



2/905



Submit by 5 January 2007

DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 15 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 (NB: Notification of results will be by post)

| | |
|--------------------------------------------------------------------|-----------------------------------------------------|
| Name: Department of Plant Sciences, University of Oxford | Address: South Parks Road, Oxford OX1 3RB |
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2. Project title (not exceeding 10 words)

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| CONSERVATION OF THE CERRADOS OF EASTERN BOLIVIA |
|-------------------------------------------------|

3. Project dates, duration and total Darwin Initiative Grant requested

| | | | | | |
|----------------------------------------|-------------------------------------|-----------------------------|----------------|----------------|--------------|
| Proposed start date: 01-05-2007 | Duration of project: 3 years | End date: 30-04-2010 | | | |
| Darwin funding requested | 2007/08 | 2008/09 | 2009/10 | 2010/11 | Total |
| | £74,850 | £81,680 | £99,442 | £9433 | £265,405 |

It would be possible (but not very desirable) to start work on 1/9/2007 but maintaining the same end dates.

4. Define the purpose of the project (extracted from logframe)

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| The identification of conservation priorities within the cerrado formations of the Chiquitano regions of Eastern Bolivia |
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5. Principals in project. Please provide a one page CV for each of these named individuals

| Details | Project Leader 1 | Project Leader 2 | Other UK personnel | Main project partner and co-ordinator in host country |
|--------------------|-----------------------------|----------------------|----------------------|----------------------------------------------------------------------|
| Surname | Scotland | Hughes | Wood | Saldias |
| Forename | Robert W. | Colin E. | John R.I. | Mario |
| Post held | Reader in Systematic Botany | Royal Society Fellow | Research Worker | Director of Herbarium (USZ) |
| Institution | University of Oxford | University of Oxford | University of Oxford | Museo de Historia Natural "Noel Kempff Mercado", Santa Cruz, Bolivia |
| Department | Plant Sciences | Plant Sciences | Plant Sciences | Botánica |

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

| Reference No | Project Leader | Title |
|--------------|-------------------|---------------------------------------------------------------------------|
| 161/11/010 | Dr R. W. Scotland | Plant Endemism in the Central Andean Valleys of Bolivia |
| 14-004 | Dr N. Brown | A biodiversity monitoring system for Trinidad & Tobago |
| 15-023 | Dr S. Harris | Conservation of endangered coastal biodiversity hotspots of Central Chile |
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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)

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| Aims (50 words) N/A |
| Activities (50 words) N/A |
| Achievements (50 words) N/A |

8. Please list the UK/collaborative (where there are partners in addition to the applicant organisation) and host country partners that will be involved, and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. This section should illustrate the capacity of host country partners to be involved in the project. Please provide written evidence of partnerships. (letters attached)

| Partner | Details (including roles and responsibilities and capacity to engage with the project): |
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| Museo de Historia Natural "Noel Kempff Mercado", Universidad Autónoma "Gabriel René Moreno" Santa Cruz, Bolivia (MNKM) www.museoelkempff.org | Our principal partner, which is the main scientific institution working with biodiversity in Eastern Bolivia, is a dependency of a public (state) university. It depends on public funding which is frequently subject to severe constraint. MNKM has been involved with the planning of the project from the beginning, coordinating links with partners and stakeholders in Bolivia, negotiating objectives and priorities with them. MNKM has a successful track record of working in collaborative biodiversity research in Eastern Bolivia over the past 20 years with positive outcomes in terms of conservation in a range of projects. MNKM will have prime responsibility for organising project activities in Bolivia and providing staff to implement the project. It will be the main beneficiary in terms of project training inputs. It will be the point of contact for all project activities in Bolivia. |

