Darwin Initiative for the Survival of Species Annual Report

1. Darwin Project Information

Project title Bolivian Key Biodiversity Areas Project

Country(ies) Bolivia

Contractor Ross MacLeod & Aidan Maccormick

Project Reference No. 162/12/013

Grant Value £135,719

Start/Finishing dates 1/7/03 - 30/6/05

Reporting period 1/04/04 - 31/03/05

2. Project Background

Bolivia is one of the world's mega-diversity countries holding a large percentage of the planet's biodiversity, including 14% of the world's bird species in 0.75% of the earth's land surface. The country is similarly rich in other taxa and is thus of critical importance for the conservation of the earth's biological diversity. Bolivia's importance is magnified because it also holds large numbers of endemic taxa. In contrast to its richness in biodiversity, Bolivia is economically one of the poorest countries in South America. Although the country has developed an important protected areas system, resources for conserving biological diversity effectively are scarce and there are many important sites outside the existing protected area network. Lack of resources, both financial and technical, have made the task of developing a systematic nationwide network of sites that prioritise biodiversity conservation difficult. The work of this project is based on the Important Bird Area (IBA) concept developed by BirdLife International to identify sites of major importance in conserving global and national bird biodiversity. Working with the global conservation NGOs BirdLife International and Conservation International the project has developed this concept and applied it to biodiversity on a wider scale to produce the concept of a network of Key Biodiversity Areas (KBAs). By gathering scientific data to identify such a network the project will help Bolivia to identify, monitor and conserve it's globally important biodiversity as required by the Convention on Biological Diversity (CBD). As in much of South America funding constraints mean there are insufficient internal resources for Bolivia to meet the costs of fieldwork, training and capacity building needed to develop such a network of site specific conservation priorities. Thus the Darwin Initiative Bolivian Key Biodiversity Areas Project has been set-up so that expertise from Glasgow University, Oxford University and other international institutions can help Bolivian organisations and scientists to initiate and develop a KBA network to the point were it can be become a central part of the country's developing national biodiversity conservation strategy.

3. Project Objectives

The purpose of this project is to gather high quality scientific data to enable the creation of the first Key Biodiversity Areas network in Bolivia, thus establishing national site-specific priorities for biodiversity conservation for the next decade and beyond. The project has 4 principal objectives; 1) To collect good quality scientific data on the abundance, distribution and ecological requirements of birds, large and medium sized mammals, amphibians, reptiles and specific insect groups at a wide variety of potentially important conservation sites. 2) Assess the current conservation threats to each potential KBA. 3) To train young Bolivian biologists in the field skills necessary to survey and monitor biodiversity and the organisational skills to run the KBA programme. 4) To assist in institutional capacity building in Bolivia, especially the development of the skills needed to seek funding and implement future conservation projects in Bolivia's KBAs.

Project fieldwork continues to collect data on the distribution and abundance of birds, large and medium sized mammals, amphibians, reptiles and selected insect groups across Bolivia and to carry out site conservation assessments, to provide the data necessary to identify KBAs. To date the project has completed biological inventories & conservation assessments at 45 sites and is on schedule to complete the remaining 15 before the end of the project. The number of KBAs identified and accepted by the Bolivian conservation community and government has risen to 23 and more sites are in the process of being recommended for KBA status.

The project is on schedule to achieve the first two principal objectives; biological inventories and sites specific conservation assessments and has this year achieved the third and fourth principal objectives of biological training and institutional capacity building. All biodiversity inventory fieldwork is now being organised, led and carried out by the KBA project's Bolivian biologists. While, institutional capacity building with the project's principal host-country partner, Armonia, has seen the development of a very successful group of key personnel with the proven ability to run conservation projects and to obtain funding from international sources. Armonia's conservation capacity continues to grow and they are now running 15 conservation projects benefiting 11 threatened birds species in 14 of the KBAs so far identified.

A key success of the capacity building work with Armonia has been the development of the Threatened Birds of Bolivia project. This collaboration between project personnel and Armonia's ornithological staff is part of the KBA project's exit strategy designed to implement active conservation measures in KBAs identified during the project. In June 2004 the Threatened Birds of Bolivia project gained a top international conservation award of \$75,000 from the prestigious BP Conservation Programme. This represents a significant additional output from the original KBA application and ensures that, after completion of the Darwin Initiative funding, conservation work will be implemented in many of the key conservation sites identified.

