

Darwin Initiative for the Survival of Species

Annual Report

1. Darwin Project Information

<i>Project title</i>	Bolivian Key Biodiversity Areas Project
<i>Country(ies)</i>	Bolivia
<i>Contractor</i>	Ross MacLeod & Aidan Maccormick
<i>Project Reference No.</i>	162/12/013
<i>Grant Value</i>	£135,719
<i>Start/Finishing dates</i>	1/7/03 – 30/6/05
<i>Reporting period</i>	1/7/03 – 30/3/04

2. Project Background

Bolivia is one of the world's mega-diversity countries that hold a large percentage of the planet's biodiversity, including approximately 14% of the world's bird species in roughly 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 for the conservation of biodiversity difficult.

The work of this project is based on the Important Bird Area 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 its 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 the 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 setup 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 where it can 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 selected insect groups at a wide variety of potentially important conservation sites. 2) To 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 progress is significantly ahead of schedule for both the training and capacity building objectives and on schedule for successful completion for the biological inventory and conservation assessment objectives. Progress towards the overall purpose of the project, the establishment of the KBA network and its acceptance as a list of site-specific conservation priorities, has been excellent and much more rapid than planned. The Bolivian conservation community has designated the first 21 KBA sites. Designation was based on the importance of each site for conservation of threatened and endemic bird species and these sites have all been accepted as national conservation priorities by the Bolivian government's state department for biodiversity. Inventory work is progressing on collecting high quality scientific data about the distribution of birds, large and medium sized mammals, amphibians, reptiles and selected insect groups in Bolivia to allow identification of more KBAs both for birds and other taxonomic groups. Significant additional fundraising and the development of many new project partnerships have allowed a national bat inventory to be added to planned work. In addition the fund raising and capacity building work have allowed Armonia, the project's principal Bolivian partner, to greatly expand its conservation capacity and the NGO is now running 11 projects for the conservation of 9 threatened bird species in the KBAs so far identified.

To ensure consistency with international conservation groups we have, with the Darwin Secretariat's approval, modified the project name to the Darwin Initiative Bolivian Key Biodiversity Areas Project. We now use the acronym KBA for Key Biodiversity Area and IBA for Important Bird Area. The acronyms IBS/IBiS, which were causing confusion because they could be interpreted as both Important Biodiversity Site & Important Bird Site, are no longer being used. There have been no major modifications to the project work plans in the last year.

4. Progress

This first annual report covers the first 9 months of the project so there is no previous history prior to this report.

Project organisers, Ross MacLeod and Aidan Maccormick, made a successful pre-project planning trip to Bolivia to meet with governmental and NGO conservation groups in May 2003. Plans for project work were developed with the 3 Bolivian

partner organisations listed in the original project plan, Armonia (the national BirdLife partner), CI-Bolivia and Los Volcanes Research Station and with Conservation International represented by the director of their South America office. New contacts were made with a further 7 Bolivian conservation & scientific organisations, including, the Direccion General de Biodiversidad or DGB (the Bolivian government's Department of State for Biodiversity), SERNAP (the national parks authority), FAN (Bolivian biodiversity conservation NGO), WCS (international wildlife conservation NGO), Universidad Mayor San Simon, PCMB (Bat Conservation NGO) and Colección Boliviana de Fauna (CBF, the Bolivian natural history museum). Work included preparation of a detailed project timetable, development of optimal methodology for fieldwork and drawing up a list of priority target areas for site inventories.

The project then commenced officially on the 1st of July and all activities timetabled for the 9 month period from 1st July 03 until 31st March 04 have been successfully completed as have several additional outputs, all of which are detailed below.

July 2003 - Official project start in Glasgow, preparations made for survey work and workshops.

July & August 2003 - From Bolivia, project herpetologist Arturo Muñoz travelled to Florida State University to receive training from Dr Michael Harvey one of the foremost international experts on Bolivian reptiles and amphibians. As well as working with the museum collection in Miami, Arturo Muñoz travelled to the Smithsonian Institution in Washington to work with the institution's world famous collections. Results of the month long trip included 2 papers on Bolivian herpetofauna submitted to the Journal of Herpetology, the first of which describes a new species of snake.

August 2003 - Project leader and organiser returned to Bolivia and started work, including site recognisance.

