



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

### 1. Name and address of organisation

Name: Dr S. Harris Address: Dept. of Plant Sciences, South Parks Rd., Oxford, OX1 3RB, UK

### 2. Project title (not exceeding 10 words)

Ref 669: Conservation of endangered coastal biodiversity hotspots of Central Chile

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

Proposed start d	ate: 01/05/2006	Duration	of project: 36 Months	End date	: 30/04/2009
Darwin funding	Total	2006/07	2007/08	2008/09	2009/2010
requested	£224,036	£79,178	£75,193	£67,229	£ 2,436

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

To develop a conservation and sustainable management strategy for the Maule region's coastal forests in the Chilean Biodiversity Hotspot, and build the technical and educational capacity and policy framework for the strategy's implementation. These internationally important ecosystems are severely threatened by land-use change, under-represented in national protected areas, and lack a coordinated conservation programme. Achieving the project aims will help Chile meet its national goals under the Regional Strategy for Biodiversity and international obligations under the Convention on Biological Diversity (CBD).

### 5. Principals in project. Please provide a one page CV for each of these named individuals

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner or co-ordinator in host country
Surname	Harris	Lander	San Martín
Forename (s)	Stephen	Tonya	José
Post held	Druce Curator of University Herbaria, University Research Lecturer	D. Phil Student	Lecturer and researcher
Institution	University of Oxford	University of Oxford	University of Talca
Department	Plant Sciences	Plant Sciences	Inst. Biología Vegetal y Biotecnología

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

The Darwin Initiative has funded 16 projects at Oxford University. S. Harris was awarded £264,500 in 2005 for *A biodiversity monitoring system for Trinidad & Tobago (2005–2008)*. The project will: 1) assess the conservation status of habitats and key species; 2) expand and enhance the National Herbarium; 3) produce two user-friendly field guides; 4) train staff in collections and information management in the herbarium; 5) provide training in plant survey and identification for students at two HE institutions, staff in the state forestry service and local nature reserve guides.

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

Aims (50 words)	
Activities (50 words)	
Achievements (50 words)	

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

University of Talca Chile project coordinator. Participated in pre-project planning meeting and gave research support for Oxford's 2005 field visit. The Institute of Plant Biology & Biotechnology (IBVB) is conducting complementary research on G. keule and other endangered species. U. Talca and CODEFF will implement the biodiversity monitoring programme, produce the Conservation Manual for Maulino Forests and participate in field research with Oxford. Dr San Martín will support Oxford's training courses and give at least 3 lectures on Conservation of Maulino Forests. Comite Nacional pro-Defensa de la Fauna y Flora (CODEFF) is the main environmental NGO in the region and originally proposed the project concept to Oxford, promoted the project amongst Chilean stakeholders and facilitated the pre-project planning meeting. CODEFF provided field/office support, and contacts with other organisations during Oxford's 2005 field visit. CODEFF will coordinate the public outreach and environmental education programme, comprising the project website, 2 radio programmes, 1 education video, and at least 5 school presentations. CODEFF and CONAMA will coordinate 2 participatory planning workshops to include local stakeholders in development of a Conservation & Sustainable Management Strategy (CSMS). CODEFF, CONAMA and CONAF will develop and publish the CSMS. CODEFF and U. Talca will implement the biodiversity monitoring programme, produce the Conservation Manual for Maulino Forests and participate in field research with Oxford. 1 staff member will participate in the RBS training courses.

**CONAMA** (Government Environmental Service) participated in pre-project planning meeting and provided field/office support and contacts with organisations during Oxford's 2005 field visit. Will coordinate the involvement of private stakeholders in the project. With CODEFF will coordinate 2 Participatory Planning Workshops to include local stakeholders in development of the CSMS. CODEFF, CONAMA and CONAF will develop and publish the CSMS. CONAMA will coordinate biodiversity monitoring. CONAMA will participate in developing public outreach and environmental education materials and the Conservation Manual for Maulino Forests. 1 staff member will participate in the RBS training courses.