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| <p>Partner</p> <p>Fundación para la Conservación del Bosque Chiquitano (FCBC) www.fcbcinfo.org</p> | <p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>FCBC is our second key partner. It was set up in 1999 by a consortium of environmental agencies and donor organisations to support biodiversity conservation in the Chiquitania region of Eastern Bolivia, which includes most of the cerrado areas that are the focus of project activities. It is relatively well-funded and has a successful track record in establishing protected areas and negotiating with local communities and their leaders. It has a wide network of contacts through the region and a number of local conservation agreements. FCBC was involved in project planning from very early stages and has made many valuable contributions both in identifying priorities for the project and in suggesting ways in which the project can be developed. It will continue to be the third principal partner with MNKM and Oxford in planning and implementing the project. It will play a vital role in developing our links with local communities, regional authorities and in turning project recommendations into successful conservation outcomes.</p> |
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| <p>Partner</p> <p>Universidade de Brasília (UB)</p> | <p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>UB is one of the most important universities sited in the cerrado areas of Brazil and has just completed a major investigation into the cerrado vegetation of Brazil. It was invited to join the project later in 2006. The participation of UB will make available their experience in Brazil to the project and help foster regional biodiversity capacity and interpretation. This will strengthen our project planning and make available individual experts to strengthen our training programme throughout the life of the project. This international link within Latin America is an important new dimension for our Bolivian partners in this kind of project.</p> |
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| <p>Informal Partner</p> <p>Herbario Nacional de Bolivia (HNB)</p> | <p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>The HNB has offered its support to the project but will only have a limited role, participating principally in training activities both as recipient and facilitator. The HNB is also the national focus for the IUCN red data programme and will advise on the preparation of a Red data book for the threatened and endemic plants of the cerrados. All specimens collected during the project will also be deposited at the National Herbarium.</p> |
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| <p>Informal Partner</p> <p>Royal Botanic Gardens, Kew (RBGK)</p> | <p>Details (including roles and responsibilities and capacity to engage with the project):</p> <p>Both MNKM and Oxford have had contacts with RBGK over many years and RBGK collaborated informally in our previous Darwin project (161/11/010) participating in field work and training both in the UK and Bolivia. Recently RBGK has secured funding to follow up this former Darwin project in Bolivia. We plan to continue this informal collaboration in planning, field work and, particularly, training. Specific members of Kew staff have been earmarked for this purpose.</p> |
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| <p>9a. Have you consulted stakeholders not already mentioned above? <input type="checkbox"/> Yes</p> <p>If yes, please give details:</p> <p>We have discussed the project with the British Embassy in La Paz who have issued a letter indicating their support.</p> <p>We have approached the prefectura of Santa Cruz through FCBC to inform them of the proposed project to</p> | |
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invite their general support. The prefectura has a Department related to Natural Resources and their support is likely to be useful in winning the support of local communities and their leaders. A letter of support has been promised but has not yet been received.

We have also discussed the project informally with the Dirección General de Biodiversidad (DGB), the national government agency responsible for biodiversity. They have requested us to consult leaders of indigenous communities within the project area (see below). Following presentation of the previous project's results we were assured by the DGB of support for future initiatives so we are optimistic that we will have the full support of the DGB – we received this in October for the follow-up of the previous Darwin project funded by Rio Tinto through RBGK.

9b. Do you intend to consult other stakeholders?

Yes

If yes, please give details:

We intend to consult local communities and their leaders (mayors, dirigentes etc) individually as a first step after formal approval of the project. We plan to do this on an individual community basis using contacts of the FCBC and choosing those communities in whose land the project intends to work. We will also need to contact individual landowners and in one or two areas the National Parks authority (SERNAP). This process of consultation will be on-going throughout the project and is neither practical nor advisable before the project is approved given the size of the undertaking and our reluctance to raise hopes unnecessarily.

9c. Have you had any (other) contact with the government not already stated? Yes **If yes, please give details:**

With the DGB and the prefectura as outlined above.

PROJECT DETAILS

10. Please provide a Concept note (Max 800 words) (repeat from Stage 1, with changes highlighted)

The cerrado vegetation of South America is one of the principal tropical savannah formations, occupying extensive areas of central Brazil and eastern Bolivia with an estimated flora of 6500-10,000 species, of which about 35% of the trees and 70% of the herbs are estimated to be endemic to the biome, making it one of the richest of the world's top 25 biodiversity hotspots. While the cerrados of Brazil have been the focus of considerable botanical research in recent years, the extensive areas in Bolivia remain neglected in terms of botanical inventory and data. There are many undescribed species, no checklist of Bolivian cerrado species, little data on species distribution and almost none on patterns of endemism or what species are endangered. Some areas are totally unexplored botanically including the mountain ranges around Santa Corazon, which aerial photos by the Fundación para la Conservación del Bosque Chiquitano (FCBC) have shown to be unusually diverse in habitat. The FCBC urgently needs specific information to provide a scientific basis to implement the vision set out in the inter-regional conservation document it drew up jointly with Nature Conservancy in 2005 to help Bolivia and neighbouring countries meet their commitments under the CBD.