September 2003 - Bennett Hennessy director of the Bolivian NGO Armonia started working for the project as Bolivian IBA Coordinator. His main tasks were, 1) to build Armonia into an effective Bolivian NGO with the ability to initiate conservation action in the KBAs identified by the project. 2) To work towards national acceptance, both by the Bolivian conservation community and the wider political community, of Important Bird Areas and Key Biodiversity Areas based on sound scientific data, as a suitable way to identify Bolivia's national biodiversity conservation priorities. This work was initiated by organising the first Bolivian Important Bird Areas workshop, which was funded by CI-Bolivia. 35 participants attended the workshop from conservation and governmental organisations from all over Bolivia. The workshop designated Bolivia's first 21 Important Bird Areas and identified an additional 23 potential IBAs currently with insufficient data. By January 2004, as a result of this national workshop and the IBA Coordinator's follow-up work, all of the 21 designated IBAs were officially adopted as national conservation priorities by the DGB, the Bolivian government's Department of State for Biodiversity. These 21 areas form the first part of the KBA network the project is constructing, therefore to have them adopted as government priorities in the first 6 months of the project greatly exceeded expectations. Even more encouragingly at a meeting between the project leader and Director Maria Marconi on the 9th March 2004, the Bolivian Department of State for Biodiversity asked to be supplied with a copy of every inventory report and

conservation assessment that the KBA project produces with the intention that all sites recommended as KBAs will be adopted as national conservation priorities.

September 2003 – Organised and signed formal agreement with the director of CBF to cover the organisation of collecting permits and depositing of specimens in the national museum.

October 2003 - Successfully completed the first 3 biological site inventories including training work with 3 Bolivian biologists. Work included the inventory of birds, reptiles, amphibians, large & medium sized mammals, butterflies, dungbeetles, selected groups of moths and flies. The 3 inventories surveyed different habitats (savannahs at Estancia San Juan, gallery forest at Estancia San Lorenzo and palm forest at Hurrasca) at sites in the San Ramon area of Beni Department.

October 2003 - Bolivian IBA Coordinator gave presentation at 7th Neotropical Ornithological Congress, Chile.

November & December 2003 – Towards the end of November the project ran into a major problem when we discovered the project permit application given to CBF had never been submitted to the government for processing. On querying the situation we found that CBF had changed director and now wanted to rewrite our agreement so that the new director could select staff to be paid by project, choose locations of work, prevent any specimens from being identified abroad or deposited in other Bolivian museums and various other conditions that would have made planned project work impossible. This put the project in major difficulties as we had spent 7 months developing the permit application and plans with the original CBF director and could not proceed with the inventory work without a permit to collect specimens and an agreement to deposit them in a Bolivian museum. After some difficult weeks the problem was resolved by negotiating a new agreement with a different Bolivian museum. A new collaboration was developed with the Noel Kempff Mercado Natural History Museum in Santa Cruz and a binding agreement signed on the 9th December and the permit application sent to the DGB the following day. With the cooperation of the DGB, Armonia and the NHMNKM the permit application process went remarkably fast and we received permission to start inventory work in March 04 and were able to start the inventory work only 3 weeks later than planned.

November & December 2003 – Organisation of the first three biological inventory training workshops held at Los Volcanes Research Station and the Lomas de Arena Regional Park. The course was advertised nationally and the participants selected based on their letter of application and CV, applications were assessed against objective criteria chosen to reflect interest, ability, theoretical knowledge and previous fieldwork experience.

Ornithological Inventory Field Training Workshop: Nine Bolivian biologists were trained in ornithological inventory methods, including visual identification, audio identification, dawn chorus sound recording, individual species sound recording and scientific survey & inventory methods suitable for rapid assessment of tropical forest bird communities. Principal instructors were Sebastian Herzog (University of Göttingen, Germany), Ross MacLeod & Aidan Maccormick.

Herpetology Inventory Field Training Workshop: Ten Bolivian biologists were trained in inventory techniques for amphibians and reptiles. Training included visual identification of Bolivia's 300+ herp species using identification keys, sound recording of frogs for audio identification, safe handling and capture of snakes, trapping methods and scientific survey & inventory methods suitable for rapid assessment of tropical amphibian and reptile communities. Principal instructors were

Steffen Reichle and Dirk Embert (both Zoologisches Forschungs Institut und Museum Alexander Koenig, Bonn, Germany).