**CONAF** (Government Forest Service) participated in the pre-project planning meeting and provided field support during Oxford's 2005 visit. CONAF will participate in the development of the CSMS and the Conservation Manual for Maulino Forests and provide logistical support for field work. 1 staff member will participate in the RBS training courses.

**Forestry companies (Celco, Bosques de Chile, Masisa)** participated in the pre-project planning meeting and provided field support during Oxford's 2005 visit. These companies will participate in the CSMS Participatory Planning Workshops and provide logistical support for field work. 1 staff member will participate in the RBS training courses.

<u>Small Woodland Owners.</u> Small woodland owners provided field support during Oxford's 2005 visit and will provide continued support. CONAMA and CODEFF will include a wide range of these local stakeholders in the CSMS Participatory Planning Workshops. Small Woodland Owners. <u>University of Oxford, Dept. of Plant Sciences</u> UK Project coordinator. Made initial field visit to meet partners and locate appropriate study areas. Oxford will coordinate Bio-quality Analysis /Rapid Botanical Survey (RBS) for the coastal Maulino forests, using the results to support development of the CSMS for the forests. Oxford will run 2 training courses in RBS/Biodiversity Survey techniques with support from U. Talca. Oxford will undertake population genetic viability analysis for the model endangered species *Gomortega keule*. Based on the results Oxford will identify critical conservation areas, developing landscape conservation and sustainable development models to support the CSMS.

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

Local communities and land owners (small & large) will be included in two Participatory Planning Workshops, where integration of their needs and interests into the CSMS for the Coastal Maulino Forests will be a particular focus. CONAMA, CONAF and CODEFF have extensive experience of working with local land-owners and communities and will liaise with these stakeholders.

### PROJECT DETAILS

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

There have been several DI projects in Chile, the most relevant being that recently completed by the Royal Botanical Garden-Edinburgh/Austral University of Valdivia. The national coordinator, Dr C. Echeverría, is aware of our initiative. The main objectives of the Edinburgh-Valdivia project were; 1) training Chilean scientists in conservation techniques, 2) conservation agreements with private landowners, 3) CBD sensitive agreements between Chilean and UK horticultural industries, establishment of an arboretum. The major result is a database of endangered species for central-southern Chile, including the Maule region. The database will be an important input to the Oxford-Talca project. Another result related to individual conservation agreements with 6 private land owners, the experiences of which will also feed into our new project. Differences with the Edinburgh-Valdivia project are: 1) a landscape oriented conservation approach which will take account of the dynamics, at a meta-population level, of endangered species and their habitat in a geographically more specific area, 2) a specific approach for the inclusion of a wider range of actors and stakeholders (multi-stakeholder process), particularly the major forest enterprises and individual landowners in the project area, 3) establishment of a monitoring system for the Maulinoforest conservation strategy as an important tool for prioritising post-project activities. A current project at IBVB, U-Talca: Modeling a Conservation Strategy from a Biodiversity Audit for an Endangered Chilean Species (funded by DIAT-U Talca) sampled all G. keule populations, measured sample trees, analysing genetic variation using ISSR markers (Herrrera et al, 2005, Biodiv & Conserv, 14, 2871-2881). The difference is that we will use co-dominant markers and will concentrate on spatial separation and gene flow between populations and isolated individuals. The complementary data will build a complete picture on species viability and management options.

# 11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country?

The project focuses on the coastal Maulino ecosystems which, despite their international biodiversity significance, are underrepresented in existing policy frameworks, conservation strategies and protected area networks. The project will produce a Conservation and Sustainable Management Strategy for the region with supporting education programmes and policy frameworks to ensure effective implementation. The project is expressly designed to support the Chilean Government's implementation of Articles 8 (10%), 12 (10%), 13 (10%), 14 (5%), 16 (5%), and 18 (5%), of the CBD and places specific emphasis on Ecosystems Approach (15%), Forest Biodiversity (20%) and Sustainable Use and Biodiversity (20%) themes. 90% of the region's forest is privately owned; therefore implementation of project results relies on the participation of large forestry companies and small land owners. All three forest companies involved in the project are FSC or CERTFOR-PEFC certified and committed to integrating and implementing the conservation strategy in their environmental management systems. Small forest owners will be encouraged to adopt the conservation and management strategies through a multi-stakeholder consultation process, which will ensure social and economic constraints are recognised and included in practical guidance and that the needs and interests of the small forest owners are considered in the development of the conservation strategy. In addition, project partners are committed to providing extension and education materials and technical assistance to all forest owners, ensuring the project's findings and outputs are implemented directly, and effectively.