In recent years the cerrados have come under intense pressure principally through soya cultivation in Brazil and cattle ranching in Bolivia. Observations by the FCBC and the Museo Noel Kempff Mercado (MNKM) have drawn attention to the ease and rapidity by which the cerrados are being grubbed up and sown with imported grasses resulting in the loss of the original vegetation and fauna. The FCBC is aware of a new threat caused by the lifting of restrictions on cattle movement after the elimination of Foot and Mouth disease which will permit the pasturing of Brazilian cattle in Bolivia. Only very few cerrados are currently within protected areas and effective conservation action within the next decade is likely to be critical, thus it is a matter of urgency to explore the region and identify the most important cerrados for conservation. Previous studies by the MNKM on the Serrania de Huanchaca in the extreme NE of the region suggest that hilltop mesetas are especially rich in endemics and still largely immune from grazing. The mesetas could play an important role in conservation planning and our project would ascertain how far they could fulfil this role. The FCBC is anxious for well-founded scientific data to help promote more sustainable grazing practices so traditional grazing can be combined with conservation.

The need for the project has grown out of the long-standing involvement of all parties in the cerrados and

their awareness of the need for information on specific threats to species and habitats to help the Bolivian government fulfil its commitments under the CBD. MNKM is the Bolivian institution with prime responsibility for biological research in eastern Bolivia and has conducted surveys and other projects in the region but, like all similar Bolivian institutions, lacks resources to carry out survey work of the kind proposed here. John Wood and colleagues have had a productive relationship with MNKM going back 12 years including collaboration in a successful recent Darwin project (161/11/010). The FCBC was set up as a consequence of threats to the biodiversity of the Chiquitano region after the construction of gas pipelines in the late-1990s and has been promoting conservation in the region since then. Three of the parties discussed the need for this project through meetings and correspondence in early 2006, pooling ideas and experience to prepare the proposal. At a later stage it was decided to invite the participation of the Universidade de Brasília (UB) to discuss integration of data, collaboration between the two herbaria and the sharing of expertise, given the biological integrity of the cerrados in Bolivia and Brazil, where UB is heading a similar cerrado biodiversity initiative at the present time.

All partners would be jointly involved in planning and implementation of the project. MNKM would have prime responsibility for the scientific programme, including field survey work, assembly and analysis of data, conservation assessments and liaison with the Bolivian government and institutions. The FCBC would be responsible for diffusion of project results and formulating conservation strategies in co-ordination with local communities and appropriate authorities. Oxford would be responsible for provision of training with inputs and advice on all project activities, which would include conservation planning and assessment through Rapid Botanical Surveys (William Hawthorne), data-basing through BRAHMS (Denis Filer), botanical illustration (Rosemary Wise), plant taxonomy and identification (Colin Hughes, John Wood). It is planned to supplement these inputs with additional experts from UK and Brazil and to make use of and further develop the taxonomic, illustration and photographic skills of Bolivians trained through the earlier Darwin project. We see the latter as an important additional step in consolidating the achievements of that project.

11a. Is this a new initiative or a development of existing work (funded through any source)?

Please give details:

This is a new initiative.

11b. Are you aware of any other individuals/organisations/Darwin Initiative projects carrying out similar work? Yes

If yes, please give details explaining similarities and differences, and explaining how your work will be additional to this work and what attempts have/will been made to co-operate with and learn lessons from such work for mutual benefits:

One of our partners, Universidade de Brasília has just completed similar work in Brazil, leading to the conservation of certain Brazilian cerrados and heightened Brazilian government interest in the conservation of the cerrados. We hope to benefit from their experience and from the considerable literature and expertise on cerrado vegetation in that country. No one is doing anything similar within Bolivia.