4. Progress

Brief history before April 2004

Project organisers Ross MacLeod and Aidan Maccormick made a pre-project planning trip to Bolivia to meet institutions and both governmental and non-governmental organisations in May 2003. Project plans were discussed and developed. In July 2003 the project officially started with one of the project herpetologists receiving training in the US while in August the project director and

coordinator returned to Bolivia to conduct site recognisance and liase with host country partners. In 2003 the director of the principal host country partner, Bennett Hennessey, began working for the project as the Bolivian national IBA Coordinator. The first Bolivian Important Bird Areas workshop was organised and 21 IBAs/KBAs were designated by the Bolivian conservation community in Sept 2003. In the following months the project completed a series of four training inventories and four biological training workshops attended by a total of 40 Bolivian biologists and students. In March 2004 the project contracted six full-time Bolivian biologists, delayed funding to initiate the fieldwork phase of the project was received and full time site inventory work began.

Project progress April 2004 - March 2005

The time period of this annual report, April 2004 to the end of March 2005, corresponds to the main fieldwork phase of the project. Within the time period the project completed a total 41 individual site inventories and over 2,500 person days of fieldwork in nine different ecoregions. Fieldwork was conducted by two teams of biologists each of between 5 and 11 persons colleting data on birds, amphibians, reptiles, large mammals, dung beetles and butterflies. Additionally we conducted inventories of orchid bees and bats at some of the sites. The 6 fulltime biologists and the field assistants employed on the project were chosen based on their ability and experience as assessed in the biological workshops and during a series of training inventories in October 2003 and March 2004. The study site selection was conducted through a process of consultations with a number of governmental departments, nongovernmental organisations and individual specilists. We liased principally with the Bolivian protected area network Servicio Nacional de Areas Protejidas (SERNAP), Armonía (BirdlLife International), the natural history museum of Santa Cruz (Museo de Historia Natural Noel Kempf Mercado - MHNNKM), Protecion del Medio Ambiente Tarija (PROMETA), Fundacioin Amigos de la Naturaleza (FAN) and experts on particular animal groups in Bolivia including Dr. Sebastian Herzog (birds), Dr. Steffen Reichle (amphibians), Dirk Embert (reptiles) and Dr. Rob Wallace (mammals) amongst others. The aim of the study site selection process was to choose sites that potentially held populations of species of conservation concern but lacked sufficient or current data to justify KBA designation. Many more potential sites were identified than the 60 the project had time to inventory therefore sites from ecoregions or habitats that had received few biological investigations in the past were specially targeted. We aimed to select study sites with as broad a geographical spread as logistics allowed covering the maximum number of ecoregions. The criteria adopted by the project for identifying KBAs follows that laid out by Conservation International and is described in a paper enclosed with this report.

As reported last year the start of the main fieldwork was somewhat delayed while waiting to receive promised funds from one of our counterpart organisations. The flow of fieldwork funds has continued to be slow for reasons we are unable to fathom and this has lead to some slippage in the fieldwork timetable. Instead of finishing fieldwork at the start of April as set out in last year's timetable we are on target to finish the fieldwork at the end of May before completion of the other project activities in June & July, six weeks later than originally planned. The project organisers have the time and financial support available for this slight extension so the project budget will be unaffected.

Between April 2004 and March 2005 the project inventories at 41 sites collected 2,892 new distributional records for birds, 319 for amphibians and 184 of reptiles. Additionally 2,541 butterfly specimens and 9,098 dung beetles have been collected and are in the process of being identified. Following consultation with experts we believe these totals include five un-described amphibian, three reptile and one bird

species however work is ongoing on these and visits to museums abroad are needed to confirm these results. It also appears that more than 50 of the 140 dung beetle species collected maybe new to science. A sample site inventory report is enclosed with this report providing and provides details of the methodologies used and the type of data collected for the principal target groups. Following the reviewers suggestion last year follow up visits have been made to several areas to increase the chances of detecting the rarer species. In these areas in particular the project has been able to train local people to act as guides and explain the needs and interests of ecotourists.