Entomology Inventory Field Training Workshop: Eleven Bolivian biologists were trained in inventory techniques for tropical insects and arthropods. Training included the use of light traps, flight interceptor traps, bait traps, hand searching, sweep netting and a host of other specialist methodologies. Collecting, mounting and identification of specimens was covered, as was the importance of standardised scientific methodologies that allow comparisons of inventories from different sites. Principal instructor Darren Mann (Hope Entomology Collection, Oxford University Museum) with translation by Sebastian Herzog.

December 2003 – During his month long stay in Bolivia Darren Mann completed three entomology training inventories in the Amazonian forests of Pando Department, the savannahs in Beni Department and the dry forests in Santa Cruz Department. These provided more specialist field training in the collection of butterflies and dung beetles and their identification for three future project biologists.

December 2003 & January 2004 – Ross Macleod & Aidan Maccormick returned to Britain for 5 weeks over the holiday period. Work in Britain included finalising the fieldwork timetable for 2004 and general project administration. Both organisers returned to Bolivia on 20th January.

January 2004 – Organised and held fourth biological inventory training workshop at Villa Tunari, Cochabamba Department. This Bat Inventory Training Workshop was an additional output developed as a result of links established over the course of the year with PCMB (Bolivian bat conservation NGO). Ten Bolivian biologists were trained in bat survey methods, including capture with mist nets, visual identification in the hand, specimen preparation, audio identification using bat detectors and the use of the Anabat and Peterson computer systems to record echolocation patterns which can be used to identify many species. Principal instructors were Luis Aguirre, Lizette Siles & Arturo Muñoz.

February 2004 – Final selection of the 10 Bolivian biologists for the two inventory teams with employment scheduled to start once project inventory work permits received. Personnel were selected on the basis of fieldwork ability, taxonomic knowledge and availability. They were chosen from the participants in the training workshops, the biologists we trained in the field and personnel recommended by the Noel Kempff Mercado Museum. Six full time biologists were selected, 2 herpetologists Arturo Muñoz and Lucindo Gonzales, 2 entomologists Caroli Hamel and Yuvinka Gareca, 2 ornithologists Rodrigo Soria & Victor Garcia. All are recent biology graduates from Bolivian universities, have good levels of practical field experience and a good taxonomic knowledge of their specialist groups. In many ways they represent the cream of Bolivia's young field biologists. Additionally 4 field assistants to help with the entomology and herpetology work were selected. These assistants were selected from current biology students who want to gain further field experience while completing their degrees. The personnel filling these positions are likely to change on a regular basis so that we can train a larger number of personnel and so that personnel can continue to attend their courses. Together with the project organisers, who are both ornithologists, this provides two inventory teams each with a core of 6 people.

March 2004 – One inventory of birds, reptiles, amphibians and bats in the cerrado habitat of Estancia Mirrimia, in the lowlands of Santa Cruz. This inventory was approved by the DGB as a special case while we waited for the official permits and granted on the condition that we only worked on groups for which we did not need to

take voucher specimens for identification. Originally full time inventory work was planned to start at the beginning of the March but due to the problems with the permit application work was delayed by 3 weeks. Collecting permits were received towards the end of the month so there remains ample time to complete the 60 planned inventories by the end of the project in June 2005.

April 2004 – The 10 inventory team biologists signed contacts with the project and we started full time inventory work. Four full inventories of birds, reptiles, amphibians, large & medium sized mammals, butterflies, dung beetles and orchid bees (Euglossinae). The first two inventory sites were Rio Ticuchi and Rio Los Pinos both Serrania Iñaño, Chuquisaca Department in Bosque Tucumano-Boliviano a type of humid montane rainforest. The second two inventory sites were Serrania Taremakua and Estancia Ururigua both in Santa Cruz Department in Chaco Serrano habitat, a specialist type of dry hill forest. At these last two sites additional inventory work was carried out on bats, selected taxonomic groups of moths, beetles and mantids. A detailed description of our biodiversity inventory methodology is available in each of our site inventory reports, which are available on request.