<sup>3</sup> 

# 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.

Conservation and conservation related research in the project area, and the Chilean Mediterranean vegetation zone as a whole, is scarce and dispersed (perhaps because donor/research interests have focussed further south in the evergreen high forest). This has improved since implementation of the 2002, CONAMA coordinated, Regional Biodiversity Strategy (RSBD) with the identification of priority areas and topics for conservation in the Maule Region. Databases of some endangered species have been developed, with progress in the inclusion of biodiversity aspects in management systems of some commercial forest enterprises. Nonetheless conservation work in the area still lacks; (1) knowledge of the biological quality of most forest patches, (2) information on critical aspects of the population dynamics of endangered species, (3) the application of specific tools and instruments to convey biodiversity needs adequately to private landowners and gain their lasting support for conservation. The project's main contribution will thus be a more systematic approach to conservation in the Maule Region, filling critical gaps in knowledge and generating a participatory planning process aimed at balancing biodiversity needs with the prevalent social and economic realities of the area.

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

The implementation of conservation measures aimed at counteracting the adverse environmental effects of advanced habitat fragmentation and the protection of endangered plant species may not in the short term result in increased revenue for local people. Nonetheless, a more biodiversity and conservation sensitive management of land will in the medium/long term increase and maintain the productivity of these disturbed ecosystems. Our project promotes implementation of sustainable land management options to conserve biodiversity and sustain rural livelihoods in line with Millennium Development Goal 7 (environmental sustainability - indicators related to maintenance of biological diversity, the planting and management of trees).

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

The project goal is to develop a Conservation and Sustainable Management Strategy (CSMS) for the coastal Maule region forests in Central Chile and build the technical and educational capacity for the strategy's implementation. This goal will be met as follows:

1. Research Essential biological information on many of the endangered/endemic species and rare ecosystems of coastal Maule is lacking. The project will improve biological understanding of this region and its species, providing a sound scientific basis for conservation planning and management. Research focuses on two aspects; 1) the genetic viability of a model endangered species, G. keule, in fragmented forests, 2) a Rapid Botanical Survey and Bio-quality Assessment of the region's forest remnants. Results will be incorporated into the CSMS and Conservation Manual for the Maulino Forests. In particular, both studies will identify critical conservation areas and contribute to the development of biodiversity conservation guidelines for the region. 2. Capacity Building The project will run 2 Rapid Botanical Survey and Bio-quality Assessment training courses. It is anticipated that private land managers, employees of forestry companies, staff from government agencies and conservation NGOs will participate in the training and that the capacity will be passed on within the respective organisations. Oxford will provide support to CODEFF/CONAMA/CONAF during CSMS development, building local capacity for future conservation planning programmes. Individuals from Chilean partner organisations will participate in the field research, gaining skills that can be applied in future research and conservation. 3. Environmental Education Part of the project's overall aim is to incorporate conservation practice into land-management in the region in general, not just in Conservation Reserves or on government land. To achieve this project partners will undertake a wide-ranging environmental education programme aimed at rural land-owners, children, and future policy makers. The children's education programme consists of production/dissemination of an educational video, and at least 5 in-school presentations. Two radio programmes will be produced, aimed at rural land owners/managers. The project website, training courses and university lectures are aimed at professional land managers and conservationists, government staff and the general public.

