



Submit by 13 January 2006

**DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 14 COMPETITION:STAGE 2**

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Keep within word limits.

**1. Name and address of organisation**

<b>Name:</b> Institute of Integrative & Comparative Biology	<b>Address:</b> Miall Building, Clarendon Way, Leeds LS2 9JT, UK
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**2. Project title (not exceeding 10 words)**

Quantification and elimination of threats to the Caspian seal
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**3. Project dates, duration and total Darwin Initiative Grant requested**

Proposed start date:		Duration of project:		End date:	
Darwin funding requested	Total	2006/07	2007/08	2008/09	2009/2010
	£260,713	£77,521	£76,629	£77,599	£28,964

**4. Define the purpose of the project in line with the logical framework**

<ol style="list-style-type: none"> <li>1. Further enhance the capacity of Caspian region scientists to identify and respond to threats to Caspian seals (<i>Phoca caspica</i>), a vulnerable sentinel species for Caspian marine biodiversity.</li> <li>2. Establish a programme for the systematic monitoring of population size, distribution, health and diet of Caspian seals, and assessment of threats from introduced invasive species, disease, pollution, fisheries by-catch, climate change and habitat degradation.</li> <li>3. Develop with Caspian partners in all five littoral states, a conservation action plan for the Caspian seal, and collaborate with stakeholders on its implementation, to translate research findings into practice.</li> <li>4. Work with local communities to reduce direct anthropogenic sources of Caspian seal mortality, focusing on hunting and fisheries by-catch.</li> <li>5. Work with local communities to raise the profile of the Caspian seal as a flag-ship species for the health of the Caspian ecosystem, and the importance of Caspian marine biodiversity for sustainable economies.</li> </ol>
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**5. Principals in project. Please provide a one page CV for each of these named individuals**

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner or co-ordinator in host country (Azerbaijan)
Surname	Goodman	Wilson	Eybatov
Forename (s)	Simon James	Susan Claire	Tariel
Post held	Lecturer	Project co-ordinator	Researcher
Institution	University of Leeds	Zoological Society of London	Azerbaijan National Academy of Sciences Baku, Azerbaijan
Department	Institute of Integrative & Comparative Biology	Institute of Zoology	Institute of Geology

## 5. Principals in project continued

Details	Main project partner or co-ordinator in host country (Iran)	Main project partner or co-ordinator in host country (Kazakhstan)	Main project partner or co-ordinator in host country (Russia)	Main project partner or co-ordinator in host country (Turkmenistan)
Surname	Asadi	Baimukanov	Zaitsev	Erokhin
Forename (s)	Hormoz	Mirgaly	Vaichoslav	Pavel
Post held	Researcher	Assistant Director	Director	Researcher
Institution	The Department of Environment Conservation, Tehran, I.R. Iran	Ministry Of Agriculture, Kazakhstan	International Oceanographic Institute	Institute of Deserts, Flora and Fauna, Ashgabat, Turkmenistan
Department	College of the Environment, Karaj, I. R. Iran	Fisheries Research and Production Centre, Almaty, Kazakhstan	IOI-Caspian Sea, Astrakhan State Technical University, Astrakhan, Russia	

**6. Has your organisation received funding under the Darwin Initiative before? If so, give details**

The Dept. of Biology, University of Leeds has not previously directly received Darwin funding. However, Simon Goodman is currently project leader on Darwin grant 162-12-17, having moved to the University of Leeds from the Institute of Zoology in November 2004. Dr. Keith Hamer has also transferred a Darwin grant to the Dept. of Biology, University of Leeds from another institution (grant 162-10-25), and is a co-investigator on grant 162-14-022.

**7. IF YOU ANSWERED NO TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)****Aims (50 words)**

To conduct and disseminate research of international excellence in biological sciences, and to provide exceptional education for undergraduate and post-graduate students.

**Activities (50 words)**

We conduct basic research in a range of topics including ecology, genetics, and evolutionary biology, which is communicated through international peer reviewed publications, scientific meetings and the wider media. Our research forms the basis of extensive undergraduate and post-graduate education programmes for home and foreign students.

**Achievements (50 words)**

We are an internationally recognised centre of research and education excellence, demonstrated by an output of high quality research papers and students, and the securing of competitive grant funding. We have recently been awarded the status of 'European Centre for Biodiversity and Conservation Science' by the EU.