Additional Outputs

As well as the timetabled activities described above a considerable portion of project personnel's time has been devoted to general capacity building and training work. Training has focused on working one to one with young biologists to develop funding applications for new conservation projects and to write up and submit for publication the results of existing projects. Nine biologists have been trained in fund raising and scientific writing techniques in this way and £5,800 has been raised for a national bat inventory project and for a project aiming to conserve high altitude *Polylepis* forest. Results from funding applications for an additional 7 species conservation projects are awaited. Capacity building work has focused on developing the conservation capacity of conservation NGO Armonia, the Bolivian BirdLife partner and the project's main host country partner. Before the start of the KBA project, Armonia employed 3 permanent personnel and 1 contract biologist working on 4 conservation projects for 3 globally threatened bird species. Funding provided by the Darwin Initiative and CI-Bolivia allowed the executive director of Armonia, Bennett Hennessey, to be employed to coordinate the Bolivian Important Bird Area project and develop Armonia. This development of Armonia's conservation capacity is part of the KBA project's exit strategy to help build up a Bolivian NGO capable of ensuring the long-term conservation of the areas identified by the project as KBAs. Over the course of the last year, development of Armonia's conservation capacity has been substantial; they now run 11 conservation projects for 9 globally threatened species in 9 KBAs. Armonia now employs 10 permanent staff and 19 contract biologists. Additional funding of \$110,000 has been secured for these projects.

Work Plan

The success of one to one training, in scientific writing and fundraising techniques, means that we are planning one change to the timetable & outputs detailed in the original application. Now instead of holding a scientific report writing and conservation fundraising workshop in 2004 we plan to continue with one to one training which we believe is much more effective. Overall training time will remain the same or be increased. The first year of our project work focused on setting up the biodiversity inventory teams, on capacity building and on training. Now that these

goals have been successfully met the second year will focus on the biodiversity inventory work outlined in the work plan below.

<i>Project implementation timetable</i>	
Date	Key milestones
April 2004 – April 2005	Two teams completing biodiversity inventories of remaining 52 potential KBA sites. Inventories of birds, reptiles, amphibians, large & medium sized mammals, butterflies, dung beetles and orchid bees (Euglossinae) at each site. With additional inventories of bats, moths, flies, mantids and beetles at selected sites.
April 2004	Assist Armonia with final development of Threatened Birds of Bolivia conservation project. This project is part of the KBA project's exit strategy; it will focus on the conservation of Bolivia's 29 globally threatened bird species in the KBAs identified during our project.
April & May 2004	Continuation of field training in biodiversity inventory techniques.
April & May 2004	One to one training for young biologists in conservation funding application and scientific report writing skills.
May 2004 – June 2005	Inventory reports and conservation assessments of sites written and submitted to Bolivian government so that appropriate sites can be designated national conservation priorities.
Aug – Nov 2004	One to one training for young biologists in conservation funding application and scientific report writing skills.

5. Partnerships

Extensive collaboration with host country organisations has been a very positive feature of project work so far and has expanded enormously since the original application. Originally partnerships were planned with 3 Bolivian organisations but so far the KBA project has established successful collaborations with 27 Bolivian organisations. The goodwill and support generated by these partnerships has been an essential aid to the project achieving its objectives in this first year. A very strong working relationship has been forged with our main host country partner, Armonia, and the project has formed strong links and partnerships with a large number of other host country and international conservation NGO's, scientific institutions, governmental departments, private landowners, indigenous community land partnerships, private foundations, 'people' based NGO's, conservation programmes and protected areas. Below is a description of our host country partners participation in the KBA project.

- **Armonia (BirdLife Bolivia) Principal Host Country Partner**

Armonia is our principal host country project partner with whom we have developed an excellent working partnership that has been absolutely crucial to the successful completion of the project's objectives to date. The UK principals coordinate weekly,

and often daily, with the directorate and administration of Armonia to ensure a solid project-host partnership. Armonia also provides essential logistics support concerning fieldwork site access as well as advice on local and national political developments that might affect the successful completion of planned fieldwork and training. In addition Armonia supplies invaluable advice to the UK principals regarding the subtle idiosyncrasies of working practices within Bolivia.

The administration of Armonia guarantees that the activities of the project are in accordance with all local and national legislation regarding scientific and conservation work at our planned study sites, and additionally ensures that employment procedures and imbursement of Bolivian biologists contracted by the project follows national employment regulations, income tax deductions as well as non-legislative working conditions and practices. Bolivian project members write the fieldwork reports using the project's computers housed at the offices of Armonia and have full access to the organisation's regionally important reference library. Finally the offices of Armonia are used by the project to conduct meetings and have also provided the location and materials for three of the biodiversity inventory workshops.

The project is employing Armonia director Bennett Hennessey as the coordinator for the Important Bird Area (IBA) programme and he ensuring that our methodologies and choice of fieldwork sites are the most pertinent with respect to the national IBA program to which we provide with all our ornithological fieldwork data. Bennett Hennessey in his role as IBA coordinator has established a successful collaboration between the KBA project, Armonia and the Bolivian Department of State for Biodiversity.