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.

Bolivia's National Biodiversity Plan was formulated some ten years ago and may well be updated by the present government. The project meets various of the priorities outlined in the current plan including:

- Conservation of national biodiversity
- Investigation of components of biodiversity
- Strengthening national capacity to study biodiversity
- Education in the value and importance of national biodiversity
- Promotion of planning for the sustainable use of biological resources
- Promotion of private and municipal protected areas, including those within areas of indigenous communities.

13a. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please rank the relevance of the project to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes by indicating percentages.

| Articles | % Relevance | Themes | % Relevance |
|-----------------------------------------------------------------------|-------------|--------------------------------------------------|-------------|
| 5. Co-operation | 100% | Access and Benefit Sharing | 20% |
| 6. General measures for Conservation and Sustainable Use | 100% | Agricultural Biodiversity | |
| 7. Identification and Monitoring | 100% | Alien Species | |
| 8. <i>In-situ</i> Conservation | 100% | Biodiversity and Tourism | 25% |
| 8h. Alien Species | | Biosafety | |
| 8j. Traditional Knowledge | 20% | Climate Change and Biodiversity | |
| 9. <i>Ex-situ</i> Conservation | | Economics, Trade and Incentives | |
| 10. Sustainable use of components of Biological Diversity | 60% | Ecosystems approach | |
| 11. Incentive measures | | Forest Biodiversity | 10% |
| 12. Research and Training | 100% | Global Strategy for Plant Conservation | 60% |
| 13. Public education and awareness | 60% | Global Taxonomy Initiative | 60% |
| 14. Impact assessment and minimizing adverse impacts | 50% | Impact Assessment, Liability and Redress | 20% |
| 15. Access to genetic resources | | Indicators | |
| 16. Access to and transfer of technology | 50% | Inland Waters Biodiversity | |
| 17. Exchange of information | 50% | Marine and Coastal Biodiversity | |
| 18. Technical and scientific co-operation | 100% | Mountain Biodiversity | 30% |
| 19. Handling of biotechnology and distribution of its benefits | | Protected Areas | 50% |
| 20. Financial resources | 50% | Public Education and Awareness | 50% |
| 21. Financial mechanism | | Sustainable Use and Biodiversity | 50% |
| 22. Relationship with other international conventions | | Traditional Knowledge, Innovations and Practices | 15% |
| 23. Conference of the Parties | | | |
| 24. Secretariat | | | |
| 25. Subsidiary Body on Scientific, Technical and Technological advice | | | |
| 26. Reports | 20% | | |

13b. Is any liaison proposed with the CBD national focal point in the host country? Yes
If yes, please give details:

We have already had initial discussions with the Dirección General de Biodiversidad which is a dependency of the Vice-Ministry for Biodiversity, Natural Resources and the Environment, which is the CBD focal point in Bolivia. We propose to maintain a regular liaison with the DGB and the responsible vice-ministry throughout the project's life delivering annual and final reports to them.

14. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country. (Max 200 words)

The project should help in three ways:

1. In the first place the project will raise awareness of the impact of unsustainable management of the cerrados. By encouraging sustainable practices which protect wildlife, grasslands and water sources, the project will contribute to the long-term livelihood of communities and individual landowners who live in the cerrados.
2. The publicity generated by the project and its pictorial outputs will stimulate tourism to the region. This is a small but growing regional industry; highlighting the region's biodiversity can provide a new focus of interest for visitors through ecotourism.
3. The skills taught directly to project workers will increase their capacity to secure future employment.

15. 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. (max 200 words)

The project's impact will be achieved in several ways. It will significantly enhance the capacity of one of our partners (MNKM) to carry out biodiversity work through experience of a successful project cycle including training (scientific, technical and presentational) and improvement of their equipment and capacity. This will make MNKM better able to help Bolivia (especially in its eastern region) meet its biodiversity objectives. The project will assemble a large body of biodiversity data providing the basis for the identification of priority areas and threatened species in the cerrado region for conservation and plans to put its recommendations into effect through its partnership with FCBC, which has adequate funds, extensive local contacts and positive experience in establishing protected areas through negotiation at local level. Scientific results will be diffused through publications in peer-reviewed journals; the data base will be left behind for continued development and as a resource for future biodiversity work; conservation targets will be reached through negotiation at local level with publicity at national level through the press and contact with appropriate government agencies. Project personnel, individually and institutionally, have a well-developed network of connections within Bolivia to achieve publicity and enable the implementation of our recommendations.

