

## ***Darwin Initiative Annual Report***

### **Darwin Project Information**

Project Ref Number	165-15-024
Project Title	Quantification and Elimination of Threats to the Caspian seal
Country(ies)	Azerbaijan, Islamic Republic of Iran, Republic of Kazakhstan, Russian Federation, Turkmenistan
UK Contract Holder Institution	Institute of Integrative & Comparative Biology, University of Leeds
UK Partner Institution(s)	Sea Mammal Research Unit (SMRU), University of St Andrews; Institute of Zoology (IoZ), Zoological Society of London
Host country Partner Institution(s)	Fisheries Research and Production Centre (FRPC - Almaty, Kazakhstan); Institute for Deserts, Flora and Fauna (Ashgabat, Turkmenistan), University of Guilan, Iran, Institute of Geology (IoG), Azerbaijan Academy of Sciences (Baku, Azerbaijan); International Oceanographic Institute (IOI - Astrakhan, Russia).
Darwin Grant Value	£260,713
Start/End dates of Project	July 1 <sup>st</sup> 2006 to July 31 <sup>st</sup> 2009
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	July 1 <sup>st</sup> 2006 to March 31 <sup>st</sup> 2007, Annual report 1
Project Leader Name	Dr Simon Goodman
Project website	<a href="http://www.caspianseal.org">www.caspianseal.org</a>
Author(s), date	Dr Simon Goodman, Dr Sue Wilson

### **1. Project Background**

The project is based in the Caspian coastal regions of each of the 5 Caspian littoral countries (Azerbaijan, Iran, Kazakhstan, Russian Federation, and Turkmenistan). It was established in response to an urgent need to assess the conservation status of the Caspian seal (*Phoca caspica*), which has declined by more than 80% in the last 3 generations, and to identify, quantify and develop responses to the ongoing threats to the species in the context of the Caspian marine ecosystem. It also aims to enhance the scientific capacity of researchers within the Caspian region working on marine biodiversity to recognise and address all issues surrounding Caspian seal conservation. Finally the project is working with local

communities and regional governments to raise awareness about conservation issues surrounding the seal, and to implement conservation policy guided by research outputs from the project.

## 2. Project Partnerships

The project team has a long history of collaboration with the lead scientists in each country predating the Darwin project, so the relationship with these partners was already mature. However, the initiation of the Darwin project led to the development of broader working relationships with new staff members in each country and with the administrations of the partner institutions. In general the relationships are productive and have generated progress towards the project goals in line with the project schedule. As to be expected with a project of this nature there have been some initial difficulties with communications and differences in administrative culture between countries. Our Scientific partners in Turkmenistan, Kazakhstan and Azerbaijan only speak Russian, but this has largely been overcome by taking a second scientific coordinator from St Petersburg, Russia on to the management team, Ms Lilia Dmitrieva, who is also a member of the team which carries out the annual aerial survey to generate population estimates.

Below is a summary of the relationship with each of the project partners in the host countries and capacity to meet CBD commitments.

IR Iran: Some initial difficulty in releasing Darwin funds to the scientific partners due administrative problems with the host institute (now resolved). Excellent progress has been made in capacity building, fieldwork and engagement in the project of local communities and the government. Substantial progress has already been made in changing attitudes towards seals in fishing communities, and we expect this lead to a reduction in seal mortality from fishing by-catch. The scientific partner participated in the drafting of the regional Seal Conservation Action Plan (SCAMP). Excellent communications.

Azerbaijan: Some initial difficulty in releasing Darwin funds to the scientific partner (now resolving). Excellent progress has been made in the initial phase of capacity building, fieldwork and monitoring. However, there have been difficulties in receiving reports of work in an appropriate format, and some difficulties in communication due to erratic email connections. These are now resolved with L. Dmitrieva's efforts. Azerbaijan hosted and helped organise the first project workshop in Baku, September 2006. The scientific partner participated in the drafting of the regional Seal Conservation Action Plan, and monitoring work with guide further policy development in Azerbaijan in line with the project timetable.

Russian Federation: Excellent communications. A graduate student has participated in February 07 workshop and is working with project on Russian language version of a Caspian Seal DVD and other educational materials for dissemination in the region. The scientific partner participated in the drafting of the regional Seal Conservation Action Plan.

Kazakhstan: Limited institutional email capacity at the FRPC coupled with language problems initially resulted in some delays to project progress. However, with L. Dmitrieva's support, progress is now on track for capacity building and research activities. Excellent progress has been with governmental participation in the project. As a result of training from the project the scientific leader in Kazakhstan, Dr Mirgaly Baimukanov, deputy director of the FRPC, was able to undertake extensive lobbying of the Kazakh Ministry of Agriculture to shift Kazakhstan's national policy on commercial seal hunting from setting quotas of ~18,000 per year to zero in the regional policy forum known as the 'Bioresources Commission'. We hope international political pressure arising from this will move other countries to follow suit. This is a major step forward in achieving the primary goals of the project, and in Kazakhstan meeting its CBD commitments since a reduction in seal mortality is required to stabilise the population decline. The FRPC also allocated significant financial resources to support the 2007 aerial population survey. The FRPC participated in the drafting of the regional Seal Conservation Action Plan.