Scientific Institutions

To legally conduct biological fieldwork within Bolivia all conservation projects require a national scientific institutional counterpart, who then applies to the Bolivian Department of State for Biodiversity for permits for the project to conduct work. At present there are only two such institutions that can officially act as a counterpart; Colección Boliviana de Fauna (CBF) and the Natural History Museum Noel Kempf Mercado (NHMNKM). The project had originally planned to work with CBF as our institutional counterpart as the UK principals had conducted research in Bolivia with CBF as institutional counterpart previously. To guarantee a smooth permit application process the UK principals met with the director of CBF in May of 2003 before the official start of the project. Further meetings occurred in August & September culminating with the signing of a formal agreement with CBF to act as the project's scientific institutional counterpart. At the same time CBF and the project prepared and signed the official permit application to be sent to the Bolivian Department of State for Biodiversity. Subsequent enquiries to the Bolivian Department of State for Biodiversity two months later showed that CBF had not sent the permit application despite verbal and written assurances that the permit application was being processed. The reason behind the delay appears to have been an internal power struggle for the directorship of CBF and a resultant change of director. The new director then informed the project that the previously signed agreement with CBF would no longer be honoured and a new agreement would have to be drawn up that would contain a number of unusual conditions. The proposed conditions were unrealistic and could not be met by the project. At this point we approached the only other scientific institution able to provide institutional counterpart status, NHMNKM. Following a period of

several weeks of meetings we managed to obtain both the formal agreement of counterpart status from NHMNKM and completed the permit application process.

The project now has a good working relationship with NHMNKM. Over the course of the project we have employed and trained several students and researchers from the institution. The project now employs a full time associate researcher of the institution as part of our inventory team and he coordinates all aspects of the project's work with the relevant departments within the museum. The museum also collaborate by providing logistical information regarding proposed project research sites and background information regarding faunal groups that the project is working with. Deposition of collected specimens is principally with NHMNKM and we have worked together to guarantee that the deposited specimens are kept under suitable conditions and will remain accessible to the project researchers and other interested parties. A number of specimens will also be deposited at the Natural History Museum Alcide D'Orbigny. The project is also coordinating with the Los Volcanes Biological Research Station. This research facility has provided facilities for two of the biodiversity inventory workshops. The research station made available accommodation, teaching space and materials for the training of 20 young Bolivian biologists while the research station's director, Sebastian Herzog was the principal instructor during the Ornithological Inventory Techniques Workshop and acted as the translator for the Entomology Inventory Techniques Workshop. The collaboration between the research station and the project was instrumental in the success of the training workshops as it provides almost the only such facility within Bolivia to conduct field based biological training within montane forests, a habitat in which the project will be conducting nearly half of its fieldwork..

Conservation NGO's

The project has met with all the major national and international conservation NGOs working within Bolivia. Apart from our principal counterpart Armonia, the project is collaborating with the organisations, The Nature Conservancy, Fundación Amigos de la Naturelza, Wildlife Conservation Society-Bolivia, Fundación para la Conservación del Bosque Chiquitano, Asociacion Hombre y Naturaleza Bolivia and Prometa. Our original application states that Conservation International-Bolivia (CI-Bolivia) would be a major partner organisation of the project. The project has signed a formal agreement with CI-Bolivia and they have provided considerable funding for the training workshops, fieldwork and the IBA programme administered by Armonia. However the collaboration is considerably less than was offered by Conservation International during the planning stages of the project and the process of obtaining both the signed agreement and promised funds has been disappointingly slow at times. A major planned collaboration between the KBA project and CI-Bolivia was the development by staff at CI-Bolivia of a data base cataloguing the known distribution of Bolivian biodiversity from museum specimens and existing data. This information was to have been used to assist in the selection of new biodiversity inventory sites for the project fieldwork. Unfortunately this project never happened. However another project partner, Fundación Amigos de la Naturelza, has completed and are expanding a similar data basing project costing \$130,000. We have been offered access to the results of this project instead and are using them to identify potential endemic zones and select fieldwork sites as was planned with the CI-Bolivia project.