As outlined in last year's annual report the project decided to slightly alter the funding application and scientific report writing training components of the project. The project had initially planned two phases of funding application and scientific report writing workshops. However we decided it would be more beneficial to students and provide greater impact for conservation if we carried one-to-one training with individuals working on actual funding applications and scientific papers/reports. Following the reviewer's suggestions last year this will be complemented by a formal workshop on funding applications and scientific report writing towards at the end of the project in June 2005. Over the last year Ross MacLeod and Aidan Maccormick have given one-to-one supervision to 14 students and this output replaces the first set of scientific reporting and funding application workshops outlined in the original application. Training and supervision of students and biologists seeking conservation funds resulted in the successful application of £23,911 for conservation projects in Bolivia, which we feel provides good justification for the partial change in strategy. As part of the exit strategy the project also developed a new project aimed at conservation in the identified KBAs. In June 2004 this Threatened Birds of Bolivia was awarded a grant of \$75,000 from the BP Conservation Programme. This output is additional to the original application.

In August 2004 the project conducted an entomology workshop specifically on larval collection and identification of hoverflies (Syriphidae) as this group acts as a useful indicator of patterns of species richness and endemism. This workshop was an additional output to the original project application.

Workplan April 2005 – July 2005 Bolivian Key Biodiversity Areas Project			
Date	Key milestones		
April 2005 – June 2005	Biodiversity inventories of remaining potential KBA sites. Inventories of birds, reptiles, amphibians, large & medium sized mammals, butterflies, and dung beetles. Additional inventories of bats, orchid bees (Euglossinae) and hoverflies (Syriphidae) at some sites.		
April 2005 – June 2005	Construction and maintenance of the project website to allow further dissemination of information about designated KBA sites.		
April 2005 – June 2005	Inventory reports and conservation assessments of sites written and submitted to landowners, funders, host country partners and the Bolivian government so that appropriate sites can be designated national conservation priorities.		
July 2005	Conservation funding and scientific report writing workshop		
July 2005	Presentation of final project results and KBA recommendations to the governmental department responsible for the natural environment, Direction General de la Biodiversidad and the protected area network (SERNAP), La Paz.		
July 2005	Submission of final reports to Darwin Initiative, Armonia and other stakeholders		
July 2005 onwards	Armonia continues IBA/KBA work focusing on implementation of identified biodiversity conservation priorities at KBA sites. Work will be supported by the BP Conservation Project award gained in 2004.		

5. Partnerships

Successful collaboration with host country partners has continued throughout the year, building on previous achievements and collaborative work. The strong working relationship with our principal host country partner, Armonía (BirdLife International), continues to be an excellent basis for successful project progress. During the last year we have consolidated the project's working relationship with several other organisations and institutions, leading to a number of collaborative initiatives and projects. Several of which are additional outputs to those in the original application.

Armonía (BirdLife in Bolivia) Principal Host Country Partner

The project continues to coordinate weekly with Armonía and provide support to Armonia's project biologists conducting conservation fieldwork. This partner's administrative support helps to ensure that project activities conform to national employment legislation and general working practices. Bolivian tax procedures changed abruptly at the beginning of January 2005 and Armonía was able to work with the project to insure continued compliance with national laws.

Scientific Institution Counterpart

In Bolivia our scientific institutional counterpart is the Museo de Historia Natural Noel Kempf Mercado (MHNNKM) based in Santa Cruz. The strong working relationship forged earlier continues and the project principals meet regularly with staff. The project employs two full time research biologists from the museum who liase on behalf of the project with the relevant departments of the institution. Additionally a large amount of background and logistical information has been supplied by the museum. The institution has been active in providing biologists for fieldwork and apart from the two full time biologists the project has employed and/or

trained 13 field assistants from the museum over the past year. In August 2004, two entomology specialists from Glasgow University travelled to Bolivia to provide training to museum personnel and students in using hoverflies (Syriphidae) as biological indicators and this group has now been incorporated into the project's biodiversity inventory fieldwork. The project will be depositing a significant volume of specimens collected during fieldwork at the museum so we are currently investigating funding sources with the museum to help develop collection management and the use of the collection as a teaching and identification resource.