16. How will the work leave a lasting legacy in the host country or region? (max 200 words)

The project will leave a lasting legacy in several ways. One will be the enthusiasm and skills of the four younger botanists and the artist who will be trained by the project. These people will significantly enhance Bolivia's capacity to meet its obligations under the CBD. They should continue with their research and be able to teach others. The project will leave behind a large data base and reference collection of plants. Both individuals and institutions should have developed a consciousness of the importance of taxonomy as a tool to support conservation of biodiversity. The project will provide a model for collaboration between a scientific research organisation (MNKM) and a conservation organisation (FCBC) as well as a model of international links (UK, Brazil, Bolivia) to advance conservation and research through collaboration. It will also be a model of collaboration in terms of involving local communities in the conservation and research process, helping them identify the long-term benefits that may come to them.

17. 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. For example, what steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? (max 200 words)

None of our partner institutions depend on the project for their existence and no institutional problems are anticipated when the project ends. The project will select committed and motivated individuals jointly with our partners and training will be focussed on a small number as none of our partners currently has the capacity to employ new staff on a permanent basis. Based on past experience we anticipate that good project management and the training opportunities offered by the project will ensure that staff changes will be minimal. We hope to leave a small pool of people who can attract work until (eventually) they can secure permanent employment. It is unlikely that any of the recommended areas of conservation will be legally established by the end of the project as this process takes years. However, by collaborating with local communities and their leaders, we hope to establish an atmosphere in which conservation will be welcomed. Both our main partners should have the institutional strength and commitment to ensure that conservation recommendations are carried through long after the end of the project. A final workshop will focus on project design and fund-raising to facilitate follow-up at the end of the project.

18. How will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used? (max 100 words)

The Darwin name will be used in the title which will appear as "The Darwin Project for the Conservation of the Cerrados of Eastern Bolivia". This will appear in all documents, publications, press releases etc. The Darwin logo will also be used wherever possible and acknowledgement will be made to the Darwin Initiative in all publications derived in whole or in part from the project. A web site will be set up with the Darwin logo to give information about the project and publicise its results.

19. If your project includes training and development, please indicate a) who the trainees will be, b) the criteria for selection, c) what the level and content of training will be, d) how many people will be involved, e) which countries will they be from, f) how will you measure the effectiveness of the training, g) will those trained then be able to train others and h) how will trainee outcomes be monitored after the end of the training? (max 300 words)

- a) The trainees will be young Bolivian graduates in Biology, environmental studies or a similar discipline mostly from the Universidad Autónoma Gabriel René Moreno but similar people from other universities will be considered.
- b) Trainees must have a relevant first degree with motivation to study plant taxonomy and conservation. It would be expected that they have a track record demonstrating interest, motivation and a willingness to do field work. Exceptionally the requirement for a degree might be waived in the case of a candidate qualified exceptionally in other ways. Candidates with good IT and communication skills would be especially welcome. Enthusiasm, motivation and ability to learn would count for more than formal qualifications and seniority.
- c) Training would be through experience in the project, individual instruction, workshops and (for a reduced number) through guided research in the UK or Brazil. Content will include botanical skills including taxonomy and survey work, data-basing and information technology, conservation prioritization, fundraising and design of project proposals. The academic level should be equivalent to that of an MSc for those undertaking guided research.
- d) 2 (possibly 3) people will have the opportunity for guided research abroad, a further 2-3 people will have regular training throughout the project's life and a wider group of an additional 5-10 people will benefit from general training offered in open workshops and during field work. One workshop is specifically aimed at managers.
- e) All trainees will be from Bolivia but visitors from Brazil would be welcome.
- f) Effectiveness in terms of individual, workshop and field training will be measured by trainees capacity to perform the task taught, i.e. to take digital photograph, to enter and analyse data in the data base, collect plant specimens, identify plants, write descriptions and reports, communicate results and recommendations to communities, draw and paint plants etc. In terms of those carrying out guided research, effectiveness would be judged by their capacity to complete the research task producing a paper for a peer-reviewed journal.
- g) Yes, to at least their own level.
- h) Outcomes can be monitored by noting trainees' ability to utilize, build on and extend the knowledge and motivation acquired during the project.