**8. Please list the UK (where there are partners in addition to the applicant organisation) and host country partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.**

**Dr T. Eybatov** (*Institute of Geology, Baku, Azerbaijan*), has monitored seal mortality in Azerbaijan for 30 years, and collaborated on the World Bank ECOTOX project (2000-02). His work has been important in highlighting serious declines in the Caspian seal population; **Dr H. Asadi** (*College of the Environment, Karaj, Iran*) has documented seal mortality from fisheries interactions and other causes in association with the ECOTOX project 2000-02; **Dr P. Erokhin** (*Institute of Deserts, Flora and Fauna, Ashgabat, Turkmenistan*), has worked with the ECOTOX project in Turkmenistan; **Prof. V.F. Zaitsev** (*International Oceanographic Institute, Astrakhan, Russia*) is a leading expert on Caspian marine biology; **Dr. M. Baimukanov** (*Centre for Applied Fisheries Science, Almaty, Kazakhstan*) is responsible for research on marine resources in Kazakhstan, and has recognised the urgent need for assessment of the status of the Caspian seal population. All the partners have been central in identifying the need for the work, promoting the proposal and gaining administrative approval, including provision of matched funding, from their institutions. Each partner will co-ordinate population monitoring, training and educational activities within their countries, will provide local logistical and administrative support and will collaborate in a regional research network. We have established contact with the senior management of each institution who have made long term commitments to support the project. Once the project is running a system of manuals and staff training will be established to ensure continuity in case of staff turnover.

**9. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities? Please include details of any contact with the government not already provided.**

The programme includes educational workshops for local communities that will be conducted in collaboration with the local institutions. These are intended to make communities aware of issues relating to wider environmental problems, the protection of marine biodiversity, and in particular to develop solutions to eliminate anthropogenic seal mortality, e.g. fisheries by-catch. During a visit to the Bautino region of Kazakhstan in October 2004, we met with local community leaders who pledged their support to these programmes. Our Iranian partner has a long history of contact with fishing communities in Iran. In Kazakhstan we have already established links and agreements of support with the Ministry of Environmental Protection and Ministry of Agriculture. We will extend the network of collaboration to other local research institutes and NGOs to maximise training outputs and research dissemination, and mirror this in the other four host countries. We already have government contacts in the other four host countries via the Caspian Environment Programme (CEP) Regional Advisory Group for Biodiversity and Invasive Species (BISRAG). In addition, we have developed supportive links with major pan-Caspian stakeholders, including the CEP, UNDP/Global Environment Facility (GEF II) and the oil company Agip-KCO, which have already provided financial support for aerial population surveys carried out by our team in February 2005 and 2006.

## PROJECT DETAILS

**10. Is this a new initiative or a development of existing work (funded through any source)? Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.**

Last year an award was made to project 162-14-052 for biodiversity education in the Caspian. While this is a complementary endeavour, offering potential for collaboration, our project is distinct since it has specific aims relating to seal conservation. The proposed work is a new initiative but does follow on from the Caspian ECOTOX project (1999-2002), funded by the World Bank to investigate the cause of mass mortalities among Caspian seals. The current project is a new initiative because it focuses on enhancing local expertise, further research, conservation action plan development, and reduction of seal mortality which were not part of the previous work, but were key recommendations from that project. Additional biodiversity research being carried out in the Caspian at the moment is supported by the CEP, but is primarily focused on topics such as fisheries and pollution impacts on a Caspian-wide scale. Our project is integrated with the CEP, and will receive matching funds from it, but there is no direct funding in the CEP for the activities in this proposal.

**11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.**

In strengthening the ability of researchers and managers to identify, monitor and manage present and future threats to the Caspian seal as a flagship species; through working on the implementation of national and local action to reduce anthropogenic seal mortality; and through building capacity for the long term implementation of science-based conservation and management policies in the Caspian that promote biodiversity and its use for sustainable livelihoods, the project will support the Governments of the Caspian littoral states in their implementation of the following articles of the CBD: Articles 12 (15%), 13 (10%), 6 (10%), 7 (5%), 8 (5%), 10 (5%); with particular emphasis on Marine and coastal biodiversity (15%), Public education and awareness (10%), Alien species (5%), Climate change and biodiversity (5%), Biodiversity and tourism (5%), Impact assessment, liability and redress (5%), Sustainable use and biodiversity (5%) themes. Contact will be established with the regional CBD focal points if the project is funded.