Conservation NGO's

The project continues to liase and coordinate project activities with a number of national and international NGOs. Collaboration principally involves the sharing of data gathered by the project, provision of existing data from the NGOs and coordination of fieldwork activities as well as development of ideas for future conservation projects. In the previous annual report we described successful collaboration with Fundación Amigos de la Naturaleza (FAN), one of Bolivia's principal conservation NGOs. As part of the project's exit strategy we have been working with FAN on the development a series of initiatives to disseminate the project's biodiversity distribution data via searchable wed databases and printed identification guides.

The project's relationship with Conservation International-Bolivia (CI-Bolivia) continues to be somewhat difficult for reasons we have been unable to identify. Although some of the promised funding has been received we still await the final \$10,000 for inventory fieldwork costs for 2005. Since Conservation International approved the original application and we had written confirmation of the availability of this money at the start of the financial year we believe we will eventually receive it and hopeful there will not be an adverse effect on the final phase of fieldwork. However if none of the funding, promised from this source for 2005, were to materialise we could potentially loose the resources to complete the final 10 site inventories. We are developing backup plans to minimize any such unwelcome impact.

The project has in the last year forged a strong collaboration with Protección del Medio Ambiente Tarija (PROMETA), a conservation NGO based in southern Bolivia. PROMETA have now provided invaluable support during 11 site inventories located in the departments of Tarija and Santa Cruz. The project received a substantial amount of technical support and local knowledge from the NGO, which facilitated successful fieldwork. We also developed an additional conservation project with PROMETA and Armonía working on the most threatened bird specie in southern Bolivia, Rufous-throated Dipper (*Cinclus schulzi*). The aim of the project is to assess distribution, habitat requirements, population size and develop a monitoring technique. Conservation funds were raised and fieldwork initiated by three Bolivian biologists in early 2005.

Protected Areas

During the last year 22 of the 41 sites surveyed by the project where located within the protected areas network. After initially coordinating fieldwork with the protected areas authority (SERNAP) in the Bolivian capital La Paz, the project now coordinates fieldwork directly with the director of each protected area in which we plan to work. Direct consultation with park directors ensures the project receive accurate logistical data and are aware of any potential health and safety hazards. Additionally park directors often request surveys from certain locations from within the protected area or information on species of conservation concern, which we can provide at no additional cost. Within several of Bolivia's protected areas there is conflict between the park authorities and communities either bordering or within the protected area.

The result of this is that park directors are sometimes unwilling to give permission (to biologists) to enter these areas and communities at odds with park authorities are unwilling to receive what they see as park-sanctioned biologists working near their communities. This can lead to a case of stalemate resulting in the loss of potential study sites. On several occasions the project has successfully resolved this problem by meeting with communities and protected area authorities separately.

Governmental Departments

The governmental department responsible for the natural environment, Dirección General de Biodiversidad (DGB) and the national protected area network, Servicio Nacional de Áreas Protegidas (SERNAP) receive regular bi-monthly reports regarding project progress and activities. As the DGB now fulfils the role we had envisioned for the National KBA committee, the UK project principals will formally present the projects results and KBA recommendations to the DGB and SERNAP in July 2005.

Private landowners, indigenous community land partnerships, and non-environmental NGOs.

The project has continued working in partnership with private landowners, indigenous community land partnerships, and non-environmental NGOs and has successfully negotiated access to conduct fieldwork in many areas. We have also received substantial assistance in the form of transport, guides and accommodation from several landowners and communities. The positive profile of the project within Bolivia has lead several private landowners and indigenous community land partnerships to request us to conduct biological surveys of the land they control.

Other Projects

Following a series of protests and road blockades against Bolivia's president earlier this year, which were centred on Cochabamba and La Paz, we have changed plans to work in the dry valleys of this region. Instead we have selected on other high priority sites in areas were road blockades are less likely to disrupt work. As a result we have not developed the planned contacts with the Oxford University DI project to coordinate sites in the dry valleys of Cochabamba. It is likely that in the future Armonia will be able to carry out KBA assessments in this area.