**4. Conservation** CONAMA coordinates the regional strategic framework for biodiversity protection and CONAF manages Chile's formally protected areas and assists small land owners in managing their woodlands. The *Coastal Maulino* forests are underrepresented in national protected areas, and lack a coordinated conservation programme. The project will support and enhance the work of these two agencies by producing a CSMS for these forests based on both rigorous scientific research and Participatory Planning Workshops where the needs/interests of land owners/ managers are fairly represented. Project partners will also publish and distribute a Conservation Manual for Maulino Forests and a Technical Guide to Conservation Monitoring which will provide guidance on conservation management for landowners. The project's Monitoring programme will ensure that the guidance in the CSMS is followed or, if adaptation of the management strategies is required in order to meet biodiversity conservation goals, that new guidance is published and followed.

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

The project will provide publicly available, practical conservation guidance for the Maule's coastal forests through the Conservation and Sustainable Management Strategy (CSMS) and a Conservation Manual. Implementation of the CSMS, monitoring and adaptive management, should ensure conservation of these forests, and protect their biological value for future generations.
 Digital maps of forest bio-quality will be produced based on the Rapid Botanical Survey and Bioquality Assessment. These maps, an essential part of the CSMS, will also provide guidance for future conservation and development programmes. Images and information compiled on rare plants will be published and made available to the general public through the project website.
 Four to eight Chilean land management practitioners/conservation workers will be trained in Bioquality assessment. Teaching materials will be developed for these courses that will allow local staff to pass on acquired knowledge and skills to future generations.

**4.** The Genetic Viability Study will increase understanding of the biology and conservation threats to one of Maule's endemic endangered species, *G. keule*, through the publication of scientific papers and integration of this knowledge into the CSMS. This study will also provide models of the likely threat from forest habitat loss and fragmentation for other endangered forest species, enhancing the ability of Chilean policy makers to develop conservation and land management options for other threatened endemic species and regions.

**5.** The environmental education programme will produce teaching materials that may be used in the future throughout the region. The education programme will increase land owners', land managers', and the general public's understanding of conservation issues.

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

1. Close collaboration of all project partners in development of the proposal (planning workshops, meetings) has given a strong sense of local ownership. This strengthens the motivation of host country partners and will enhance project impact and legacy overall. The project will start with the signing of a Memorandum of Understanding, explicitly detailing the contributions and responsibilities of all partners for the duration of the project. This will ensure all partners have realistic expectations and are fully aware of their commitments from the start.

2. The main route to ensure lasting impact beyond a project's time-line is assignment of activities and responsibilities which lie at the core of local partners' mission and capacities. Thus the project enhances existing work programmes which currently cannot be implemented because of the lack of technical-scientific knowledge or financial means, rather than introducing new areas of work. As a result principal participation in research/capacity building will be by the area's main university (U. Talca), environmental education and implementation of monitoring by the main local environmental NGO (CODEFF), articulation of private landowners and coordination with other public agencies, along with coordination of monitoring by the Government environmental service (CONAMA), extension work towards small forest owners by the Government forest service (CONAF).
3. Both CONAF and CONAMA's remit is sustainable management and conservation of Chile's biological resources. These agencies are ideally placed to effectively implement the CSMS in the long term and their participation in its development will ensure it is realistic and applied as extensively and appropriately as possible.

**4.** 90% of the region's forest area is privately owned; therefore implementation of the project's results relies on participation of large forestry companies and small land owners. All forest companies involved in the project are FSC or CERTFOR-PEFC certified and committed to integrating and implementing the CSMS in their environmental management systems. Active participation of all stakeholders in CSMS development will ensure its relevance and practicality for these land-owners, increasing their commitment to long term implementation of CSMS guidance.

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

The Darwin logo will be used on all project documents for public distribution or in training courses, the project's website and posters, *etc.* Course participants will receive certificates including the Darwin logo, as well as those of the project partners. Darwin funding will be acknowledged in all published articles and manuals. There will be ceremonies to mark; 1) launch of the project which will include media coverage and highlight Darwin's involvement, 2) launch of the CSMS and conservation manual. Oxford will seek involvement of the UK embassy in these launches, and has experience of this with missions in Costa Rica, Honduras and Panama.