**12. How does this project meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with National Biodiversity Strategies or Environmental Action Plans, if applicable.**

The Caspian seal is a flagship species for the whole Caspian ecosystem. This species faces multiple threats common to the whole ecosystem (over-exploitation, pollution, invasive species, disease, habitat degradation and climate change). Estimates from the Soviet era put the population size of Caspian seals at ~400,000. Mass mortalities between 1997 and 2002 involving tens of thousand seals prompted a World Bank funded investigation under the 'ECOTOX' project, identifying Canine Distemper Virus as a major factor in the mass mortalities, and highlighting the need for further study. Continuing work by our local partners indicate ongoing collapse in population size and low breeding success. Our group conducted an aerial survey of Caspian seals on the winter ice field in February 2005, supported by funding from the CEP. We estimate a total population size of 111,000 individuals, with a breeding female population of just 20,000. Juvenile mortality is in excess of 50% per annum, and there is an ongoing annual population decline of 4%. Caspian seals are currently listed as 'Vulnerable' by IUCN, but our work demonstrates a decline of more than 80% over the last 3 generations, qualifying the species for IUCN 'Endangered' status. Urgent work is needed to develop a Caspian-wide action plan, and to implement measures to reduce mortality from hunting and fishing by-catch. Adequate local funding and institutional expertise to undertake this task does not currently exist.

**13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country.**

Previously Caspian marine biodiversity supported the economy of the whole region, for example through fishing and seal hunting. However, fishery resources have collapsed in most areas, and seal hunting is no longer economically viable. By enhancing local expertise for marine biodiversity management, this project will begin the process by which biodiversity resources can again support sustainable livelihoods. In the case of Caspian seals, we will work with local communities to promote their conservation and develop their potential for income which is not based around extraction of resources, such as tourism.

**14. What will be the impact of the work, and how will this be achieved? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact.**

This work will yield better understanding of threats to Caspian seals, leading to a science based conservation action plan. National agencies and local communities will implement the plan, and in particular, by eliminating mortality from by-catch and hunting, conditions for the recovery of the seal population will be reached. We will achieve this by strengthening the capacity of local scientists to identify and respond to present and future threats to Caspian seals, through workshops and in-project training, combined with a research programme that will monitor seal population numbers and movements, diet, post-mortem examination and diagnostic analysis, health status and genetics. The work will be carried out from new regional research centres that will act as focal points for marine biodiversity research in each country, and which will be linked into a pan-Caspian network. We will generate a seal conservation action and management plan (SCAMP) to be implemented in each country. Educational outreach to local communities will highlight protection of marine biodiversity, and we will work directly with fishing communities to develop solutions to eliminate by-catch. Scientific outputs will be communicated through yearly reports, publication in peer reviewed journals and presentation at international conferences. A project website will describe the project and its findings for scientific and general audiences. Our project's integration with CEP will facilitate dissemination of project outputs publicly and to ministerial levels in the government of each partner state.

**15. How will the work leave a lasting legacy in the host country or region?**

1) In each country, seal research centres will provide continuing research infrastructure and national foci for marine biodiversity research, 2) Enhanced expertise in seal biology and marine biodiversity conservation in each country, linked in to a regional marine biodiversity network will ensure continued project output implementation and training of young scientists into the future, to meet developing needs in each country. 3) There will be increased public support for seal conservation in the Caspian, 4) New knowledge of threats to seals will contribute to future mitigation programmes, 5) The SCAMP will be a lasting management tool for Caspian seals to be implemented in the framework of the CEP, 6) Changes in fishing practice eliminating by-catch will remove a major source of mortality contributing to continuing population decline achieving conditions for population recovery.

**16. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.**

In year three of the project, input from UK staff will be scaled down and research and monitoring activity handed over to the regional staff to ease the transition into the post-project period. Staff in each country will be trained so that they can train others, ensuring expertise is maintained despite staff turnover. The research centres and network will continue to provide the infrastructure needed to support project activities. The ultimate role of this network will be to independently conduct the co-ordinated pan-Caspian research required to inform conservation policy once Darwin funding finishes, and to continue the implementation and monitoring of the required conservation measures. Ensuring implementation of project outcomes can be a problem, but in our case the SCAMP will be endorsed within the framework of the CEP, a quasi-legal agreement between the 5 Caspian littoral states. It promotes continuation of established programmes and compliance with the 1992 Biodiversity Convention and the 2003 Framework Convention. CEP is anticipated to run for another 15 years, and will ensure project outputs, including monitoring and the SCAMP are funded and implemented for the foreseeable future. Agip-KCO and other oil companies in the region will maintain a financial input.