6. Impact and Sustainability

During the last year the project has continued dialogue with the principal groups responsible for biodiversity conservation in Bolivia as described in section 5 above. In many cases dialogue has lead to strong partnerships and a number of successful collaborations and initiatives ensuring a high project profile, especially within the conservation and scientific community. The project also regularly receives letters of interest from individual biologists and conservationists requesting employment. Our work with private landowners and indigenous communities has also ensured a high profile more generally.

In terms of sustaining the project's legacy long term the greatest impact to date is the increased capacity of our principal host country partner, Armonía. Since the start of the project Armonia's capacity to work towards successful biodiversity conservation within Bolivia's KBAs has increased substantially. Armonia now runs 15 conservation projects in Bolivia and 1 in Peru, conserving 11 threatened bird species and working in 14 KBAs. Since the start of the KBA project Armonia has grown from employing 4 people in 2003 to 37 this year. The impact of the project's training programmes is demonstrated by the fact that 12 of Armonia's new employees come from those trained by the project. Worth special mention is biologist Rodrigo Soria who, after attending a training workshop, worked for 7 months with the KBA project

first as an ornithologist and then survey team leader. With continuing support from the project he has now developed and successfully applied for international funding for a new conservation project for the threatened Southern Helmeted Curassow. He now works for Armonia managing this project.

The first phase of the project's exit strategy is successfully in place and the Threatened Birds of Bolivia project described earlier will ensure that after completion of the Darwin Initiative funding conservation work will be implemented in many of the key conservation sites identified. A second phase of the project's exit strategy has also been developed as described below and we hope to be asked to apply for Darwin Initiative post-project follow up funding to help put this in to action.

7. Post-Project Follow up Activities (max 300 words)

This section should be completed ONLY if your project is nearing completion (penultimate or final year) and you wish to be considered for Post Project Funding.

As a result of the project partnerships outlined in this and previous reports, the project is in an excellent position to consolidate its impact on biodiversity conservation in Bolivia. The overall aim of post-project work would be to disseminate knowledge and information about Bolivian biodiversity and its conservation to the widest audience possible so that capacity for biodiversity monitoring and conservation can be enhanced. Having collected a vast quantity of new data on the distribution of biodiversity in Bolivia from 60 different sites, the project has a unique chance to consolidate its results by making this, and existing biodiversity information, easily accessible nationally and internationally. The aim of the post-project work will be achieved in three ways; first, by developing a series of searchable web databases so that biodiversity information on the distribution, conservation status and identification of Bolivian species becomes available to the whole conservation community and to all Bolivians. Second, by producing a series of field guides and check lists for the key groups that can be used to monitor biodiversity and its conservation. Finally, by helping in the scientific description of several dozen new species of birds, frogs, snakes and lizards discovered by biologists in Bolivia in recent years. These species represent a major conservation priority but until resources are available to assist Bolivian biologists to publish in refereed scientific journals the conservation status of these will remain unrecognised and funding cannot be sought for their conservation. The KBA project's Bolivian biologists will work on these projects with Fundacion Amigos de la Naturaleza (FAN), Armonia, the Noel Kempff Mercado Natural History Museum and Programa para la Conservacion de Murcielagoes de Bolivia (PCMB). There is an in principal agreement for FAN to manage the project supported by the resources of Glasgow & Oxford University staff and the international experts who are currently advising the project. Armonia, NKMNHM and PCMB currently maintain private databases on species distribution in Bolivia. These will be used to supplement the KBA project's own databases so the basic data for each part of the work will be available before the post-project work. Discussions with Steffen Reichle, TNC-Bolivia Conservation Planner, indicate that this international NGO will part fund the post-project work if we can obtain Darwin Initiative funding to kick start it.