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

Local staff will be trained to plan, execute, analyse and disseminate results from a Rapid Botanic Survey (RBS) and Bio-quality Analysis. The effectiveness of the training will be gauged through the actual implementation of the RBS and bio-quality analysis survey phase. (The trained team and data generated will be comparable to that of the Darwin-Oxford Plant Sciences Trinidad/Tobago Biodiversity Project).

**Training Course 1:** Two weeks, February 2007. The course will include four to eight people drawn from the partner organisations. Course participants will become the RBS Field Team to work with Dr Hawthorne in the RBS Survey and Bio-quality Analysis. Following training, the Field Supervisor of the RBS Field Team will be capable of training a second Field Team to work in parallel if resources are available.

**Skills focus:** Planning and executing a botanic survey, field supervision, field note-taking, field botany, tree-spotting, plant pressing, sampling methods, field reconnaissance, analysis of vegetation type and position in landscape; collection, organisation and identification of sterile plant material; botanical survey database development, digital botanical photography

**Training Course 2:** Three weeks, February 2008. This course aims to increase the capacity of the Field Team to analyse the data collected in the RBS Survey.

**Skills focus:** Botanical database management, data analysis and mapping of RBS results, categorisation of global rarity and biodiversity significance

RBS course participants will evaluate how the courses helped them learn new skills effectively using a standard course questionnaire and a similar evaluation a year on to see how skills are actually used. Trained staff will be able to train others through the availability of associated support materials. In addition to these two main courses, training, and help with data preparation will take place via close internet collaboration between Oxford and the Chilean partners. Informal training in reproductive biology field methods will be given through the involvement of local staff in field work.

#### LOGICAL FRAMEWORK

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

n.b. changes are not substantial but clarify or give more detail that was originally lacking Means of verification Important Assumptions **Project summary** Measurable Indicators 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 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 • Purpose New scientific Develop a public-Conservation No significant changes in private biodiversity publications Chilean Government's National strategies and conservation management plans **Biodiversity Action Plan with** for coastal native respect to public-private strategy for coastal Project reports conservation policies forest ecosystems in woodlands based on the Maule Region scientific information Workshop reports (build the technical generated by the Private stakeholders. capacity and policy project Conservation particularly forest enterprises, framework to Strategy documents maintain favourable attitudes implement the towards implementing Conservation strategy) proposals accepted Management plans conservation in the area of forest companies and implemented and a procedure Small forest owners and their agreed for their Sustainable forest representatives disposed to continued collaborate in planning and management implementation certification implementation of the strategy Outputs 1) Bio-quality Access to private land 4-8 people trained in Project reports, analysis of coastal RBS methodology. maps, technical facilitated by landowners, local digital maps of forests and documents. resources (maps, aerial photos, libraries, botanical collections, woodlands in the forest bio-quality, herbarium digital photographs Maule region specimens, plot satellite images, data bases, in interactive data, photographs, GIS, etc.) accessible website and website and botanical database botanical database 2) PVA of model Agreed access to private land Genetic research Lab. protocols, species (G. keule) results. conclusions progress reports, maintained and development of and conservation peer reviewed conservation models models available publications 3) Conservation and stakeholder Workshop materials Conflicts of interests between **Sustainable** and reports from workshop actors and management goals participants, CSMS Management conclusions of specific land areas in respect Strategy (CSMS) to proposed conservation available. reports, forest agreed and implementation management plans measures are resolvable implemented by procedure defined stakeholders and agreed 4) Biodiversity 2 RBS Survey/Bio-Training course Trained staff stay in posts conservation skills quality Assessment materials published (private/public), given training courses on-line, participants opportunity to apply and and capacity increased in Maule completed, project course reports, disseminate skills, continued partners participate online digital photos interest among public and Region from RBS and data in field research private actors in conservation

on key species.

programme.