Collaboration with the other NGOs has mainly involved discussion concerning the provision of the project's data into national databases, location of study sites, cooperative work in the field, avoiding duplication of effort and resources, provision of scientific reports and dialogue regarding the expansion of future projects that will fulfil the project's exit strategy. The Nature Conservancy and Fundación para la Conservación del Bosque Chiquitano have also provided facilities and personnel for the biological inventory workshops.

One of the project's capacity building objectives is to help young Bolivian biologists obtain further funding for biodiversity conservation projects. During the first few months of the project we made contact with the Program for the Conservation of Bolivian Bats (PCMB) and subsequently helped apply for a year-long national bat survey conservation project that was successfully in obtaining £5000 in September 2003. To reduce field costs for the bat project we are also provided study site access and supplies for fieldwork.

Governmental Departments

To guarantee that the project leaves a lasting legacy within Bolivia, important links have been established with the Bolivian Department of State for Biodiversity, the governmental department responsible for Bolivia's natural environment. This has led to the first 21 IBAs/KBAs designated as national conservation priorities. Additionally the project is supplying all KBA inventory results to the department to help with the development of the national conservation strategy.

A large number of the potential study sites of the project lie within the national protected areas network administered by the Servicio Nacional de Áreas Protegidas (SERNAP). The project is therefore collaborating with SERNAP and supplying them with the project's results so that these can be added to their national protected areas biodiversity database, which will be used to formulate management plans. In return SERNAP are helping the project with maps and data regarding the individual protected areas.

Protected Areas

Although the project has collaborated directly with SERNAP all access to the national parks has to be coordinated in person with the each protected area's administration. For this reason we have been collaborating with the administration of the following protected areas; P.N. Carrasco, P.N. Altimachi, P.N. Amboró, P.N. Sama, P.N. Tariquia, P.N. Isiboro-Securé, P.N. Kaa-Iya and P.N. Iteñez.

Private Landowners, Indigenous community land partnerships, Private Foundations and non-environmental NGOs.

To successfully complete our objectives the project has worked in partnership with a number of private landowners, indigenous community land partnerships, private foundations and non-environmental NGOs. The project has successfully negotiated access to conduct fieldwork with a number of private landowners and indigenous community land partnerships. We have received substantial cooperation with two community land partnerships where we received use of vehicles and additional equipment in return for the provision of a technical report and the additional training of individuals from the community. A Bolivian private foundation, Fundación Simón I. Patiño, also provided the location for the fieldwork section of the biological

inventory workshop for herpetology. A number of the above organisations and individuals have also provided invaluable logistical support.

6. Impact and Sustainability

During the first year, the project has had dialogue with virtually all the major groups responsible for biodiversity conservation within Bolivia and as described in Section 5, successful collaborations, partnerships and continual dialogue has developed a strong project profile within the country. We feel that the high profile of the project and the success of our project to date is due largely to the nearly continual presence of the UK principals within the country combined with a concerted effort to present the project's objectives to as many organisations and individuals within Bolivia as possible. To increase the interest and profile of the project the project conducted a national Important Bird Area workshop in Bolivia in September, which brought together 35 participants from conservation organisations, governmental departments and national scientific institutions leading to the designation of the first 21 Important Bird Areas and the identification of an additional 23 potential sites. The government is now adopting these as national conservation priorities. The project was also able to give presentations at both the 6th National Ornithological Conservation Congress in Bolivia, the 7th Neotropical Ornithological Congress in Chile and the BirdLife World Conservation Conference in South Africa where the project's objectives and approach to data collection and key biodiversity site designation in Bolivia was presented. The biological training component of the project has had a substantial impact with biological inventory workshops leading to the employment of at least 12 of the 40 participants, either on this project or other conservation projects.

To date one of the project's greatest impacts within the country has been the increased capacity of our host country partner, Armonia. The number of employed personnel within the organisation increased from four to 29, while the IBA coordinator has managed to raise a further £62,850 to fund conservation projects over the last nine months. This now means that our host country partner is conducting nine threatened species projects as well as the Bolivian IBA program. Additionally the project has also raised £5,800 towards two conservation projects to conduct a national bat survey and work with Polylepis forest Conservation.

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

Our project will finish next year in June 2005 and we would like to be asked to apply for post project funding at the start of 2005 so that follow-up activities could start straight away in July 2005.

