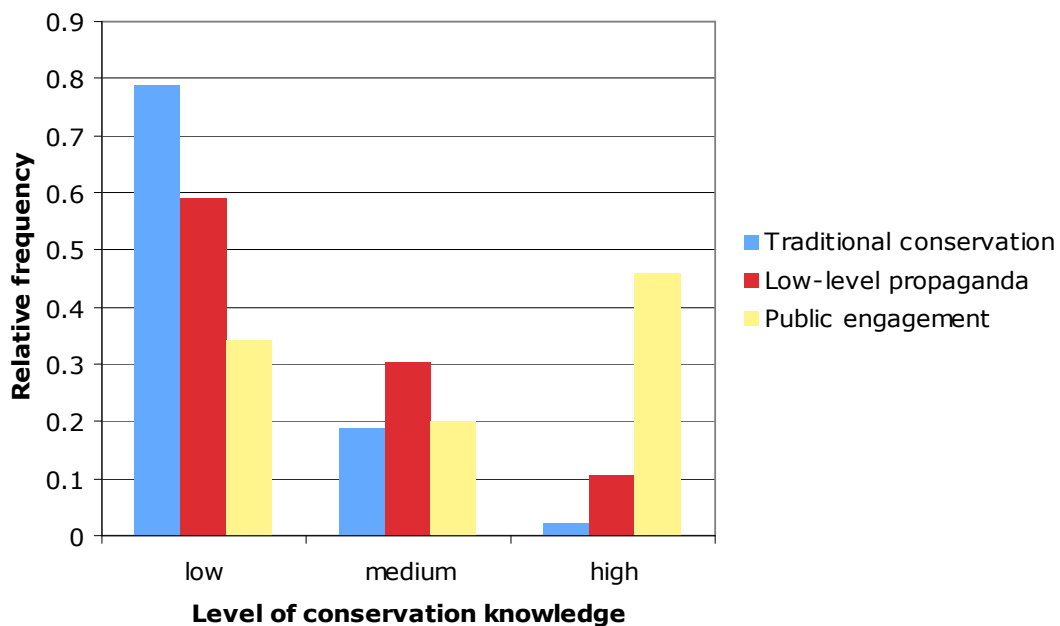


Figure 5. Levels of conservation knowledge among communities who have received low-level information from the media; traditional exclusionary conservation and public engagement under the previous Darwin Initiative project.

The differences are highly significant statistically, as assessed in a General Linear Model of conservation knowledge as a function of a range of variables including household characteristics and the location of the villages. The traditional conservation interventions were carried out in Astrakhan province of Russia, next-door to Kalmykia, around the Stepnoi Sanctuary. We previously have not been active in this region, and the social characteristics of this area are quite different to those in Kalmykia. These results point out the urgent need to engage with people in this region, and indeed we have started to do this as part of this current Darwin project, through our partners at the Stepnoi Sanctuary. Other factors that affected the level of conservation knowledge included people's nationality and length of residency, with Kalmyks and those who had lived in the area for longest having a higher level of conservation knowledge. It was also affected by whether or not people kept livestock. These results make sense because people with livestock spend more time on the steppe and so are more likely to interact with saigas, and hence take note of conservation interventions (Fig. 6).

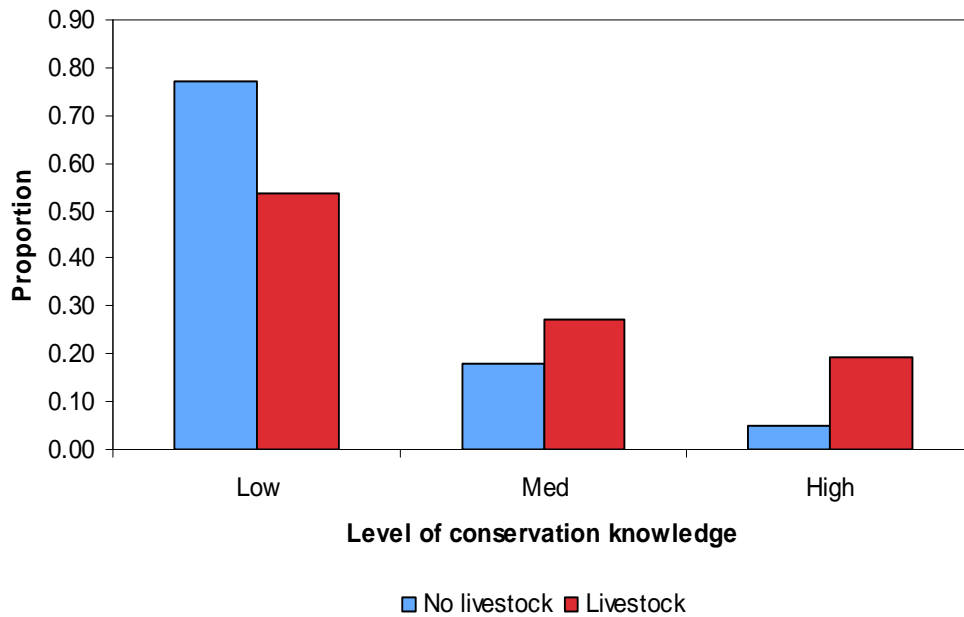


Figure 6. The relationship between the level of knowledge of conservation interventions that people displayed and whether or not they kept livestock.