issues relevant to the region

5) Monitoring	Monitoring guidance	Conservation	Post-Darwin Initiative financial
programme for	published as a	Manual for Maulino	support for post-project
critical areas	specific technical	Forests	monitoring activities obtained
	monitoring guide)		-
		Technical guide for	
	1 or 2 local	conservation	
	institutions establish	monitoring including	
	monitoring prog. by	geographical and	
	end project	thematic priorities.	
6) Environmental	Project website, 2	Website,	N/A
education prog. and	radio programmes,	presentation and	
participatory	1 educational video,	lecture materials	
extension prog. with	min. 5 school	published on-line,	
forest owners and	presentations, min.	participant reports,	
general public	3 university lectures	project progress	
		reports, interviews	
		with actors and	
		beneficiaries	

Activities	Activity milestones (summary of project implementation timetable)
Research programme	<i>G. keule</i> genetic viability study completed and models for endangered species conservation developed (April 08), Rapid Botanical Survey and Bioquality Assessment (RBS) completed (April 07), Bioquality maps completed (Nov 08), critical conservation areas identified (Aug 08), RBS interactive website completed (Oct 08), Herbarium Reference Collection completed (Nov 08)
Training programme	Two Rapid Botanical Survey and Bio-quality Assessment training courses (Oct 06, Nov 07),
Conservation and Monitoring programme	Two Participatory Planning Workshops (May 06, June 07), CSMS completed (March 09), Conservation Manual for Maulino Forests completed (Dec 08), Technical Guide for Conservation Monitoring completed (Nov 08),
Environmental Education Programme	Project website online (Dec 07), two radio programmes broadcast (Mar, Sept 07), one educational video produced (June 07), five school presentations (Mar, Aug, 07, Feb, Mar, Aug 08), three university lectures (Aug 06, Oct 07, Oct 08)

Project implementation timetable					
Date	Financial year	Key milestones			
	Apr-Mar 2006/7				
May 06		Microsatellite markers developed for G. keule samples already			
		held in Oxford			
May 06		Participatory Planning Workshop 1			
June 06		Meeting of CSMS development group 1			
July 06		G. keule microsatellite manuscript submitted for publication			
July 06		Meeting of Conservation Manual development group 1			
August 06		G. keule viability study, fruit/leaf, pollinator samples collected			
August 06		Project website online			
August 06		University Lecture 1			
September 06		RBS Training Course materials available on project website			
October 06		RBS Bio-quality training course 1			
October 06		Whole project half-yearly meeting 1			
October 06		Gomortega keule genetic analysis complete			
November 06		RBS field survey			
December 06		GIS-based analysis of genetic viability for <i>G. keule</i> complete			
December 06		Meeting of Conservation Manual development group 2			
March 07		Radio programme 1 complete and broadcast			
March 07		School presentation 1			
	Apr-Mar 2007/8				
April 07	-	Bioqualiy analysis for project area complete			
April 07		Landscape conservation & sustainable development models			
F -		from Genetic Viability Study available for CSMS development			
April 07		Whole project half-yearly meeting 2			
April 07		Biodiversity Monitoring Strategy meeting 1			
May 07		Meeting of CSMS development group 2			
June 07		Participatory Planning Workshop 2			
June 07		Educational video complete			
August 07		School presentation 2			
September 07		Radio programme 2 complete and broadcast			
September 07		Biodiversity Monitoring Strategy meeting 2			
October 07		University Lecture 2			
October 07		Meeting of CSMS development group 3			
October 07		Whole project half-yearly meeting 3			
November 07		Meeting of Conservation Manual development group 3			
November 07		RBS Bio-quality training 2			
December 07		Project website updated with data from research programme			
		and education and outreach materials			
January 08		Meeting of Conservation Manual development group 4			
March 08		School presentation 3 and 4			

20	. Pro	ovid	e a	pro	ject	im	olem	entation	n timetable	e that sh	ows tl	he key	mile	stones	s in	proj	ect a	activit	ies.