LOGICAL FRAMEWORK

20. Please enter the details of your project onto the matrix using the note at Annex C 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 |
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| <p>Goal: 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 benefits arising out of the utilisation of genetic resources | | | |
| <p>Purpose</p> <p>The identification of conservation priorities within the cerrado formations of the Chiquitano region of Eastern Bolivia</p> | <p>Acceptance of report by FCBC/government</p> <p>Steps taken to conserve priority areas recognised</p> <p>Progress in meeting CBD commitments by Bolivia</p> | <p>Report from FCBC/ government agencies</p> <p>Press reports</p> | <p>Bolivia continues to work towards meeting its CBD commitments</p> |
| <p>Outputs</p> <p>1. Report to FCBC and Bolivian government detailing priority cerrados for conservation with map of hotspots, checklist of cerrado species with provisional conservation data, role of mesetas as refugia and assessment of impact of grazing.</p> <p>2. A colour illustrated red data book of the endemic/ endangered plants of the zone.</p> <p>3. Information leaflets and posters on the flora and vegetation of the zone for public education.</p> <p>4. At least 4 scientific papers related to the plants/vegetation of the Bolivian cerrados</p> <p>5. Enhanced capacity in botanical survey, conservation assessment, taxonomy</p> | <p>Completion of comprehensive report and checklist</p> <p>Existence of map</p> <p>Detailed conservation assessment of species</p> <p>Existence of assessments of mesetas and grazing impact</p> <p>Completion, publication and distribution of book</p> <p>Existence of leaflets and posters</p> <p>Papers completed and accepted for published</p> <p>Number of collections Made</p> <p>Number identified</p> | <p>Review of report</p> <p>Reports from Bolivian partners/ government institutions/ international Groups/ British Embassy</p> <p>Reviews of book</p> <p>Comments from IUCN representatives</p> <p>Review of leaflets and posters</p> <p>Reports from schools, visitors and other users</p> <p>Peer reviews of papers</p> <p>Reports by herbaria</p> <p>Examination of data base and specimens</p> | <p>Identification of probable cerrados. Staff available to carry out assessment. Staff with assessment and identification skills.</p> <p>Cooperation offered by local communities</p> <p>Transport available</p> <p>Continued support by MNKM and FCBC.</p> <p>Existence of photographs</p> <p>Collection of information on specific species</p> <p>Availability of photographs</p> <p>Oxford and local artist available</p> <p>Information available</p> <p>Discovery of new species</p> <p>Collection of data</p> <p>Problems not overly complex</p> <p>Field work completed</p> <p>Data entered</p> |