Responses to statements designed to measure attitudes to saigas showed that, although people were naturally concerned about other issues as well as the saiga, there was strong feeling that the loss of saigas from Russia would be of concern to respondents. There was particularly strong agreement with the statement that saigas should be protected, even if that meant making sacrifices now (Figure 7).

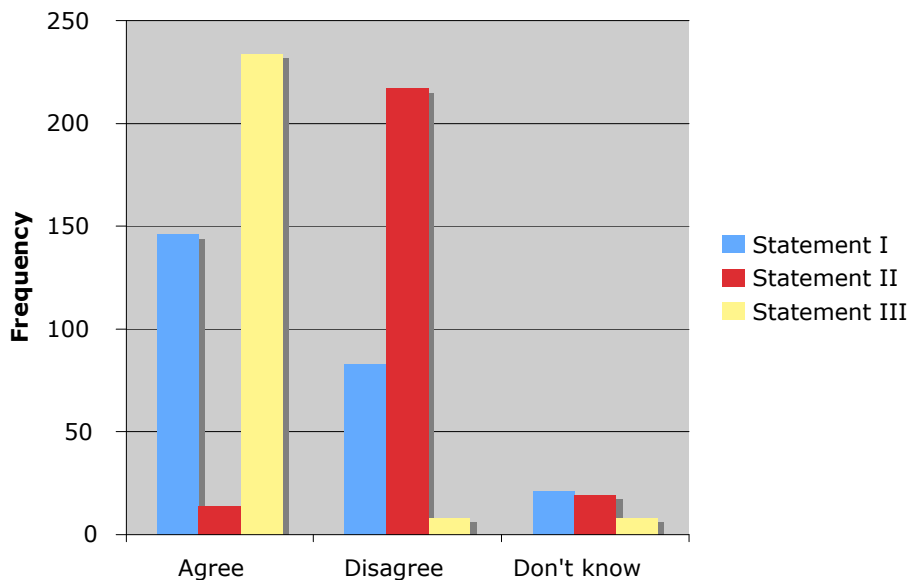


Figure 7: Responses to three statements aimed at revealing attitudes to saiga conservation:
Statement I: 'I have more important things to think about than the future of the saiga antelope'.
Statement II: 'If the saiga were lost from Russia I would not mind'. *Statement III:* 'Saiga should be protected for future generations even if that means making sacrifices now'

82% of the respondents stated that they would be willing to pay money into a fund for saiga conservation in their area, and 65% of respondents said that their opinion had changed recently to become more positively disposed towards saigas (as opposed to 1% who now felt more negatively, 24% who have felt consistently positive and 10% consistently negative). There are no obvious differences in opinions about saigas or willingness to pay for saiga conservation between people subject to the different conservation interventions. Any differences are therefore likely to be linked to household characteristics (such as whether household members have hunted for saigas) and require a multivariate model to elucidate them; this is our next step.

Cultural Exchange

The activity is about to commence, and hence there are no concrete outputs as yet.

Saiga Monitoring

We have recently published a research paper in *Proceedings of the Royal Society*, based on the results of our monitoring activities under the previous Darwin project (see Annex 3). This paper received some UK press interest, and has given us important insights into the differences in maternal investment in calves of different sexes, depending on whether that calf is a singleton, in a same-sex or a mixed litter. We found that mothers were able to target their investment effectively to males in single-sex litters, giving very large body sizes at birth, but that males in a mixed litter were significantly smaller, suggesting that males with a sister were less likely to reach optimal size than those with a brother. We also found that the saiga has the largest pre-natal investment of any ungulate, with foetal mass comprising up to 35% of maternal mass in some cases. This is a result of general interest in ecology, and opens up many interesting questions for future research.

We had planned to continue with one further season of data collection on calving in May 2007. However, the biologists at the CZBR had concerns that the inevitable disturbance caused to calves and females at this sensitive time by intensive monitoring was no longer outweighed by the scientific benefits of collecting these data. Hence as a team we have decided not to carry out further invasive monitoring in the near future, but instead to collect general descriptive information about the location and size of calving herds. We hope that Darwin will agree that this is a sensible departure from our original plans.