**17. How will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used?**

The Darwin name and logo will be used on the building at each regional research centre. The name and logo will be used on official communications, educational material, reports, conference presentations, and during the training and educational workshops. The support and aims of the Darwin Initiative will be key features of presentations to local people. The name will be used in all dealings with the media. The project will feature in a TV documentary about environmental issues in the Caspian that will be shown locally and internationally. Finally, there will be a project website in English and regional languages

**18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?**

There will be extensive in-project training for principal local partners, plus an assistant researcher in each country (to be appointed, these will be local biology graduates with experience of marine conservation). In addition there will be yearly workshops by UK staff, running for up to 2 weeks for 30 people from across the region. Workshop attendees will be graduates working in conservation programmes. Topics include seal ecology, population ecology, health, post-mortem examination and diagnostic analysis, diet analysis, telemetry, conservation genetics, climate change and contaminants. Effectiveness of the training will be evaluated by the local staff gaining proficiency in key skills required to run monitoring programmes independently, and the ability to train other people in these activities. A minimum of 5 undergraduate and 1 graduate student from each country will undertake projects within the Darwin project. The training success of these students will be judged on them passing their courses.

**LOGICAL FRAMEWORK**

19. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Goal:</b>  <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>• <b>the conservation of biological diversity,</b></li> <li>• <b>the sustainable use of its components, and</b></li> <li>• <b>the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</b></li> </ul>			
<p><b>Purpose</b>            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 policies 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.            A Seal Conservation Action and Management Plan (SCAMP) endorsed by the Caspian Environment Programme and 2003 Framework Convention; potential reclassification by IUCN.            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.            SCAMP document and correspondence.            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.            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>            Regional Seal Centre Network with trained staff and research infrastructure.            Estimates of population size, movement &amp; habitat usage, health status, diet, genetic structure, &amp; climate change response model.            Seal Conservation Action and Management Plan; reduced by-catch mortality            Educational events &amp; materials.            Media representation</p>	<p>Network of trained and equipped staff in collaborating centres across the region.            Findings endorsed by local &amp; international scientific &amp; conservation communities.            Plan peer reviewed, presented at international meeting and to local stakeholders.            Participation of local communities in events, material distributed.            Project featured in local and international media.</p>	<p>Annual and field reports, peer reviewed papers, continued output of data to support SCAMP.            Publication of results in peer reviewed international scientific journals.            SCAMP published and distributed, copies sent to Darwin Initiative, meeting proceedings.            Educational materials, posters, leaflets, press releases &amp; reports on changes to level of seal mortality.            Articles and recordings.</p>	<p>Researcher network and laboratories in the 5 littoral states continue to collaborate to fulfil SCAMP.            Research &amp; monitoring programme generates the information required for the SCAMP.            Researchers continue to follow project protocols, make data available and produce work to international standards.            Links to media &amp; educational institutions strengthened through project.</p>
<p><b>Activities</b>            Capacity building and training              Research and population monitoring              Education &amp; policy              Dissemination of results</p>	<p><b>Activity milestones (summary of project implementation timetable)</b>  <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.  <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.  <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.  <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>		<p><b>Assumptions</b>            Required relationships with partner institutions in place. These are already well established.            Research methods are appropriate for the Caspian. The proposed methods are well established for related species (ringed seals).            Local communities participate.              Successful engagement of stakeholders.</p>