Turkmenistan: Turkmenistan had the lowest starting capacity of all the Caspian countries to carry out the project scientific activities and communications were initially poor. Communication has improved with L. Dmitrieva's input. Turkmenistan staff participated in the initial project training workshop in Baku but need more support and guidance than team members from other countries. Monitoring of seal populations is slightly behind schedule and is being conducted to a lower than expected standard compared to other partners, but we are confident that with guidance from the UK and regional partners this will be on track by the end of the project. Major efforts are being made to maintain a good working relationship with our Turkmenistan partners because of the importance of the extensive Turkmenistan coastal habitat for the Caspian seal. The scientific partner participated in the drafting of the regional Seal Conservation Action Plan, and is also lobbying the Turkmenistan government to support implementation of the SCAMP.

Other Partners: Relationships with other partners have been excellent and very productive.

Caspian Environment Programme (CEP) [www.caspianenvironment.org](http://www.caspianenvironment.org): The CEP is a UNDP funded pan-Caspian body which is developing international environmental treaties and policy for management of the Caspian ecosystem, and has a mandate from each of the Caspian countries. The CEP invited the Darwin project management team to advise on seal conservation issues in 2004, and supports the project logistically, financially and by providing a conduit for research outcomes and policy advice from the project direct to ministerial levels in each country. The CEP provided secretarial support and a venue to the first project training workshop in Baku, September 2006, US\$14,000 towards fieldwork costs, film production and project coordination (salary for L. Dmitrieva). The preliminary seal conservation action and management plan drafted at that workshop was used by the CEP as the basis for its official regional seal conservation plan, which was ratified by each country and published March 2007. This support from the CEP has made a substantial contribution to the project helping the region meet its CBD commitments by accelerating acceptance of the SCAMP.

Agip KCO: Agip KCO is an international oil company involved in the development of the northern Caspian oil field. It has previously provided logistical and financial support (US\$100,000) in 2006 for aerial population surveys. In January 2007 it again donated logistical support of approximate in-kind value US\$10,000 towards this year's aerial population survey, and requested submission of a tender for 3 years support for aerial surveys and satellite telemetry studies on Caspian seals valued at £600,000. The studies will provide important new knowledge on population status and habitat usage, guiding development of conservation policy, will Agip KCO will use the outputs in their environmental impact assessments.

Institute of Zoology, Zoological Society of London: Dr Paul Jepson from IoZ attended the Baku workshop in September 2006 and delivered training on post-mortem investigation techniques, contributing to the development of capacity for investigation into the causes of seal mortality within the region.

Sea Mammal Research Unit, University of St Andrews: Mr C. Duck from SMRU attended the Baku workshop in September 2006 and delivered training on fieldwork techniques for working with live seals. This is required to shift the emphasis away from lethal sampling techniques which has been the basis of seal research by regional scientists until now.

Swedish Museum of Natural History, Stockholm (SNHM): Dr Tero Härkönen provided scientific support in the implementation of the 2007 aerial population survey and data analysis. While Mart Jüssi and Ivar Jüssi (Estonian Fund for Nature) provided training in aerial survey techniques at the February 2007 workshop in Atyrau, Kazakhstan. This training is increasing the capacity for regional scientists to undertake their own population surveys.

Other collaborations: We have made contact with James Hindson, leader of project 14-052 which is focused on biodiversity education in the Caspian region. We have discussed potential links between the projects but this is still at an early stage. We also have close contacts with the WWF Caucasus Office in Baku, and our Azeri partner has made an application to them for supplementary funds to support further monitoring work. We have established contact with Institute of Virology and Microbiology (IVM) in Almaty, Kazakhstan and two scientists from this Institution are now participating in the health aspects of the project.

### **3. Project progress**

#### **3.1 Progress in carrying out project activities**

The overarching project outputs from the logframe are: 1) Regional Seal Centre Network with trained staff and research infrastructure; 2) Estimates of population size, movement & habitat usage, health status, diet, genetic structure, & climate change response model; 3) Seal Conservation Action and Management Plan & reduced by-catch mortality; 4) Educational events & materials; 5) Media representation. The following activities contributed towards these outputs:

##### *Capacity building and training*

The project initiation activities (establish project at the partner institutions, draft institutional MOUs, select and employ research assistants, procure equipment etc) were completed. Training workshops were completed in Baku, Azerbaijan, September 2006 (Project initiation, population status and conservation,

seal ecology, health surveys, diet analysis), and Atyrau, Kazakhstan, February 2007 (aerial population survey methods) fulfilling the year 1 aims for output 1.