As a result of the project partnerships outlined above, 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 will have 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 producing a series of high quality field guides and check lists for the key groups that can be used for monitor biodiversity and its conservation. Second, by helping in the description of several dozen, new species of birds, frogs, snakes and lizards

discovered by project members so that these species can be effectively conserved. Third, 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. The KBA project's Bolivian biologists will work on these projects with Armonia, the Noel Kempff Mercado Natural History Museum and PCMB and be supported by the resources of Glasgow & Oxford University staff and the international experts who are currently advising the project. Armonia, NKMNHM, 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 suggest that this international NGO would be interested in part funding this post-project work.

8. Outputs, Outcomes and Dissemination

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

<i>Code No.</i>	<i>Quantity</i>	<i>Description</i>
4AB	26 person/weeks	4 Biodiversity Inventory Field Training Workshops of 1 week each, 40 Bolivian students attended for a total of 40 person/weeks training (this was 10 person/weeks additional training - 1 additional workshop training 10 extra students in addition to planned outputs) 9 Bolivian biologists were trained in the field during 11 weeks of fieldwork, 30 person weeks (19 person/weeks training were additional output). 9 Bolivian biologists were trained in scientific writing and funding application techniques (9 person/weeks)
4CD	53 person/weeks	
6AB	4 person/weeks	As permits to export insect specimens for identification in Britain were delayed as described in section 4 this output was reorganised with herpetology training taking place 6 months earlier than planned and entomology training 6 months later. Bolivian herpetologist Arturo Muñoz received training from Dr Michael Harvey at Florida State University and the Smithsonian Institute in Washington, 15 July to 15 August 2003. Bolivian entomologist Caroli Hamel will now go to Oxford University for training from the 28 th May until 1 st July 2004. Flights are already booked and there is no foreseeable reason for the timing of this output to change again.
7		In the project application the date given for this project output (June 2003, a month before the project started) is a typing mistake. This output is planned for June 2005.
8	63 person/weeks	Additional output 3 person/weeks
11B	3	3 papers submitted to peer review journals, ornithology

14A	1	paper to Bird Conservation International, 2 herpetology papers submitted to Journal of Herpetology
14B	3	Bolivian Important Bird Area Workshop organised in Cochabamba, 35 delegates representing conservation groups and governmental organisations from all over Bolivia. (Additional output) Presentations at 1 national and two international conferences. October 2003, VII Neotropical Ornithological Congress, Chile. February 2004, VI Bolivian Ornithology & Bird Conservation Conference. March 2004, BirdLife World Conservation Conference & Global Partnership Meeting, South Africa. (Additional Output, presentation at one extra conference)
15A	5	Work with the press has focused on raising conservation awareness for key species for the IBA programme. This has resulted in 5 articles in nationally read newspapers.
23	£88,293	This money is the agreed project finance raised from the sources described in the project application to supply £88,125 for this first year.
	£62,850	This additional money was raised for the conservation of 9 globally threatened bird species in the KBAs designated to date and to support the Bolivian IBA program. The money was raised through the work of project IBA Coordinator Bennett Hennessy.
	£5,800	This additional money was raised for a Bolivian bat conservation project & the conservation of the Polylepis forest habitat. The money was raised as the result of the project organisers' capacity building work training Bolivian biologists in conservation fund raising.
		Total Additional Output £66,650.

Table 2: Publications

Type *	Detail	Publishers	Available from	Cost £
(e.g. journal paper, book, manual, CD)	(e.g. title, authors, journal, year, pages)	(name, city)	(e.g. contact address, email address, website)	
booklet	Important Bird Area Program for the Conservation of Birds and their Habitats in Bolivia, Bennett Hennessey & Rodrigo Soria, 2004, 16 pages. (Spanish)	Editorial Armonía	Asociación Armonía, Lomas de Arena 400, Santa Cruz de la Sierra, Casilla Postal 3566. Bolivia. Armonia@scbbs-bo.com	Free

website	Web pages introducing and explaining the Important Bird Area Program in Bolivia; including the process of IBA designation and details of all the IBAs. Rodrigo Soria. 2004 (Spanish)	Armonía	www.armonia-aicas.org.bo	Free
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Dissemination activities have focused on coordinating and developing the KBA project with the organisations described in section 5. Project work by Armonía and IBA Coordinator Bennett Hennessy, funded by CI-Bolivia, has established an IBA website describing the first 21 designated KBAs. Both this website and a CI-Bolivia funded IBA programme booklet are disseminating information nationally and internationally about the IBA/KBA conservation network and will continue to do so long after this project has finished.