## 20. Provide a project implementation timetable that shows the key milestones in project activities.

Project implementation timetable		
Date	Financial year	Key milestones
	Apr-Mar 2006/7 Apr-Mar 2007/8 Apr-Mar 2008/9 Apr-Mar 2009/10	
07/06	Apr-Mar 2006/7	<b>Institutional Capacity Building and Training</b> Project initiation activities (Drawing up memorandum of agreements, staff selection, equipment procurement)
08/06	Apr-Mar 2006/7	Training workshop 1: seal ecology, population biology, health, pathology & diet analysis
02/07	Apr-Mar 2006/7	Training workshop 2: aerial survey methods
04/07	Apr-Mar 2007/8	Seal research centres in each country fully operational
06/07	Apr-Mar 2007/8	Training workshop 3: As for workshop 1, plus radio & satellite telemetry, conservation genetics.
06/07	Apr-Mar 2007/8	Students begin research projects
02/08	Apr-Mar 2007/8	Training workshop 4: aerial survey methods
06/08	Apr-Mar 2008/9	Training workshop 5: As for workshops 1 & 3, plus climate change & contaminant monitoring
02/09	Apr-Mar 2008/9	Training workshop 6: aerial survey methods
04/09	Apr-Mar 2009/10	Students complete research projects
06/09	Apr-Mar 2009/10	Review and management plan discussion workshop
08/06	Apr-Mar 2006/7	<b>Research and Population Monitoring Programme</b> Ground/water based censuses at key sites in (Kstan, Tmstan, Azbjan), to continue monthly throughout project. Seal-fishery interaction monitoring (Iran) begins, continues monthly throughout project. Diet monitoring using otolith sampling at focal haulout sites Health monitoring and pathology (blood and other samples collected for pathogen monitoring, including Canine Distemper Virus), at focal sites.-Results from the above continuous projects collated and reported yearly-
06/07	Apr-Mar 2007/8	Genetic population structure analysis using microsatellite markers
06/07	Apr-Mar 2007/8	Satellite telemetry tagging study (externally funded)
02-03/ ,07,08,09	Apr-Mar 2007/8, Apr-Mar 2008/9	Aerial surveys (externally funded)
06/09	Apr-Mar 2009/10	Management plans and publications produced, final results compiled for CEP and regional governments.
04/07	Apr-Mar 2007/8	<b>Education Programme</b> Educational materials prepared and translated (posters, leaflets and presentations) for local communities in collaboration with local partners.
06/07	Apr-Mar 2007/8	First local community workshop conducted
06/08,09	Apr-Mar 2008/9, Apr-Mar 2009/10	Further local community workshops
09/06	Apr-Mar 2006/7	<b>Conservation Policy Implementation</b> Consultation with government agencies in Iran* to introduce legislation to control seal by-catch/killing.
09/06	Apr-Mar 2006/7	Consultation with fishing communities in Iran on reducing by-catch, and development of solutions to eliminate by-catch.
04/07- 04/07-	Apr-Mar 2007/8- Apr-Mar 2007/8-	Implementation of anti by-catch measures and monitoring of results. Via CEP work with national agencies on staged introduction of conservation action plan recommendations.
*Iran is the main area where by-catch occurs in legal fisheries, but we will work with agencies in all countries to try and reduce take from illegal fishing.		



08/06	Apr-Mar 2006/7	<p><b>Dissemination of Results</b></p> <p>TV documentary filming begins (to be produce by ByWord productions).</p> <p>Initial press releases produced &amp; Project featured in CEP newsletter.</p> <p>Newsletters with project reports, further press releases as appropriate.</p> <p>Website created and accessible, to be updated throughout project</p> <p>Yr 1: UK seminar given, further talks arranged for UK and internationally.</p> <p>Yr 2: UK seminar given, further talks arranged for UK and internationally.</p> <p>Yr 3: UK seminar given, further talks arranged for UK and internationally.</p> <p>TV documentary completed and broadcast.</p> <p>Project results presented at international conference by end of project.</p> <p>SCAMP completed and submitted for review, then handed to CEP &amp; regional governments.</p> <p>At least 2 papers accepted by international peer reviewed journals by 1 year after end of Darwin funding.</p> <p><b>Reporting</b></p> <p>2 reports yearly according to Darwin Initiative schedule.</p> <p><b>Administration</b></p> <p>Throughout the project the overall co-ordination will be handled by SG and SW who will ensure the project is implemented according to the timetable. Local partners will manage the day-to-day running of project activities, via the network we will establish. The network will be led by Kazakhstan. Efficient communication is possible via telephone and email, and regular review and management meetings will take place between the UK staff and project partners during project workshops. The University of Leeds will be responsible for the financial administration. Project partners will administer use of matched funds for the purposes as specified in section 23, except for funds from CEP and Agip-KCO which will be administered by Leeds.</p>
04/06	Apr-Mar 2006/7	
10/06-	Apr-Mar 2006/7	
04/07	Apr-Mar 2007/8	
04/07	Apr-Mar 2007/8	
04/08	Apr-Mar 2007/8	
04/09	Apr-Mar 2009/10	
06/09	Apr-Mar 2009/10	
06/09	Apr-Mar 2009/10	
06/09	Apr-Mar 2009/10	
06/09	Apr-Mar 2009/10	
10/05-	Apr-Mar 2006/7	