### *Research and population monitoring*

Project partners in Iran began monitoring of seal mortality along the Iranian coast for assessment of by-catch rates in the Iranian fishery. Project partners from FRPC and IVM in Kazakhstan carried out preliminary live-sampling and necropsy work in Kazakhstan, and identified potential sites for population monitoring. Project partners in Azerbaijan began monitoring of mortality on the Azeri coast, however there are indications that the population of Caspian seals inhabiting the Aspheron peninsula near Baku has declined to zero which means the original plans for monitoring of live seals and seal diet at this location will have to be reassessed. The project partner in Turkmenistan carried out a survey of haul out sites during the breeding and moulting periods but the quality of the work fell below the expected standard and we are now attempting to provide additional support and training to increase the capacity to do this work to the required level.

An aerial survey carried out over the winter ice-field in Kazakhstan in February 2007, to assess pup production and seal distribution on the ice. The survey was carried out together with our FRPC partners and SNHM, with logistical assistance from Agip KCO. This generated an estimate of annual pup production for 2007 of 6,200, which is substantially lower than the estimates of 21,000 and 16,000 for 2005 and 2006. This was likely to very poor ice conditions winter 2007.

These activities fulfil most of the anticipated research aims for year 1, and where there is a shortfall e.g. in Turkmenistan, these can be made up in year 2 and 3.

### *Education & policy*

Iran has held workshops with fishing co-operatives along the Iranian Caspian coast to raise awareness of seal conservation issues and to educate fishermen in strategies for reducing/avoiding seal bycatch. Educational materials associated with these workshops has been produced and distributed. The early indications are that this has been well received by the fishing communities and that they are using the methods taught to reduce seal mortality, and reporting mortality to the project when it occurs. The Iranian partners have also been successful in engaging the Iranian Ministry of Fisheries who are now supporting the drive to reduce seal by-catch and the enforcement of existing Iranian legislation to protect seals.

During the September 2006 Baku workshop the project leaders and regional scientists drafted a preliminary Caspian Seal Conservation Action and Management Plan (SCAMP) based on the current state of knowledge. The project personnel attended CEP BISRAG (Biodiversity and Invasive Species Regional Action Group) meeting in Baku, September 24-25, 2006, gave presentation on Darwin project background and programme, proposals for regional seal centre network (CSCN), Caspian seal population status assessment and draft Caspian Seal Conservation Action and Management Plan. The CEP accepted the SCAMP as the basis for the official regional seal conservation action plan which was ratified by the member countries and published in March 2007.

Together these fulfil the year 1 aims for outputs 3 and 4.

### *Dissemination of results*

Production of a DVD with 3 short films detailing the history, population status and conservation efforts for Caspian seals was completed and distributed among regional stakeholders and to the CEP. A project website (<http://www.caspianseal.org>) is in development and will be completed during 2007. The conservation action plan, plus reports on previous population surveys and other activities are now available from the CEP website (<http://www.caspianenvironment.org/newsite/Data-MeetingReports.htm>). The project has received press coverage in Azerbaijan, Iran, Kazakhstan and Turkmenistan. The project initiation meeting in September 2006 was covered by Azeri TV. A presentation on previous aerial survey results was given by team member Mart Jüssi at the Marine Mammals of the Holarctic conference in St Petersburg, Russia (September 10<sup>th</sup>-14<sup>th</sup> 2006). A manuscript detailing the pup production of Caspian seals based on the 2005 and 2006 aerial surveys was submitted to the journal *Ambio*. Together these fulfil most of the anticipated aims for year 1 under output 5.

## 3.2 Progress towards Project Outputs

### 1) Regional Seal Centre Network with trained staff and research infrastructure

Work under this output is generally proceeding in line with expectations for this stage of the project. The basic structure of the seal centre network is in place, with the staff in post, equipped and beginning their project activities. The project partners in each country are in touch with each other forming the pan-Caspian network of regional scientists working seal conservation. The training is a multiyear activity, but the proposed training activities for this year were completed as planned. At this stage the enthusiastic uptake of the training indicates that this output will be delivered as planned by the end of the project. One area for concern is that identifying sufficient good students for participation in the project is proving more difficult than planned, but we have asked the project partners to put more effort in to this and we will monitor progress carefully.