Our monitoring of herd sizes and locations is also of scientific interest, but more importantly will be very useful for conservation planning; ensuring that protection is correctly targeted to different locations at the appropriate times of year, and making sure that saiga numbers continue stable or increasing. These data are now routinely collected by project teams without external intervention.

Support to partners/public engagement

We have discussed above the activities which we have carried out under this heading. We have also described in the "Building partnerships" section the steps we have made on the international stage. In Annex 3 we give an example of local press coverage about the links made between children and the CWA. Ongoing support for day-to-day activities is not so easy to quantify in terms of progress towards project outputs.

Next steps

There are major activities planned for the remaining 9 months of the project. These include the project progress meeting, cultural exchange, the public awareness campaign and capacity-building of local partners. We will also hold the first meeting of the Steering Committee of the Saiga Conservation Alliance in Tashkent, Uzbekistan, in September, which Yuri Arylov will attend as representative of the Darwin project team. The team will also be represented at the Wildlife Conservation Network's annual Expo at Palo Alto, California, at which the achievements of the Darwin project team will be showcased. This will include the chance to sell handicrafts made by children from Yashkul school (Fig. 5), the proceeds of which will go back to supporting their saiga conservation activities.



Figure 5. Children of Yashkul school in traditional dress, with EJM and their teacher, who is holding saiga pennants made by the children.

3.3 Standard Output Measures

Table 1 Project Standard Output Measures - reported against original plan

Code No.	Description	Year 1 Total
4A/B	4 Students from Kalmykian State University Biological Faculty trained in transect methods for biological monitoring (2 per year). 2 weeks training during calving period.	3 rangers trained at CZBR May 2006. 20+ students trained at CWA throughout year.
6A/B	50+ Children & 2+ teachers at 1 school and 1 childrens' home receive ongoing environmental training linked to saiga conservation.	Done
6A/B	3 UK opinion-formers carry out 2 week visit to UK	To be done May 2007
6A/B	3 Kalmykian educators carry out 2 week visit to UK	To be done June 2007
7	Posters for educational displays at CWA Visitor Centre	Done, May 2006 + ongoing

8	EJMG attends launch of project and calving monitoring, 10 days	Done, May 2006
8	CH carries out attitudinal survey, 8 weeks	Done, Sept-Oct 2006
8	EJMG and CH attend project meeting. 2x1 week	Meetings held between EJMG and team leaders: May 2006 (Kalmykia); Sept 2006 (Almaty).
9	Report of attitudinal survey	Preliminary analysis done - report will be finished end May 2007.
11B	At least 3 papers (saiga monitoring, attitudinal survey, use of education as a conservation strategy)	1 paper published Mar 2007 (monitoring); others underway.
12A	2: A database of saiga herd and poaching incident observations by CZBR & SS rangers, and a database of saiga calf monitoring results.	Done, up to 29/2/07 is in electronic format.
14A	Workshop for stakeholders in Kalmykia.	Done, May 2006
14A	Project meeting, including presentations of interim results and future plans to key stakeholders.	Planned May 2007
14B	Presentation of evaluation study at 1 international conservation conference (e.g. SCCS, SCB)	Presentation at SCB, July 2006.
15B	Local press campaign (2+ press releases) on exchange.	Planned for May 2007
15B	Press campaign highlighting project achievements (2+ press releases).	One July 2006, others planned for 2007
15C/D	4+ press releases to local and national UK media, advertising exchange opportunity.	Done, Oct-Dec 2006
18C + 19C	1 report on local TV and 1 on local radio on the educator exchange.	Planned May-June 2007
18C + 19C	1 report on local TV and 1 on local radio on project achievements.	Planned for 2007
7	Information leaflets for use in CEP public awareness campaign	Planned for 2007
7	Posters for use in local schools	Planned for 2007

20	Physical assets. SS/CZBR: Spares for vehicles, radio communication system, uniform for rangers. All Kalmykian partners: computer for communications and report-writing. Educational partners: video-player, books and educational equipment for awareness-raising work. CWA: display boards for visitor centre	Handed over, 2006.
23	Minimum £77,222	Matched funding was obtained from a number of sources as outlined in the proposal.