	Apr-Mar 2008/9	
April 08		Study of landscape fragmentation on genetic viability of G.
		keule completed, manuscript submitted for publication
April 08		Study of reproductive biology of G. keule completed and
		manuscript submitted for publication
April 08		Whole project half-yearly meeting 4
May 08		Meeting of CSMS development group 4
June 08		Meeting of Conservation Manual development group 5
June 08		Biodiversity Monitoring Strategy meeting 3
August 08		Critical conservation areas identified based on RBS
August 08		School presentation 5
October 08		University Lecture 3
October 08		RBS botanical database published online
October 08		Interactive digital photolibrary available through project
		website and Oxford Virtual Field Herbarium
November 08		Technical Guide for Conservation Monitoring complete
November 08		RBS Herbarium Reference Collection complete
November 08		RBS results manuscript submitted for publication
November 08		RBS Bioquality maps available
December 08		Final draft of Conservation Manual for Maulino Forests sent
		for publication
December 08		Final draft of Monitoring guide
December 08		Project website updated with CSMS and publications
January 09		Final workshop validating the CSMS,
March 09		Conservation and Sustainable Management Strategy for the
		Coastal Maulino Forests (CSMS) complete
March 09		Project review, presentations
	Apr-Mar 2009/10	
April 09		Project final report

PROJECT OUTPUTS						
Year/Month	Standard output number (see standard output list)	Description (include numbers of people involved, publications produced, days/weeks etc.)				
Feb. 07 & 08	6A	4-8 Chileans trained in RBS & Bio-quality Assessment				
February 07,	6B	5 weeks training (2 courses, 2 & 3 weeks) in RBS &				
February 08		Bio-quality Assessment				
February 07	7	Training Course materials published on project website				
August 06	7	Project website online				
June 07	7	One educational video produced and distributed				
December 08	7	Final draft of Conservation Manual for Maulino Forests				
		sent for publication				
December 08	10	Final draft of Technical Guide for Conservation				
		Monitoring sent for publication				
March 09	9	Conservation & Sustainable Management Strategy for				
		Coastal Maulino Forests (CSMS) published				
December 08	10	Interactive digital photolibrary available through project				
	440	website & Oxford Virtual Field Herbarium				
January 09	11B	RBS results manuscript submitted for publication				
July 06	11B	G. keule microsatellite paper submitted for publication				
April 08	11B	Landscape fragmentation study of <i>G. keule</i> genetic viability completed, paper submitted for publication				
April 08	11B	Study of reproductive biology of G. keule completed,				
-		manuscript submitted for publication				
January 09	12A	RBS Botanical Database available on project website				
January 09	13A	RBS Herbarium Reference Collection				
October 08	14A	3 university lectures to include project results				
August 08	14A	5 school presentations to include project results				
March 09	14A	Workshop to present final results of the project				
May 06	15A	Press release to mark signing of Memorandum of Understanding				
Sept. 07	19C	Two radio programmes produced and broadcast				

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

### PROJECT BASED MONITORING AND EVALUATION

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

The project's national co-ordinator and reference point for the UK project leader will be Dr San Martín (IBVB, University of Talca). Each partner will appoint a Darwin coordinator, with the prospective coordinators being: Patricio Olivares (CONAMA), Mauricio Aguilera (CONAF), Cesar Sepulveda (CODEFF), along with environmental coordinators of the main three forest enterprises. Other staff within each partner organisation will report to that Coordinator. All Chilean Darwin Coordinators will report to Dr San Martin, the Chilean Darwin Project Leader. Genetic Viability and RBS researchers will report to Stephen Harris, the UK Darwin Project Leader.

All project partners will participate in two meetings per year to monitor progress on the different elements of the project and to agree on further action. Meetings will be held in Chile and planned to coincide with field visits from the Oxford partners. Minutes will be taken and circulated electronically to all project partners. Minutes of meetings will feed into the half-yearly and yearly reports required by the Darwin Initiative. The project will conclude with a final workshop in Chile in which achievements will be reviewed; research findings, publications and outreach materials presented; and further work planned.