### 2) Estimates of population size, movement & habitat usage, health status, diet, genetic structure, & climate change response model

An aerial population survey was completed in February 2007, complementing those undertaken in 2005 and 2006. Local population monitoring, and surveys of health and diet are underway. The genetics and construction of the climate change model are scheduled for later in the project. At this stage we believe the activities that are currently underway and those completed in 2007 indicate that the output will be delivered as planned. The endorsement of the current research results by the regional scientific community (e.g. the success of Dr Baimukanov in Kazakhstan (see section 2)) is measurable indicator of how this is translating in to conservation impacts.

### 3) Seal Conservation Action and Management Plan & reduced by-catch mortality

Draft Caspian Seal Conservation Action and Management Plan (SCAMP) was prepared by the Darwin project, presented to the BISRAG meeting in September 2006, edited and adopted by Caspian Environment Programme (as Caspian Seal Conservation Action Plan (CSCAP) - the Fourth Draft (March 01, 2007) and agreed by regional authorities in March 2007 (see table 2 below; Annex 3 supplementary material).

Reduction of by-catch is multiyear activity but there has been significant progress towards this through the community workshops taking place in Iran (see 3.1 above).

The engagement of the regional authorities and local communities in the project is a measurable indicator of the success of this output, and the progress to date is a strong indication that the output will be delivered as planned by the end of the project.

### 4) Educational events & materials

This output is generally progressing in line with expectations for this stage of the project, in terms of the number of and type of activities completed, e.g. workshop materials, DVD, submission of manuscript to Ambio etc (see 3.1).

### 5) Media representation

This output is generally progressing in line with expectations for this stage of the project, in terms of the number of and type of activities completed (see 3.1).

For each output, the output level assumptions still hold true, and we do not anticipate any problems at this stage.

### 3.3 Standard Output Measures

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
Established codes						
4A	Workshop Sept 2006 (seal biology, fieldwork)	2				
4B	2 weeks each student	4				
4C	Workshop Feb 2007 (aerial survey)	1				
4D	1 week	1				
5	Research assistants in Kz, Ir, Az, Tk	8				
6A	Additional attendees at workshops 2006-7	8				
6B	Workshop total 3 weeks	24				
7	Necropsy book, website, children's introduction to seal conservation (web presentations), Caspian seal DVD with short films, Iranian bycatch workshop materials.	6				
8	SG 2, SW 3, PJ 1	6				
9	Caspian Environment Programme Seal Conservation Action & Management Plan	1				
11B	Manuscript on aerial survey submitted to Ambio	1				
14A	Action plan meeting, Baku, Sept 2006	1				
14B	BISRAG Sept 2006, Holarctic Marine Mammal Conf, 2006	2				
15A	Ir x2, Az, Kz, Tk, 1 each	5				
17A	Caspian seal Network	1				
18C	Ir 1, Az 1 (News progs)	2				
20	Boats & computers	£10,000				
23	CEP	\$14,000				
	Agip KCO (in kind)	\$10,000				

New - Project specific measures	Weeks spent in country by other European project collaborators/staff	14				
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**Table 2 Publications**

Type * (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £ (if applicable)
CD	Darwin Caspian seal project workshop, September 18-22, 2006.		S.J. Goodman	N/A
Report to CEP	S. Goodman and S. Wilson (eds). The start of a new programme for assessing the distribution, habitat and health status of Caspian seals ( <i>Phoca caspica</i> ). Caspian International Seal Survey (CISS); December 2006.	Caspian Environment Programme, Tehran, Iran.	Caspian Environment Programme, <a href="http://www.caspianseal.org">www.caspianseal.org</a> Or S.Wilson	N/A
Seal Conservation Action and Management Plan (SCAMP)	SCAMP was prepared by the Darwin project, presented to BISRAG meeting September 2006, edited and adopted by Caspian Environment Programme (as Caspian Seal Conservation Action Plan (CSCAP), and agreed by regional authorities in March 2007	Caspian Environment Programme, Tehran, Iran.	<a href="http://www.caspianenvironment.org/autoindex/index.php?dir=NewSite/DocCenter/reports/2007/Caspian%20Seal%20Conservation%20Action%20Plan/">http://www.caspianenvironment.org/autoindex/index.php?dir=NewSite/DocCenter/reports/2007/Caspian%20Seal%20Conservation%20Action%20Plan/</a>	N/A
DVD	The Caspian Seal (English version)	Byword Productions	S. Wilson	N/A
Manuscript submitted	T. Harkonen, M. Jüssi, M. Baimukanov, A. Bignert, L. Dmitrieva, Y. Kasimbekov, M. Verevkin, S. Wilson & S. J. Goodman.  Pup production and breeding distribution of the Caspian seal <i>Phoca caspica</i> in relation to human impacts.	<i>Ambio</i>	S.J. Goodman	N/A

### 3.4 Progress towards the project purpose and outcomes

**Purpose** To strengthen the ability of researchers and managers in the region to identify, monitor and manage present and future threats to the Caspian seal

The project has created communication links between all the project partners forming a network or regional scientists working on seal conservation, run two specialist training workshops and provided materials for guidance, including manuals for field monitoring and post-mortem examination and sampling. Communications between the partners and the project leaders help guide work and resolve technical problems. The project has also provided the equipment and other basic infrastructure required to support the work. Thus the project is increasing the capacity of the regional researchers to undertake the research and ability to communicate across the region required to achieve this outcome.