Table 1a Additional outputs not envisaged in the plan

Code No.	Description	Year 1 Total
9	EJMG was the co-author of the Overview Report on saiga antelope status, produced by the IUCN Antelope Specialist Group, and of the Medium Term Work Programme agreed by the signatories to the CMS MOU on saiga conservation, September 2006.	2
14B	3 members of the Darwin project team attended the CMS meeting in September 2006. Y. Arylov and A. Kuhl gave presentations at the Technical Workshop on the Darwin project.	1
14B	C. Howe presented preliminary public awareness study results at UNESCO conference, Kalmykia, October 2006	1
15C	Press release by Imperial College on the monitoring paper	1
16	Two issues of Saiga News supported by the project. Wide dissemination locally and internationally (including >50 people in UK and Kalmykia)	2
17	Saiga Conservation Alliance established	1
18A	Project featured on "Vremya" Russian news channel	1
18B	EJMG interviewed on "Saving Planet Earth", BBC4, transmitted Nov 2006	1
19C	Extensive radio coverage of opening of CWA Visitor Centre	3+
23	In addition to the planned sources, costs for Kalmykian partners to attend the CMS meeting were covered by CMS (about £2000), and to attend the SCA meeting in Tashkent were obtained from the WCN (about £1000). We expect to raise more next year as a result of the exchange.	3000

Table 2 Publications

Type *	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £
Journal*	<i>Kuhl, A., Mysterud, A., Erdnenov, G.I., Lushchekina, A.A., Grachev, Iu. A., Bekenov, A.B., Milner-Gulland, E.J.</i> (2007) The 'big spenders' of the steppe: sex-specific maternal allocation and twinning in the saiga antelope.	Proceedings of the Royal Society B 274, 1293-1299	www.iccs.org.uk	-
Magazine*	Milner-Gulland, E.J., Kuhl, A. (2006) Desperately seeking saiga.	BBC Wildlife, August 2006	www.iccs.org.uk	-
Magazine	Lagrot, J-F. (2006) Survival of the saiga.	Asian Geographic	www.asiangeo.com	
Magazine.	Edda Schlager (2006). Saigas - Kazakhstan's oldest Nomads.	Tengri, Air Astana inflight magazine. Summer 2006 (in Kazakh, English and Russian)	-	-
Newspaper*	Andreeva, P.A. (2006) An ecological centre will be founded at Yashkul school	Iskra 56, 18 July 2006	E.J. Milner-Gulland	
Newsletter*	Saiga News, June & December 2006	Saiga Conservation Alliance	www.iccs.org.uk/saiganews.htm	-
Journal	Milner-Gulland, E.J., Lushchekina, A.A., Bekenov, A.B., Arylov, Iu.A. (2006) Using saiga antelope conservation to improve rural livelihoods.	Stepnoi Bulletin 21-22, 10-11.	http://www.ecoclub.ru/books/step-21-22/index.htm	-
Journal	Arylov, Iu.A., Voznessenskaya, V.V., Lushchekina, A.A., Medzhidov, R.A., Milner-Gulland, E.J., Ubushaev, B.S. (2006) International projects for the study and conservation of the saiga antelope in Kalmykia.	Stepnoi Bulletin 21-22, 11-13	http://www.ecoclub.ru/books/step-21-22/index.htm	-

Note that the articles in *Stepnoi Bulletin* and *Proceedings of the Royal Society* are reporting the outputs of our previous Darwin project, which this project follows on from.

3.4 Progress towards the project purpose and outcomes

The saiga population continues stable and poaching appears to be at a low level. Although we have data on saiga herd sizes, structure and distribution, there has not been a publically available formal assessment of saiga population size using standardised methods in the last few years. This was one of the key actions signed up to by the range state governments at the CMS meeting. Although Russia has not yet become a signatory, it has stated that it is committed to remaining part of the process, and this suggests that a population survey will be carried out in the next 1-2 years. A full population survey is beyond the financial and technical means of our project, particularly as it would involve coverage of areas where our partners do not have jurisdiction. However, the indications are that the population is healthy:

- Our calving data show no decline in number of calves born in the CZBR over the last 4 years.
- Monitoring data show no decline in saiga densities and herd sizes in CZBR or the Stepnoi Sanctuary.
- Saigas show a minimal flight response when they observe vehicles and people, even close to villages. This is a very clear indicator of lack of fear of humans, and a good indicator that poaching is not heavy.
- Discussions with local people suggest that although poaching is going on, it is not at high levels.

We have increased local capacity for conservation through working with key local NGOs. This is particularly through our joint study of public attitudes to saiga conservation, but also includes the management of the Darwin project as a whole and integration into the wider saiga conservation movement through attendance at the CMS meeting, the exchange, Saiga News and the Saiga Conservation Alliance.

Our research demonstrates positive attitudes towards saigas, and improved knowledge and conservation awareness in areas where conservation interventions have been targeted.

Substantial international linkages have been built up, with the Convention on Migratory Species and others, through the Saiga Conservation Alliance and Saiga News. Further linkages will be created as a result of the cultural exchange.

We are on track with preparations to deliver key outputs in the next period of the grant. The purpose-level assumptions still hold true, and the indicators are adequate.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The project is having a beneficial impact on biodiversity through our support for rangers and anti-poaching patrols, increasing their capacity to protect saigas and so reducing mortality. We have also had a positive impact on benefit-sharing through improving linkages between local conservationists and the international community, and through support for the rotating cow project, which is a direct livelihoods intervention linked to saiga conservation.