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| <p>Activities</p> <p>1. Rapid assessment of plant diversity of potentially diverse cerrados.</p> <p>2. Identification of specimens from zone.</p> <p>3. Assembly of bank of photographs, artwork and data.</p> <p>4. Training/workshops in plant identification, esp. grasses, use of BRAHMS, botanical illustration, project proposal design, survey methods, conservation priorities and assessment</p> <p>6. Meetings with cattle ranchers, community representatives and schools to promote conservation and use of posters/pamphlets.</p> <p>7 Symposia, website, and exhibition to publicise results</p> <p>8. Institutional capacity building through purchase of equipment and materials.</p> | <p>Activity Milestones</p> <p>Selection of potential cerrados for study (by 6/07)</p> <p>Training in assessment methods (by 10/07)</p> <p>Completion of initial assessments (by 12/08)</p> <p>Follow-up visits to short-listed cerrados (by 12/09) for more detailed study</p> <p>Common/indicator species identified (by 12/08)</p> <p>Rarer/more complex taxa identified (by 2/10)</p> <p>Basic set of photos/illustrations ready (by 1/09)</p> <p>Gaps in photos/illustrations filled by 1/10</p> <p>Data entered within 30 days of receipt</p> <p>Two workshops, one on survey methods and one on BRAHMS and by 1/08</p> <p>Four additional workshops including illustration, taxonomy/identification, assessment of survey results by 1/09</p> <p>Three additional workshops including taxonomy/identification, BRAHMS and conservation priorities by 1/10</p> <p>At least one UK trained botanist by 3/10 and one through Darwin fellowship programme</p> <p>Initial meetings to inform local communities of project activities (by 1/08)</p> <p>Meetings/Workshops with cattle ranchers, major communities/schools in project area by (by 5/10)</p> <p>International symposium in Santa Cruz and national one in La Paz (by 5/10)</p> <p>Purchase of vehicle, computers, GPS, cameras (by 9/07)</p> <p>Purchase of herbarium cabinets and equipment (by 9/09)</p> | <p>Assumptions</p> <p>Staff and transport available.</p> <p>Local community co-operative.</p> <p>Weather conditions adequate</p> <p>Key experts (UK, Brazil & Bolivia) available to identify material</p> <p>Cameras not lost</p> <p>Computers available</p> <p>Skilled illustrators available</p> <p>Availability of experts in key areas</p> <p>Identification of appropriate taxonomy project for Bolivian researcher</p> <p>Staff available for illustration and taxonomy work</p> <p>Cattle ranchers, community representatives can be interested</p> <p>Posters and pamphlets completed</p> <p>Results ready to be publicised.</p> <p>MNKM has sufficient space for additional equipment</p> |
| <p>9. Lobbying of authorities to support conservation</p> | <p>Meetings with mayors, prefecto, indigenous leaders to win moral/legal support for conservation measures/protected areas</p> <p>Press releases</p> | <p>Political stability at end of project</p> <p>Meetings can be arranged</p> <p>Press can be interested</p> |

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

| Project implementation timetable | | |
|------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date | Financial year | Key milestones |
| By end June By end August September Sept-November December By January January-Feb March | Apr-Mar 2007/08 | Initial planning of project with key partners including consultation with government and other central authorities Selection of potential cerrados for investigation in Year 1 Purchase of vehicle, field equipment etc Selection of 4 key Bolivian workers Initial training of botanists in field work, use of cameras, survey work etc (Wood) First cycle of field work with introductory meetings to communities, collections from selected cerrados Workshop on use of BRAHMS (Filer) Project website set up to publicise project and promote its recommendations. Data entry and processing and initial identification of specimens Review of progress and planning for next 6 months |
| April-June By June By September September Sept- November By December March | Apr-Mar 2008/09 | Second cycle of field work along lines of first cycle Workshop on specimen identification of sterile material and methods of diversity assessment (Hawthorne) Purchase of equipment for herbarium Joint evaluation of progress and planning for next field work cycle with key cerrados "short-listed" for detailed study Third cycle of field work with concentrating on high diversity cerrados/refugia Visit by artist (Wise) with training of Bolivian counterpart/workshop. Selection of Bolivian botanists for UK/Brazilian training Second general workshop on plant identification (Beck) Specialist workshop on grasses (Renvoize) Review of progress and planning for next 6 months |
| April-June June By July September September September Sept-January By January By January | Apr-Mar 2009/10 | Fourth cycle of field work as for third cycle Consultancy review of final Rapid Assessment findings with Hawthorne consultancy with identification of key diversity hotspots Specialist workshops on additional 2 key families (Myrtaceae, Labiatae and Legumes) Completion of study training in UK and Brazil by 2 selected Bolivian botanists Joint evaluation on progress with detailed planning of final stages of project Advanced workshop on BRAHMS with Filer Final field work cycle to plug gaps in knowledge, obtain missing photos, data etc and inform communities, mayors etc of possible priorities for conservation Delivery of at least four scientific papers for publication based on project work Final specialist workshops (Composites, Bignoniaceae, |