## 21. Set out the project's measurable outputs using the separate list of output measures.

<b>PROJECT OUTPUTS</b>		
<b>Year/Month</b>	<b>Standard output number (see standard output list)</b>	<b>Description (include numbers of people involved, publications produced, days/weeks etc.)</b>
2006/08-2009/06	4A	<p><b>Training Outputs</b>            Minimum 25 (5 from each country), undertaking research projects and attending training workshops.            21 weeks, training run ~7 weeks per year            5 (1 from each country), MSc students undertaking research projects and attending workshops            Up to 26 weeks per student            10, Training of host partner and junior researchers.            Expected ~30 people (6 from each country), Primarily conservation workers attending training workshops            Total of 9 weeks (3 weeks per year)            14, workshop packs for each topic (seal ecology, population biology, health and pathology, diet analysis, telemetry methods, conservation genetics, climate change, contaminant monitoring); Protocol manual; Website; Local community information: seal conservation leaflets, posters, slideshow (local community).</p> <p><b>Research Outputs</b>            Total 60, 20 people weeks per year.            1: Caspian seal conservation action and management plan to be implemented through CEP            Minimum of 2 (Otolith, and pathology guides)            Minimum of 2            2, Seal population number and distribution database, Caspian otolith database</p> <p><b>Dissemination Outputs</b>            7, 2 project workshops per year (2 weeks), minimum 1 local community workshop per year (4 days).            Minimum of 6, date and location not yet specified            Minimum of 6, released on project reporting dates            Minimum of 3, released on annual reporting dates            3, 1 yearly; 200; 100            Caspian Biodiversity Network linking all regional centres            One each category anticipated            One each category anticipated</p> <p><b>Physical Outputs</b>            Minimum £10,000 (equipment purchased under Darwin initiative to equip region seal research centres)            5: Seal research centres in each country</p> <p><b>Financial Outputs</b>            University of Leeds: £39,960            Institute of Zoology: £27,400            Sea Mammal Research Unit: £25,800            Swedish Museum of Natural History: £16,313            Institute of Geology, Azerbaijan: £10,313            College of Environment, Iran: £41,667            Fisheries Research Centre, Kazakhstan: £31,286            IOI, Russia: £10,000            IDFF, Turkmenistan: £17,022            GEF/CEP: £ to be confirmed            Agip KCO: to be confirmed</p>
2006/08-2009/06	4B	
2006/08-2009/06	4C	
2006/08-2009/06	4D	
2006/08-2009/06	5	
2006/08-2009/06	6A	
2006/08-2009/06	6B	
2006/08-2009/06	7	
2006/08-2009/06	8	
2009/06	9	
2009/06	10	
2009/06	11	
2009/06	12A	
2006/08-2009/06	14A	
2006/08-2009/06	14B	
2006/08-2009/06	15A/B	
2006/08-2009/06	15C	
2006/08-2009/06	16A/B/C	
2009/06	17A	
2005/08-2008/06	18A/B/C/D	
2005/08-2008/06	19A/B/C/D	
2009/06	20	
2009/06	21	
2006/08-2009/06	23	

**PROJECT BASED MONITORING AND EVALUATION**

**22. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.**

Progress and delivery of outputs in relation to the proposed timetable will be monitored by visiting scientists with expertise relevant to the project. Specific supervisory visits from UK staff (a minimum of visits 2 per year) will ensure that the core elements of the project and training are delivered on time and to the required standard. Monitoring activities will match progress to expected outputs using the indicators in the Log Frame. Scientific outputs (Indicators: papers on seal population status, SCAMP) will be peer-reviewed before publication thereby ensuring the highest international standards. Infrastructure and training components (Indicators: operational research centres, competent staff and students, participation of local communities in educational activities) will also be examined by outside experts, to highlight potential lessons and problems. Monitoring information will be presented as project reports, co-ordinated by UK staff in association with the local partners, with additional reports from visiting scientists, plus training and workshop reports, and summaries of media coverage (with copies of articles and recordings). The final report will be compiled by all the organisations involved, with comments from outside scientists in relation to achievements of the project, its purpose and management implications. Local partners will be responsible for overseeing the day to day management of the project and progress towards its outputs, with monthly reports to the. Review meetings will be held involving all project staff during visits of UK personnel. With the UK staff, local partners will co-author the six monthly, yearly and final reports, plus scientific papers and management plan as appropriate.