4. Monitoring, evaluation and lessons

The project has been monitored by:

- Periodic visits to the Kalmykian team by members of the Imperial College team (May 2006, September 2006).

- Regular e-mail contact between EJMG and Olga Obgenova to monitor progress.
- Periodic written reports from each Kalmykian team to Olga Obgenova, as Kalmykian coordinator. Olga also has frequent contact with the other Kalmykian teams, both collaborating with them on the project and monitoring their progress.

The indicators of achievement used are set out in the logframe (Annex 2). The lessons learnt are that it takes a while to build new working relationships, and this is particularly due to the need to build new administrative arrangements for money transfer, communication and monitoring. However once a strong foundation is built, which we are now doing, the collaboration will be sustainable into the long term.

5. Actions taken in response to previous reviews (if applicable)

N/A

6. Other comments on progress not covered elsewhere

None required

7. Sustainability

The project has a very high profile, and our exchange in May is planned to boost the project's profile considerably, both in the UK and Kalmykia. The local press are very interested in our work, particularly because the projects are clearly strongly led by local Kalmykian groups and their priorities, rather than simply being carried out by researchers from the UK.

We have taken enormous strides also in reaching out to the international community, particularly other saiga range states within the region. This will be a major strength in ensuring long-term sustainability. As one example of this, the Kalmykian team will be welcoming a representative of the US-based NGO Wildlife Conservation Network in late April; this organisation links private donors in California to dedicated conservationists in the field. The Saiga Conservation Alliance was awarded start-up partner status by WCN in October 2006, which is a major contribution to our long-term sustainability.

We have an explicit exit strategy built into the project planning, starting from June 2007. We are going to carry out a SWOT analysis of the capacity for saiga conservation in Kalmykia, and at our Saiga Conservation Alliance meeting in Tashkent we will discuss the way forward for this network, including prioritising fund-raising for conservation activities in Kalmykia and elsewhere. We also plan to ensure that the cultural exchange leads to long-term links between the UK and Kalmykia, which is currently looking very promising.

8. Dissemination

Dissemination is a key component of our project. This year in the host country we have:

- Collaborated with newspapers to ensure coverage of our project's aims (Annex 3).
- Appeared on local radio and TV in connection with the opening of the CWA Visitor Centre, May 2006.
- Disseminated information about saiga conservation via our 6-monthly e-bulletin *Saiga News* (June & September 2006).
- C. Howe presented preliminary results of our attitude study at a UNESCO conference in Elista, October 2006.

- The CEP produced and distributed 300 leaflets on the laws relating to the saiga antelope.
- The attitude survey itself was a form of awareness-raising about saiga antelope issues, aimed at people in the saiga range areas.
- Numerous visits by school-children and university students to the CWA providing an opportunity for dissemination.
- Regular contact with the Kalmykian government to ensure their knowledge and buy-in to the project's activities.

Our main dissemination campaign is timetabled for the second year of the project.

9. Project Expenditure

Table 3 Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

Item	Budget	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries (specify)			
TOTAL			

The budget is as in our revised proposal, agreed in May 2006. None of the variations in individual budget lines is more than 6% of that line, and the total underspend is 1% of the budget; we propose to carry this over to the next grant period.

10. **OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**

The project has made spectacular progress in terms of **regional and international partnerships:**

- We enabled our key collaborators to travel to a the First Meeting of the Range States to the **Convention on Migratory Species** MOU on saiga conservation, at which the MOU came into force. This was a milestone in saiga conservation, and the inclusion of our Kalmykian partners in the meeting enabled them to highlight the excellent work that they have been doing for saigas in an international forum. This has also allowed them to link up with others working for saigas in the region, as well as with international policy-makers. Project partners were heavily in preparing the

scientific documentation for the meeting and facilitating the associated Technical Workshop. As a result of this, the CMS has sub-contracted us to monitor range states' progress towards fulfilling their obligations under the MOU over the next two years.

- We have founded the **Saiga Conservation Alliance**, a network of professionals working together to promote the conservation of the saiga at all levels from the grassroots upwards, and both locally and internationally. This organisation is growing fast and Darwin project members are key to its success. The SCA has been made a “start-up partner” of the Wildlife Conservation Network in recognition of our achievements in saiga conservation. This gives our team access to donor networks and planning, marketing and strategic support. The WCN has also (March 2007) awarded one member of our Kalmykian team, Nadezhda Arylova, a Sidney Byers scholarship to support her PhD research on saiga antelope ecology, which is a prestigious award that will help her to complete her research and build partnerships internationally.