**Purpose** To halt seal population decline by reducing anthropogenic sourced mortality

Prior to this project, the perception in the region was that there were approximately 400,000 Caspian seals, an annual pup production of 40-60,000 pups, population recovery from CDV outbreaks and therefore no reason not to resume or continue commercial and scientific hunting. The true implications of the aerial survey results of pup production (of about 21,000 pups in 2005, 17,000 in 2006 and fewer than 7,000 in 2007) and the calculation of a 3-4% annual decline in the breeding female population is gradually impacting on the regional authorities, resulting in serious debate and questioning of traditional hunting activity. The preliminary seal conservation plan drafted at our September 2006 meeting is now accepted by the region.

The project workshops, the Darwin Initiation meeting and also meetings and correspondence with BISRAG (Biodiversity and Invasive Species working group) have raised awareness of threats to the Caspian seal among both researchers and decision-makers in the region, who are now realising the importance of taking action. For example, lobbying by our main partner in Kazakhstan led to change of the Kazakh Ministry of Agriculture advocating a hunting quota of 18,000 per year in 2005, to a zero quota for 2008 in line with the Seal Conservation Action and Management Plan. However Russia remains the main commercial hunter of seals and more political pressure within the region is required to make them follow suit.

The workshops with fishermen's groups in Iran has had an almost immediate effect on preventing the killing of seals caught in nets, and the attitude of fishermen towards seals is undergoing a radical change on account of this work. Once this project is well developed and established in Iran, it would be our aim to try to extend it to other areas of the Caspian where by-catch is known to be a major source of seal mortality.

**Purpose** To build capacity for the long-term implementation of science-based conservation and management policies in the Caspian that promote biodiversity and its sustainable use.

There is still a long way to go both in having the capacity within the region to carry out the scientific research required to guide conservation policies, and to establish a culture of actually using peer reviewed science and other objective criteria for setting conservation policy and managing biodiversity in a sustainable way, rather than using anecdote or short term financial interests.

However, the partners in the project, and the governmental bodies they report to are already seeing the successes from the seal project, and in some countries are using the results to argue for a shift in previous policy (e.g. in Kazakhstan). Our belief is that the training we will provide will leave a scientific cultural legacy that will spread into broader areas of biodiversity management in the Caspian region. A key challenge is to gradually effect a change in the *modus operandi* of the Caspian Bioresources Commission. This Commission meets privately annually to allocate fisheries (e.g. for sturgeon) and seal hunting quotas throughout the region. It has historically been dominated by the Russian delegation and continues to be so. Seal hunting quotas continue to be allocated based on 'advice', the basis of which is not specified. The 2007 quota allocated of 18,000 seals was approximately three times the actual juvenile recruitment for 2007 and is clearly unsustainable. However by already changing the attitudes of countries such as Kazakhstan we are confident that in the short term this important regional biodiversity management group will accept the need for fully transparent policy setting based on peer reviewed science.

The Darwin project is working with its sister group, the Caspian International Seal Survey (CISS) – which includes Darwin scientific partners in Kazakhstan and Russia – firstly to obtain realistic pup production and population figures by means of systematic and transparent survey methods over a period of several successive years, and secondly to ensure that all country delegates to the Bioresources Commission

have the results and conclusions of these surveys, and therefore have the background and knowledge to argue for sustainable hunting quotas (we have recommended zero quotas until the Caspian seal population has been shown, by means of systematic and transparent surveys, to be increasing). Thus the management policy should gradually change, through these efforts, to become genuinely science-based.

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

It is still early in the lifetime of this project, and so it would be premature to make strong statements about biodiversity impacts arising from the work. However the early successes in the drafting and acceptance of the conservation action plan, the success with the local community work on fishing by-catch in Iran, suggest that ultimately the project does have the potential to contribute to a halt in the current decline of the Caspian seal and begin a recovery. If this can be achieved then wider improvements the Caspian ecosystem should follow since the seal is key flagship and indicator species.

## **4. Monitoring, evaluation and lessons**

As this was the first year of the project most of the work has focused on setting up the project and initiating the project work. Evaluating the success of these components is straight forward since this is evident from having functioning project teams in place starting to generating data and the project outputs listed in the rest of this document. There have already been notable progress, such as the generation of the conservation action plan, the success of which is indicated by its acceptance in the region, and the change in policy on seal hunting by the government of Kazakhstan. The success of other project activities will be more closely address in years 2 and 3, once they have been established and have had time to begin making an impact.