9. Project Expenditure

Table 3: Project expenditure during the reporting period

Item	Budget	Expenditure

10. Monitoring, Evaluation and Lessons

Monitoring and project evaluation is undertaken by a number of host country organisations. Monthly meetings are held with the directors of Armonía, the director of Los Volcanes Research Station and the Noel Kempf Mercado Natural History Museum who provide verbal feed back on the project progress. With the commencement of the inventory work written monthly reports are sent for review to the Bolivian Department of State for Biodiversity (DGB), Conservation International, Armonía, Fundación Amigos de la Naturelza and the Noel Kempf Mercado Natural History Museum. Reports of the training workshops are also reviewed by Armonía and Conservation International.

The original application stated that a national Key Biodiversity Areas committee would monitor and evaluate the project progress. However at the IBA workshop at the start of the project the participants showed little enthusiasm for the idea of such a committee. Instead the DGB have taken on the role of evaluating and monitoring the projects conservation recommendations. As the DGB is able to designate recommended IBA and KBA sites as national governmental conservation priorities

this greatly increases the projects impact and we see this as a major improvement on our original plans.

The project has learnt that to be successful, constant dialogue is required with a high number of Bolivian biodiversity stakeholders. Additionally the choice of a very well respected conservation NGO as our host country partner with a strong leadership and a number of competent bilingual personnel has been critical to the successful completion of the objectives during the first year.

Our progress towards our measurable indicators of achievements and the means of verification are detailed within the logistical framework show overleaf.

Aidan Maccormick & Ross Macleod
30/4/04

<i>Project summary</i>	<i>Measurable indicators</i>	<i>Means of verification</i>	<i>Important assumptions</i>
<p>Goal:</p> <p>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose</p> <p>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.</p>	<p>8 biodiversity inventories completed and a further 3 entomology training inventories. Bolivian government (DGB) adopted role planned for KBA committee 21 KBAs designated at national IBA congress and adopted by government 10 permanent and 19 contracted staff employed by Armonia.</p>	<p>Individual project site reports and annual project report presented to KBA Committee, sponsors and collaborators. Electronic book of Bolivian Key Biodiversity Areas published on web and CD on completion of project. Individual site reports Annual and final project reports.</p>	<p>Continued commitment of Armonia and CI-Bolivia to KBA programme.</p>
<p>Outputs</p> <p>30 young Bolivian biologists trained and experienced in biodiversity surveys.</p> <p>2 young Bolivians trained & capable of instructing others (entomology & herpetology).</p> <p>Biological inventories of 60 sites completed.</p> <p>Bolivian KBA book published and distributed in electronic form.</p> <p>Armonia able to coordinate future KBA work.</p>	<p>40 Bolivian biologists completed workshops. 12 participants obtained employment in conservation biology within the period. Completion of herpetological training in USA. 8 potential KBA sites inventoried. Publication of IBA booklet and website. Recruitment of 29 suitably trained Armonia staff for KBA work.</p>	<p>Course attendance records maintained by Los Volcanes Field Station. Annual project report. Report of training staff from Florida State University. Annual project report. Individual project site reports on Bolivian KBA web site and annual project report. Published CD and website. Armonia employment records and final project report.</p>	<p>A good percentage of participants will apply training to project surveys and then move on to conservation jobs within Bolivia. Trained Bolivian entomologist & herpetologist will continue to work in biology and train future students in Bolivia. Potential KBA sites are logistically accessible to survey teams. Continued commitment of Armonia to KBA programme.</p>
<p>Activities</p> <p>Training Workshops IBA/KBA Workshops Entomology & herpetology Training Biological Inventories Write site reports, compile results into scientific papers and prepare KBA book Institutional capacity support given to Armonia personnel</p>	<p>Activity Milestones (Summary of Project Implementation Timetable)</p> <p>8 Training workshops carried out between Aug 2003 and March 2005. 2 KBA Workshops involving national KBA Committee, Sept 2003 and May 2005. Field training with Oxford & Glasgow staff July-Sept 2003 & 2004, entomology museum training at Oxford University Jan & Feb 2004, herpetology museum training Jan 2004 & Jan 2005. Biological inventories, compilation of site reports and preparation of scientific papers May 2003-April 2005. IBA/KBA book prepared Jan-April 2005. Presentation of results, reports & recommendations to KBA Committee resulting in KBA designation, May 2005. Work with Armonia to identify specific priorities, then to provide training in international grant application process, followed by practical application to identified priorities, May 2003-April 2004.</p>		