I agree for ECTF and the Darwin Secretariat to publish the content of this section.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2006/07

Project summary	Measurable Indicators	Progress and Achievements April 2006 - March 2007	Actions required/planned for next period
<p><i>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>We participated in the major milestone of bringing into force the Convention on Migratory Species' MOU on saiga conservation.</i></p> <p><i>We have supported ongoing activities for livelihood improvement and supported ranger patrols in Kalmykia, hence having a positive impact on both biodiversity and benefit-sharing.</i></p>	<p><i>(do not fill not applicable)</i></p>
<p><i>Purpose To safeguard the future of the saiga antelope in Kalmykia through constructive engagement with the public.</i></p>	<p>a) Saiga population continues to be stable or increasing in project area</p> <p>b) Local institutions have the will and capacity to continue saiga conservation.</p> <p>c) Kalmykian public shows positive attitudes towards saiga conservation.</p> <p>d) Ongoing international links</p>	<p>The saiga population continues stable and poaching appears to be at a low level.</p> <p>We have increased local capacity for conservation through working with key local NGOs.</p> <p>Our research demonstrates positive attitudes towards saigas, and improved knowledge and conservation awareness in areas where conservation interventions</p>	<p>May 2007. Project workshop to discuss project progress and develop recommendations for awareness campaigns.</p> <p>May 2007. Calf monitoring. UK participants visit Kalmykia. Extensive media coverage of visit.</p> <p>June 2007. Kalmykian participants visit UK.</p> <p>July-Sept 2007: CEP public</p>

	established for environmental educators.	have been targeted. Substantial international linkages built up, with the Convention on Migratory Species and others, through the Saiga Conservation Alliance and Saiga News. We are on track with preparations to deliver key outputs in the next period of the grant.	awareness campaign. July-December 2007. Support to Kalmykian partners to build capacity and funding base, to ensure sustainability of conservation and public engagement activities. Preparation of reports and articles for publication.
Output 1. Saiga monitoring system is in place and being used to provide data for assessment of conservation success.	Spatially—referenced data on population size and structure in the two zones, with particular focus on calf production.	Data on herd size, structure and location have been collected throughout the period and placed in an Excel database. Calving data were collected in May 2006. These data are under analysis at Imperial College. A paper based on previous calf monitoring has been published in the journal Proceedings of the Royal Society.	
Activity 1.1 Monitoring saiga populations in CZBR and SS.		Standard monitoring in both locations has been ongoing throughout the period. Calf monitoring took place in May 2006 as planned.	
Output 2. Successful visitor centre at the Centre for Wild Animals of Kalmykia.	Visitor numbers exceed 500 individuals in year 2, exhibition judged by visitors as being of high quality and interest.	There have been a number of visits to the Centre by school parties this year under the auspices of the project, which also hosted university and college field trips as well as scientific meetings.	
Activity 2.1. CWA visitor centre opened and exhibition mounted.		The CWA Visitor Centre was opened by the Head of the Kalmykian Republic in May 2006, and a permanent exhibition created.	
Output 3. Continuation of rotating cows project based at	2 cows per year given to needy families together with support for	The new cows are delivered to families in calf in May, rather than during the winter months. Hence the next phase of the project will commence shortly.	

Centre for Wild Animals and serving areas to the west of the Chernye Zemli Biosphere Reserve.	veterinary & maintenance costs, first-born female calves returned to the scheme.	The existing families have continued to be supported through the winter.
Activity 3.1. Rotating cows project by CWA		This activity is ongoing.
Output 4. Public awareness campaign in area north of the Chernye Zemli Biosphere Reserve carried out by Centre for Ecological Projects.	At least 100 households visited in at least 3 villages, and public meetings held in 3 villages. Information on saiga conservation distributed.	Scheduled for the next period.
Activity 4.1. CEP public awareness campaign		This activity is scheduled for summer/autumn 2007.
Output 5. Continuation of anti-poaching activities by rangers of the Stepnoi Sanctuary (east of the Chernye Zemli Biosphere Reserve).	Rangers in Stepnoi sanctuary continue to patrol effectively throughout the period.	Ongoing.
Activity 5.1. Anti-poaching patrols by SS rangers.		These have been ongoing throughout the period
Output 6. A comparison of public attitudes and behaviours in the three regions, drawing lessons for future engagement with the public in the Chernye Zemli region.	A report on the study produced by the UK project team.	A preliminary report has been produced and the study is now being written up for publication in an international journal.
Activity 6.1. Study of attitudes to saiga conservation in areas with 3 contrasting types of public engagement.		This study was carried out successfully in September-November 2006.