Neither the principal partner nor research assistants in Kazakhstan, Turkmenistan and Azerbaijan have a working knowledge of written or spoken English. In order to promote clear understanding and communication with the Darwin scientific partners in the region, the UK team has found that it is essential to have a native Russian speaker on the coordination team. That person (Ms Lilia Dmitrieva from St Petersburg, a member of the CISS survey team) has now joined the team. The language barrier not only acts as an impediment to the practical running of the Darwin project, but acts to continue to isolate scientists in these countries from the international scientific community and prevents them from reading and learning from the scientific literature. The UK team is therefore considering the possibility of promoting English learning for scientific partners as an integral part of the project.

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

N/A

## **6. Other comments on progress not covered elsewhere**

There is some concern about the international situation with respect to Iran and how this might develop, but at this time it is not impacting on the implementation of the project.

## **7. Sustainability**

The project has a high profile within the region at governmental level, and among government agencies responsible for management of the seal population through our involvement with the CEP, partners, and direct approaches to the government institutions involved. This evidenced by the acceptance of the conservation action plan and the change in policy in Kazakhstan.

There has also been work with local communities in Iran, and the project there now has a high profile and acceptance. The project and seal conservation has received media attention in the form of press articles, and TV coverage in each country. All though early in the project there are strong indications that governments in Iran and Kazakhstan are interested in supporting the research activities once the Darwin project finishes, and we are confident that the early successes with policy and local communities indicate that these impacts will continue beyond the term of the project.

## 8. Dissemination

All the project scientific outputs other materials will be made freely available from the project website and from the CEP website. These websites will persist beyond the end of the project, as this is web based the costs are minimal. The CD made for the September 2006 workshop was distributed to all workshop participants, The DVD entitled 'The Caspian Seal' has so far been distributed among all project participants, and will be more widely distributed as soon as the Russian and Farsi language versions are available. The manuscript submitted to Ambio on annual pup production 2005/06 and the draft interim report on pup production for 2007 have been distributed to all stakeholders in the region.

## 9. Project Expenditure

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

Item	Budget (please indicate which document you refer to if other than your project schedule)	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			

There were under spends of ~10% (or less) or of relatively modest sums in salaries, travel, office costs and printing which were vired to cover additional equipment and higher than expected costs for capital items (boats, engines etc) for the project partners. The additional expenditure in 'Others' category appears to be mostly due to costs of community workshops in Iran and other training which were counted as 'fieldwork costs' rather than 'conferences and seminars' in the university accounting system.

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

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><b>Goal:</b> <i>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>The early successes in the drafting and acceptance of the conservation action plan, and the success with the local community work on fishing by-catch in Iran, suggest that project is has the potential to contribute to a halt in the current decline of the Caspian seal and begin a recovery. If this can be achieved then wider improvements in the Caspian ecosystem should follow since the seal is key flagship and indicator species.</p>	<p><i>(do not fill not applicable)</i></p>
<p>Purpose</p> <p>To strengthen the ability of researchers and managers in the region to identify, monitor and manage present and future threats to the Caspian seal; to halt seal population decline by reducing anthropogenic sourced mortality; to build capacity for the longterm implementation of science-based conservation and management polices in the Caspian that promote biodiversity and its sustainable use.</p>	<p>New knowledge on the status of Caspian seals, plus the nature, and prevalence of threats faced by the population.</p> <p>A Seal Conservation Action and Management Plan (SCAMP) endorsed by the Caspian Environment Programme and 2003 Framework Convention; potential reclassification by IUCN.</p> <p>Increased awareness of environmental issues and changes in practice to reduce seal mortality in local</p>	<p>The seal conservation network was established, and training programmes initiated, increasing capacity to identify, monitor and manage threats to the seal. The research programmes are generating the new knowledge required to inform policy (e.g. aerial survey in January 2007). A preliminary conservation action plan was produced and endorsed by the governments of the Caspian countries via the Caspian Environment Programme. Media coverage in each country is raising the profile of the seal, and community</p>	<p>Capacity building and training: workshops (as yr1 plus telemetry methods), students begin projects;</p> <p>Research and population monitoring: Population surveys, diet analysis, health surveys, telemetry studies and genetic population structure analysis</p> <p>Education &amp; policy: Continue to work with local organisations, schools and communities to develop educational materials and solutions to reduce by-catch; further promote implementation of SCAMP at governmental levels</p> <p>Dissemination of results: annual</p>