8. Outputs, Outcomes and Dissemination

Table 1. Project Outputs (According to Standard Output Measures)

Code	Code Overtity Description				
No.	Quantity	Description			
4AB	40 person/weeks	19 Bolivian and 3 Peruvian biologists trained in the			
4CD	15 person/weeks	field (40 person/weeks are an additional output). 14 Bolivian & Peruvian Biologists trained on one to one basis in conservation funding application and scientific report writing techniques (14 person/weeks).			
6AB	11 person/weeks	Bolivian entomologist Caroli Hamel received training at the Hope Entomological Collections, Oxford University Museum of Natural History for 8 weeks in June & July 2004. Bolivian ornithologist Rodrigo Soria traveled to Britain for 3 weeks biodiversity inventory and project management training from the BP Conservation Programme.			
8	67 person/weeks	6 person/weeks are additional output.			
11AB	2	3 papers accepted by and 1 submitted to peer review journals. 3 more being prepared.			
14A	1	August 2004. Biodiversity Inventory Techniques Workshop. 6 students trained in hoverfly identification, field survey techniques. This is an additional output.			
14B	2	2 presentations at international meetings one for the Scarab Research Network, one at the VI Reunion de Latin Americana Scarabaeoidologia both at Universidad EARTH in Costa Rica, Oct 04. (Both are additional outputs)			
15A	2	Work with the press has focused on raising conservation awareness for key species for the IBA programme. This has resulted in 2 articles in nationally read newspapers.			
16A	2	2 update news letters for project stakeholders			
21	1	Construction of a national Bird Conservation Centre in Santa Cruz (Additional output). The centre's construction was funded by an award from the BP Conservation Programme and several smaller private donations. The centre provides administrative, technical & expert support to bird conservation projects throughout the country and running costs are met by Armonia.			
23	£45,966	This money is the agreed project finance raised from the sources described in the project application to supply £52,281 for this second year. We are still awaiting the remainder from Conservation International for fieldwork costs in 2005.			

£42,000	Additional money raised for conservation project 'Threatened Birds of Bolivia', developed as part of exit strategy in partnership between the project and Armonía.
£23,911	Additional money raised for conservation projects in identified KBAs

Table 2: Publications

Type *	Detail	Publishers	Available from	Cost
	(e.g. title, authors, journal, year, pages)	(name, city)	(e.g. contact address, email address, website)	£
*Journal paper	A New Species Of Tomodon (Serpentes: Colubridae) From High Elevations In The Bolivian Andes. Harvey and Muñoz, Herpetologica, 60 (3), 2004, 364–372	The Herpetologists' League, Inc.	http://www.bioone.org	-
Journal paper	Description of Bothrops jonathani Harvey (Serpentes: Viperidae) From Southern Bolivia. Harvey and Muñoz, Herpetologica, In press.	The Herpetologists' League, Inc.	http://www.bioone.org	-
Journal paper	First sound recordings, new behavioural and distributional records and a review of the status of the globally threatened Scimitarwinged Piha Lipaugus uropygialis Bryce, R. et al. Cotinga, In Press.	Neotropical Bird Club	http://www.neotropical birdclub.org/	-

Dissemination activities are principally through the diffusion of site inventory reports to landowners, land managers and organisations described in section 5. Additionally the Important Bird Area website (http://www.armonia-aicas.org.bo/es/default.htm) provides updated details of the 23 designated KBAs. In July 2005 the UK project principals will give a series of formal presentations to the Bolivian governmental department responsible for the natural environment (Dirección General de Biodiversidad, DGB) and the national protected areas network (Servicio Nacional de Áreas Protegidas, SERNAP). An additional project website is currently being constructed to provide comprehensive details of all KBAs designated.