Output 7. A high level of positive media attention and official support for our work achieved within Kalmykia.	At least 3 articles in local newspapers and 1 article on local TV per year. Positive meetings with relevant officials on a regular basis.	The Russian News Channel “Vremya” covered our work in May 2006. We have had an ongoing presence in the local Kalmykian media. Substantial UK press interest was generated by the publication of an article on our work in BBC Wildlife (Aug. 2006), and an appearance on BBC4 “Saving Planet Earth.
Activity 7.1. Media awareness campaigns.		A media campaign is planned in the UK and Kalmykia to coincide with the Exchange visits in May and June.
Output 8. Project staff engaged actively with environmental education in local schools and temples, and children enthused by saiga conservation.	Project establishes and supports active saiga clubs at Yashkul school Arshan children’s home and the Dharma Centre; children develop environmental understanding and interest.	The CWA has built a high level of collaboration with local schools and temples.
Activity 8.1. Visits to local schools & temples, including targeted technical support for international communication and environmental education		Local schoolchildren have formed an environmental club and carried out voluntary activities at the CWA. The Yashkul school was very involved in the attitudinal study, and carried out their own version of the questionnaire among their friends and family in Yashkul village, which was a very positive experience for them.
Output 9. International links established between educators in the UK and Kalmykia, leading to ongoing support for saiga conservation at the grassroots level in both countries.	An exchange involving 3 UK and 3 Kalmykian participants, leading to high media coverage in Kalmykia and sustained contacts between them, including fund-raising and continued personal friendship.	Exchange participants from both sides have been chosen and preparations made. We already have media interest and one of the UK participants has received a small grant to support the making of a film recording her experiences.
Activity 9.1. Exchange between UK and Kalmykian educators.		Scheduled for May and June 2007.

Annex 2 Project's full current logframe

Project summary	Measurable indicators	Means of verification	Important assumptions
<p>Goal:</p> <p>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</p>			
<p>Purpose</p> <p>To safeguard the future of the saiga antelope in Kalmykia through constructive engagement with the public.</p>	<p>a) Saiga population continues to be stable or increasing in project area</p> <p>b) Local institutions have the will and capacity to continue saiga conservation.</p> <p>c) Kalmykian public shows positive attitudes towards saiga conservation.</p> <p>d) Ongoing international links established for environmental educators.</p>	<p>a) Monitoring of saiga populations in Chernye Zemli Biosphere Reserve and Stepnoi Sanctuary.</p> <p>b) Local institutions carry out project work competently and enthusiastic with hands-off guidance by project leaders.</p> <p>c) Attitudinal surveys and indirect measures of poaching activity in three project areas. High level of media and official interest in project activities sustained.</p> <p>d) Exchange with UK educators leads to sustained contact and support for Kalmykian participants, and particularly for local schools.</p>	<p>a) Monitoring protocols sound and give an unbiased representation of saiga population dynamics.</p> <p>b) Capacity-building equips these institutions with the ability to continue to operate once Darwin support is removed.</p> <p>c) Surveys are reliable indicators of level of public support and poaching activity. Media and official interest reflect or drive public interest.</p> <p>d) International links with environmental educators are a useful means of providing moral and actual support for saiga conservation.</p>
<p>Outputs</p>			

<p>a) Saiga monitoring system is in place and being used to provide data for assessment of conservation success.</p>	<p>a) Spatially—referenced data on population size and structure in the two zones, with particular focus on calf production.</p>	<p>a) An international journal paper based on analysis of the datasets. Physical presence of a dataset.</p>	<p>a) Saiga monitoring is carried out to a high standard and data collation is efficient and timely. This relies on the support of CZBR management.</p>
<p>b) Successful visitor centre at the Centre for Wild Animals of Kalmykia.</p>	<p>b) Visitor numbers exceed 500 individuals in year 2, exhibition judged by visitors as being of high quality and interest.</p>	<p>b) All visits to Centre recorded in guest book, and their comments recorded and acted upon.</p>	<p>b) Visitor centre opens to public on time, and CWA continues to be adequately core-funded.</p>
<p>c) Continuation of rotating cows project based at Centre for Wild Animals and serving areas to the west of the Chernye Zemli Biosphere Reserve.</p>	<p>c) 2 cows per year given to needy families together with support for veterinary & maintenance costs, first-born female calves returned to the scheme.</p>	<p>c) Records of herd size and animal locations kept at CWA.</p>	<p>c) The rotating cow project proves a success (this scheme is about to be launched).</p>
<p>d) Public awareness campaign in area north of the Chernye Zemli Biosphere Reserve carried out by Centre for Ecological Projects.</p>	<p>d) At least 100 households visited in at least 3 villages, and public meetings held in 3 villages. Information on saiga conservation distributed.</p>	<p>d) Detailed reports by CEP to project leaders.</p>	<p>d) Villagers are receptive to public awareness campaigns.</p>
<p>e) Continuation of anti-poaching activities by rangers of the Stepnoi Sanctuary (east of the Chernye Zemli Biosphere Reserve).</p>	<p>e) Rangers in Stepnoi sanctuary continue to patrol effectively throughout the period.</p>	<p>e) Regular reports from Director to project leaders, supplemented by direct observation.</p>	<p>e) Patrolling effort will continue to be adequately funded by Provincial government (Darwin project can only provide supplementary funds for monitoring activities).</p>
<p>f) A comparison of public attitudes and behaviours in the three regions, drawing lessons for future engagement with the public in the Chernye Zemli region.</p>	<p>f) A report on the study produced by the UK project team.</p>	<p>f) Study published as an article in an international journal.</p>	<p>f) A short-term study can adequately characterise behaviours and obtain unbiased attitudinal responses.</p>
<p>g) A high level of</p>		<p>g) A weekly search of</p>	<p>g) Our current high</p>