	communities.	workshops in Iran are leading to changing attitudes and practices to avoid by-catch in fishing communities.	reports, website updates, media engaged, conference presentations
Output 1. Regional Seal Centre Network with trained staff and research infrastructure.	Network of trained and equipped staff in collaborating centres across the region.	The basic structure of the seal centre network is in place, with the staff in post, equipped and running their project activities. The project partners in each country are in touch with each other forming the pan-Caspian network of regional scientists working seal conservation. The training is a multiyear activity, but the proposed training activities for this year were completed as planned.	
Activity 1.1 Establishment of regional seal conservation network	See above for current progress. In year 2 continue to make sure the research groups maintain contact, participate in workshops, enhance communication and dissemination through use of the project website.		
Activity 1.2 Training workshops	Training workshops were held in September 26 (2 weeks) Baku, Azerbaijan (seal ecology, population biology, pathology, health & diet analysis); February 2007 (10 days), Atyrau, Kazakhstan (Aerial survey methodology). Year 2 continue to run training workshops as per logframe.		
Activity 1.3 Procure equipment and formalise institutional relationships	All equipment purchased and institutional relationships formalised by MOUs. Continue to maintain relationships in Year 2.		
Output 2. Estimates of population size, movement & habitat usage, health status, diet, genetic structure, & climate change response model.	Findings endorsed by local & international scientific & conservation communities.	An aerial population survey was completed in February 2007, complementing those undertaken in 2005 and 2006. Manuscript submitted to Ambio. Local population monitoring, and surveys of health and diet are underway. The genetics and construction of the climate change model are scheduled for later in the project. The endorsement of the current research results by the regional scientific community (e.g. the success of Dr Baimukanov in Kazakhstan (see section 2)) is measurable indicator of how this is translating in to conservation impacts.	
Activity 2.1. Aerial survey February 2007	Aerial population survey undertaken in February 2007. Continue with survey in February 2008 providing external funds available – application will be submitted to		

		Agip KCO summer 2007.
Activity 2.2. Local monitoring of populations		Monitoring established in Iran, Kazakhstan, Azerbaijan, Turkmenistan and is beginning to generate data. Continue with programme in Year 2.
Output 3. Seal Conservation Action and Management Plan; reduced by-catch mortality	Plan peer reviewed, presented at international meeting and to local stakeholders.	<p>Preliminary Caspian Seal Conservation Action and Management Plan (SCAMP) was prepared by the Darwin project, presented to the BISRAG meeting in September 2006, edited and adopted by Caspian Environment Programme (as Caspian Seal Conservation Action Plan (CSCAP) - the Fourth Draft (March 01, 2007) and agreed by regional authorities in March 2007 (see table 2; Annex 3 supplementary material).</p> <p>Reduction of by-catch is multiyear activity but there has been significant progress towards this through the community workshops taking place in Iran.</p> <p>The engagement of the regional authorities and local communities in the project is a measurable indicator of the success of this output, and the progress to date is a strong indication that the output will be delivered as planned by the end of the project.</p>
Activity 3.1. Draft seal conservation action & management plan, submitted to CEP		See above for progress. Year 2, Use project data to refine the SCAMP as it is generated. Continue to lobby regional authorities about uptake and implementation of plan.
Activity 3.2. Workshops with Iranian fishing communities to change fishing practices		The workshops with fishermen's groups in Iran has had an almost immediate effect on preventing the killing of seals caught in nets, and the attitude of fishermen towards seals is undergoing a radical change on account of this work. Year 2, continue workshops as planned.
Output 4. Educational events & materials	Participation of local communities in events, material distributed.	This output is generally progressing in line with expectations for this stage of the project, in terms of the number of and type of activities completed, e.g. workshop materials, DVD, etc. Level of participation in educational activities suggests this is successful.

<p>Activity 4.1. Educational events with local communities to highlight seal conservation</p>	<p>Along side workshops with fishermen dealing with fishing practices, workshops to highlight the status of the seal are also being conducted. Year 2, continue workshops as planned.</p>
<p>Activity 4.2. Production of educational materials for use by the region</p>	<p>DVD of short films about the Caspian seal completed and distributed; website established and growing (<a href="http://www.caspianseal.org">www.caspianseal.org</a>); educational presentations and project materials available from website. Year 2 - Continue to generate film to enhance DVD, and produce other educational materials as planned.</p>
<p>Output 5. Media representation</p>	<p>Project featured in local and international media.  This output is generally progressing in line with expectations for this stage of the project, in terms of the number of and type of activities completed. Indicator appropriate.</p>
<p>Activity 5.1. Project featured in press</p>	<p>Project featured in press articles in Iran, Azerbaijan, Kazakhstan and Turkmenistan. Year 2 - Continue to promote media coverage appropriate to project activities and outputs.</p>
<p>Activity 5.2. Project featured in broadcast media</p>	<p>Project featured in TV reports in Iran and Azerbaijan. Year 2 - Continue to promote media coverage appropriate to project activities and outputs.</p>

## Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Goal:</b></p> <p><b>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</b></p> <ul style="list-style-type: none"> <li>• the conservation of biological diversity,</li> <li>• the sustainable use of its components, and</li> <li>• the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</li> </ul>			
<p><b>Purpose</b></p> <p>To strengthen the ability of researchers and managers in the region to identify, monitor and manage present and future threats to the Caspian seal; to halt seal population decline by reducing anthropogenic sourced mortality; to build capacity for the longterm implementation of science-based conservation and management polices in the Caspian that promote biodiversity and its sustainable use.</p>	<p>New knowledge on the status of Caspian seals, plus the nature, and prevalence of threats faced by the population.</p> <p>A Seal Conservation Action and Management Plan (SCAMP) endorsed by the Caspian Environment Programme and 2003 Framework Convention; potential reclassification by IUCN.</p> <p>Increased awareness of environmental issues and changes in practice to reduce seal mortality in local communities.</p>	<p>Project and workshop reports involving partner organisations, publications in peer-reviewed journals.</p> <p>SCAMP document and correspondence.</p> <p>Documentary films, website, professional and community educational materials, reports of educational and public relation programmes, success of students trained in programme, uptake of policy recommendations by local stakeholders. Monitoring shows seal mortality reduced due to uptake of practices to eliminate by-catch.</p>	<p>Researchers trained in the project and government ministries all use project findings and conservation action plan to continue to minimise the effects of threats to the seals and help to restore its population according to the 2003 Framework Convention.</p> <p>Continued funding made available, most probably via the Caspian Environment Programme with continuing matched contributions from oil companies and partner organisations</p>
<p><b>Outputs</b></p> <p>Regional Seal Centre Network with trained staff and research infrastructure.</p> <p>Estimates of population size, movement &amp; habitat usage, health status, diet, genetic structure, &amp; climate change response model.</p> <p>Seal Conservation Action and Management Plan; reduced by-catch mortality</p> <p>Educational events &amp; materials.</p> <p>Media representation</p>	<p>Network of trained and equipped staff in collaborating centres across the region.</p> <p>Findings endorsed by local &amp; international scientific &amp; conservation communities.</p> <p>Plan peer reviewed, presented at international meeting and to local stakeholders.</p> <p>Participation of local communities in events, material distributed.</p> <p>Project featured in local and international media.</p>	<p>Annual and field reports, peer reviewed papers, continued output of data to support SCAMP.</p> <p>Publication of results in peer reviewed international scientific journals.</p> <p>SCAMP published and distributed, copies sent to Darwin Initiative, meeting proceedings.</p> <p>Educational materials, posters, leaflets, press releases &amp; reports on changes to level of seal mortality.</p> <p>Articles and recordings.</p>	<p>Researcher network and laboratories in the 5 littoral states continue to collaborate to fulfil SCAMP.</p> <p>Research &amp; monitoring programme generates the information required for the SCAMP.</p> <p>Researchers continue to follow project protocols, make data available and produce work to international standards.</p> <p>Links to media &amp; educational institutions strengthened through project.</p>

<b>Activities</b>	<b>Activity milestones (summary of project implementation timetable)</b>	<b>Assumptions</b>
Capacity building and training	<p><i>Yr1:</i> Equip research centres, workshops (seal ecology, population biology, pathology, health &amp; diet analysis); <i>Yr2:</i> workshops (as yr1 plus telemetry methods), students begin projects; <i>Yr3:</i> Workshops (as yr2 plus, climate change, contaminant monitoring), students complete projects.</p> <p><i>Yr1:</i> Population surveys, diet analysis, health surveys; <i>Yr2:</i> As yr1 plus telemetry studies and genetic population structure analysis; <i>Yr3:</i> As yr 2, scientific papers and management plan written.</p>	<p>Required relationships with partner institutions in place. These are already well established.</p> <p>Research methods are appropriate for the Caspian. The proposed methods are well established for related species (ringed seals). Local communities participate.</p>
Research and population monitoring	<p><i>Yr1:</i> Work with local organisations, schools and communities to develop educational materials and solutions to reduce by-catch; <i>Yr2 &amp; Yr 3,</i> continue to run programmes.</p>	<p>Successful engagement of stakeholders.</p>
Education & policy	<p><i>In each year:</i> annual reports, website updates, media engaged; <i>Yrs 2 and 3:</i> presentation of results; <i>Yr3:</i> Action plan distributed, papers submitted.</p>	
Dissemination of results		

## **Annex 3** supplementary material

### **Film DVD: The Caspian seal (Byword production)**

The Caspian seal

Seals & Ships

Seals on Ice

### **Data DVD: Supplementary material for Darwin Caspian seal project Annual Report 1 (July 01 2006 to March 31 2007).**