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>By January By January By February</p> <p>By February By March By April February-March</p> <p>February-March</p> | | <p>Acanthaceae/Convolvulaceae) Completion of art work for posters books etc. Completion of map of key cerrado areas Selection of photos for posters, book and pamphlets Project meeting to discuss final results, outline final report and other publications, and discuss means of publicising results and promoting conservation of key areas Final workshop on project design/fundraising Completion of text for Red data book, posters etc Printing of books, posters etc Final round of meetings with selected communities, mayors, schools and other local and regional authorities to present project results and visit possible areas for conservation, discussing recommendations for sustainable grazing practices Meetings and Visits with Santa Cruz and national press representatives</p> |
| <p>April April April</p> | Apr-Mar 2010/11 | <p>National symposium (La Paz) to present project report and publications International Symposium in Santa Cruz to present results, publications and request support for conservation. Final review of project's achievements by project participants prior to presentation of Final Report to Darwin Initiative</p> |

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

| PROJECT OUTPUTS | | |
|------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Year/Month | Standard output number (see standard output list) | Description (include numbers of people involved, publications produced, days/weeks etc.) |

| | | |
|-----------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Throughout project | 4A | At least 10 undergraduate students will benefit from spells of work experience, training and workshops |
| | 4B | Can only be assessed retrospectively |
| Throughout project | 5 | All four principal project workers will have on-going training through life of project totalling about 18 months each. |
| 2009 | 6A | At least 2 project workers to complete guided research in UK/Brazil |
| | 6B | 12 weeks each |
| Throughout the project | 6A | At least 10 Bolivian botanists to receive training through workshops |
| Throughout the project | 6B | Can only be assessed retrospectively but not more than 6 weeks each |
| To accompany some workshops | 7 | Manuals to aid identification of specific groups |
| 2007-8 | 8 | Wood (20), Filer (2) |
| 2008-9 | 8 | Wood (18), Hawthorne (2), Wise (2), Renvoize (3), Hughes (3), others (2) |
| 2009-10 | 8 | Wood (18), Filer (2), Wise (1), Hawthorne (1), others (2) |
| 2010 | 8 | Wood (4) |
| 2010 | 9 | At least two general documents. One an overall report on the conservation of the cerrados and a second plan for sustainable grazing of the cerrados. Individual management plans may be prepared for individual communities or municipalities. |
| 2010 | 10 | IUCN Red data book for Bolivian cerrados |
| | 10 | Map of key cerrados |
| By 2010 | 11B | At least 4 papers submitted to peer-reviewed journals. |
| By 2010 | 12B | Database significantly enhanced in Santa Cruz and La Paz. |
| By 2010 | 13A | At least 3000 reference collections handed over (and data based) to Santa Cruz and La Paz herbaria. |
| 2010 | 14A | Two major symposia to be organised. |
| 2010 | 14A | Small meetings (number not known) with individual communities to publicise results. |
| By 2010 | 14B | Unknown number of conferences or workshops where project results may be publicised. |
| 2007-10 | 15A | National press reports at least annually and as opportunities arise |
| 2007-10 | 15B | Regular progress reports in MNKM newsletter |
| 2007-10 | 15C | Regular reports in Oxford Plant Systematics |
| 2007-10 | 18C | Local (Santa Cruz) TV programmes of unknown number |
| By 2010 | 20 | £21000 (computers, cameras, GPS, vehicle etc) |
| By 2010 | 23 | Unknown amount but efforts to be made to raise significant amounts. |

PROJECT BASED MONITORING AND EVALUATION

23. 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.

Built into the project plan are a six monthly series of meetings to evaluate the project's progress and plan its next steps. These meetings will necessarily involve the presence of representatives of the three principal partners (Oxford, MNKM and FCBC) but representatives of UB, HNB and RBGK will be welcome to participate if their representative(s) can be present in Santa Cruz at the time of the meeting. These meetings will evaluate the project's progress against the indicators in the Logframe, the activity milestones, the implementation timetable and the table of measurable outputs. Problems and slippage will be discussed and decisions taken to deal with problems and enhance the project's progress. These meetings will be used to anticipate problems and, if possible, begin the negotiations with communities and their leaders to secure the conservation of areas which are identified as priorities for protection. Feedback from Darwin evaluation reports will also be discussed.