9. Project Expenditure

Table 3: Project expenditure during the reporting period

10. Monitoring, Evaluation and Lessons

Monitoring and evaluation of the project is conducted in partnership with a number of host country counterpart organisations. The project organisers have monthly meetings separately with Armonía, the director of Los Volcanes Research Station and Noel Kempf Mercado Natural History Museum to evaluate project progress against goals. The meetings allow the project to present activity and progress reports, written and verbal, in order to receive feedback regarding our obligations, contractual agreements and the continued quality of project outputs. Full written annual reports for the inventory work are provided in Spanish to 5 national and international organisations Armonia, Noel Kempf Mercado Natural History Museum, DGB, SERNAP and Conservation International. A pdf of the 2004 report will be enclosed with this report. Following up on the reviewer's comments last year training is now monitored by post training questionnaires and follow-up contacts have been made to last year's participants to ask about employment status post training. The effectiveness of the funding application and scientific writing training is evaluated based on the students' successes in gaining funding and getting papers accepted. Seven out of the eight submissions that have received decisions have been successful. The following are our other indicators of achievement; 45 biodiversity site inventories in potential KBAs completed, Bolivian government (DGB) adopted role planned for KBA committee, 23 KBAs designated at national IBA congress and later adopted by government, 14 permanent and 23 contract staff employed by Armonia. 46 Bolivian biologists attended workshops and 23 participants obtained employment in conservation biology within the period. Completion of 4 weeks of herpetological training in USA, 3 weeks of biodiversity inventory and project management training in UK and 8 weeks of entomology training in UK by three of the project's Bolivian biologists. Publication of IBA booklet and website listing the 23 KBAs so far designated. Recruitment of 37 suitably trained Armonia staff for KBA work.

Aidan Maccormick & Ross MacLeod 1/5/05

Project summary	Measurable indicators	Means of verification	Important assumptions	
Goal: To draw on expertise relevant biodiversity but poor in resour • the conservation of bio	ces to achieve	ne United Kingdom to worl	k with local partners in countries rich in	
• the sustainable use of it				
	haring of the benefits arising	out of the utilisation of gen	tetic resources	
Purpose To gather high quality scientific data with which to identify a Key Biodiversity Areas network in Bolivia, and thereby establish national site-specific priorities for biodiversity conservation. In tandem, to expand the capacity of Armonia to act on these priorities and to provide the training and field experience necessary for the KBA programme to be run by Bolivian personnel.	45 biodiversity inventories completed. Bolivian government (DGB) adopted role planned for KBA committee First 23 KBAs designated at national IBA congress and later adopted by government 14 permanent and 23 contracted staff employed by Armonia.	Individual project site reports and annual project reporst. Electronic book of Bolivian IBA/KBAs published on web and CD on completion of project. Individual site reports Annual and final project reports.	Continued commitment of Armonia and CI-Bolivia to KBA programme.	
Outputs				
30 young Bolivian biologists trained and experienced in biodiversity surveys.	46 Bolivian biologists completed workshops. 23 participants obtained employment in	Course attendance records. Annual project report.	A good percentage of participants will apply training to project surveys and then move on to conservation jobs within Bolivia.	
2 young Bolivians trained & capable of instructing others (entomology & herpetology).	conservation biology within the period. 3 Bolivian biologists trained in UK & USA and now training others	Oxford Universities. ists Annual project report. USA and Individual project site	Trained Bolivian entomologist & herpetologist will continue to work in biology and train future students in Bolivian Potential KBA sites are logistically accessible to survey teams. Continued commitment of Armonia to KB programme.	
Biological inventories of 60 sites completed.	45 potential KBA sites inventoried.	reports in Spanish and annual project report.		
Bolivian KBA book published and distributed in electronic form.	Publication of IBA booklet and website listing bird KBAs.	Published CD and website. Armonia employment records and final project report.		
Armonia able to coordinate future KBA work.	Recruitment of 37 suitably trained Armonia staff for KBA work.			
Activities	Activity Milestones (Sumr	nary of Project Implemen	ntation Timetable)	
Training Workshops	Activity Milestones (Summary of Project Implementation Timetable) 5 Training workshops & one to one training carried out between Aug 03 and March 05.			
IBA/KBA Workshops	KBA Workshop involving government (DGB) representatives, Sept 03. Final presentation to DGB			
Entomology & herpetology Training Biological Inventories	representing Bolivian government now due July 05. Field training with Oxford & Glasgow staff July-Sept 03, Aug & Dec 04 & Jan 05. Entomology & ornithological training in UK June & July 04, herpetology museum training in USA July 03. 45 Biological inventories, compilation of site reports and preparation of scientific papers May 2003-March 2005. IBA/KBA booklet prepared Jan-April 2004. Presentation of results, reports & recommendations to DGB resulting in KBA designation, now due July 2005. Worked with Armonia to identify specific priorities, then provided training and assistance in international grant applications, £132,561 raised for conservation in KBAs, May 03-March 05.			
Write site reports, compile results into scientific papers and prepare KBA book				
Institutional capacity support given to Armonia				