<p>positive media attention and official support for our work achieved within Kalmykia.</p> <p>h) Project staff engaged actively with environmental education in local schools and temples, and children enthused by saiga conservation.</p> <p>i) International links established between educators in the UK and Kalmykia, leading to ongoing support for saiga conservation at the grassroots level in both countries.</p>	<p>g) At least 3 articles in local newspapers and 1 article on local TV per year. Positive meetings with relevant officials on a regular basis.</p> <p>h) Project establishes and supports active saiga clubs at Yashkul school Arshan children's home and the Dharma Centre; children develop environmental understanding and interest.</p> <p>i) An exchange involving 3 UK and 3 Kalmykian participants, leading to high media coverage in Kalmykia and sustained contacts between them, including fund-raising and continued personal friendship.</p>	<p>the media by local project collaborators. Minutes taken of all relevant meetings</p> <p>h) Register taken at organised activities. Evidence of active enthusiasm through initiatives taken by children, such as paintings/stories and saiga club.</p> <p>i) Scans of media coverage of the exchange visits in both countries. Funds raised by UK counterparts. Records of continued personal contact from e-mails/letters.</p>	<p>level of visibility in the local media is sustained and heightened. Media presence translates into public attitudes.</p> <p>h) Enthusing children and highlighting the cultural and religious significance of saigas improves the long-term future for biodiversity conservation.</p> <p>i) Our experience so far, that personal contacts are hugely important in supporting sustained conservation efforts, is borne out when applied at a larger scale.</p>
<p>Activities</p> <p>a) Monitoring saiga populations in CZBR and SS.</p> <p>b) Anti-poaching patrols by SS rangers.</p> <p>c) CWA visitor centre opened and exhibition mounted.</p> <p>d) CEP public awareness campaign.</p> <p>e) Rotating cows project by CWA.</p>	<p>Activity Milestones (Summary of Project Implementation Timetable)</p> <p>Throughout project: Monitoring of saiga herds, anti-poaching patrols in Stepnoi Sanctuary, CWA visitor centre open, project activities with local schools and temples, rotating cow project.</p> <p>May 2006: Calf monitoring. CWA visitor Centre opened. Technical support given to local schools.</p> <p>September-October 2006: Imperial College field study in collaboration with CEP, of attitudes to saiga conservation in 3 contrasting areas.</p> <p>October 2006: Competition in UK and Kalmykia to choose exchange participants. Darwin project takes over ongoing maintenance costs of rotating cow project.</p> <p>March 2007: Attitude study report completed.</p>		

<p>f) Study of attitudes to saiga conservation in areas with 3 contrasting types of public engagement.</p>	<p>April 2007. Project workshop to discuss project progress and develop recommendations based on report.</p>
<p>g) Exchange between UK and Kalmykian educators.</p>	<p>May 2007. Calf monitoring. UK participants visit Kalmykia. Extensive media coverage of visit.</p>
<p>h) Visits to local schools & temples, including targetted technical support for international communication and environmental education.</p>	<p>June 2007. Kalmykian participants visit UK.</p> <p>July-Sept 2007: CEP public awareness campaign.</p> <p>July-December 2007. Support to Kalmykian partners to build capacity and funding base, to ensure sustainability of conservation and public engagement activities. Preparation of reports and articles for publication.</p>

Annex 3 Supplementary material

These items have been sent as additional attachments:

Item 1: Saiga News, Issue 3 (June 2006)

Item 2: Saiga News, Issue 4 (December 2006)

Item 3: Publicity leaflet issued by the Saiga Conservation Alliance

Item 4: Scan of a postcard advertising “Love an Animal” week at Spitalfields City Farm

Item 5: Article in BBC Wildlife on the saiga project. BBC Wildlife refused to include the Darwin Initiative name or logo, but were prepared to direct people to the project website.

Item 6: Article in Kalmykian newspaper “Iskra”, entitled “An ecological centre will be founded at Yashkul School” and documenting interactions between our partners at the school and the Centre for Wild Animals.

Item 7: Imperial College’s press releases concerning our Cultural Exchange and our paper on saiga maternal investments.