

## **DARWIN INITIATIVE PROJECT SCHEDULE ref: 162/08/044**

**Organisation name :** University of Wales, Cardiff with the Centre International de Recherches Médicales de Franceville, Gabon (CIRMF)

**Name of project :** Conservation biology and genetics of the western lowland gorilla in Gabon.

**Project purpose :** to assist in the creation of a conservation strategy for the western lowland gorilla within Gabon using molecular techniques, and to create genetic profiles to establish the identity of individual gorillas.

**Project objectives :** to establish a strong and durable research activity at CIRMF in tropical molecular ecology and non-invasive population genetic techniques; to establish a teaching programme in conservation science through which candidates for further training can be identified, and through which increased national awareness of conservation issues can be raised; to establish population genetic methodology whereby endangered rain forest species may be studied and long term conservation strategies can be developed.

**Length of project :** Starts 1st September 1999 for 3 years

**Total project cost :** £408,175

**Darwin funding profile :** 1999/2000 £30,870; 2000/2001 £48,623; 2001/2002 £50,400; 2002/2003 £18,240. Total £148,133

**Other sources of funding :** £260,042 covering overheads, some salaries, laboratory consumables, flight costs and £36,000 granted for a UWC/Wildlife Conservation Society PhD studentship.

**Expenditure profile :** see Table A

**Target outputs :** see Table B

**Implementation timetable with milestones :** see Table C

**Key staff inputs :** see Table D

<b>Reporting requirements :</b>	31 October 1999	First report (1.9.1999 to 30.9.1999)
	30 April 2000	Annual report (1.4.1999 to 31.3.2000)
	31 October 2000	Six month report (1.4.2000 to 30.9.2000)
	30 April 2001	Annual report (1.4.2000 to 31.3.2001)
	31 October 2001	Six month report (1.4.2001 to 30.9.2001)
	30 April 2002	Annual report (1.4.2001 to 31.3.2002)
	31 October 2002	Six month report (1.4.2002 to 30.9.2002)
	30 April 2003	Annual report (1.4.2002 to 31.3.2003)
	30 November 2003	Final report

### **Arrangements for monitoring trainee outcomes :**

1) **Gabonese technician** (now identified : Mireille Bawe-Johnson MSc): Weekly project laboratory meetings at which Ms Bawe-Johnson's progress will be monitored along with the UWC/WCS PhD student. Annual reviews both at UWC and CIRMF will culminate with a final review prior to CIRMF funding as a Senior Technician once the Darwin project ends.

2) **Attendees at Population Biology workshop:** Continual assessment will be carried out during the 6-week courses, and each course will conclude with a final assessment and certification. Suitable Gabonese candidates (up to 2 per year) will be identified for further training investment on projects identified by UGENET at CIRMF, for which funding will be sought from CIRMF, WCS and UWC. Expertise at CIRMF and UWC will be made available for successful graduates of each course by email and other means of communication identified on an individual-by-individual basis.

**Ref: 8/044 Conservation biology and genetics of the western lowland gorilla in Gabon.**

**Key Outputs (expected)**

- CIRMF technician trained in laboratory techniques in UK & Gabon
- 3 workshops, each up to 30 students from Gabon / Central Africa) to train in conservation biology
- 2-4 scientific articles published
- Reference collection of gorilla hair/DNA established at CIRMF
- Management plan delivered to Ministere des Eaux et Forets
- Final data presented at International Primate Society
- Permanent research unit established at CIRMF
- UWC/WCS PhD student completed

**Table A**

<b>PROJECT COST</b>					
<b>Total Darwin Grant: £148,133</b>					
Annual Darwin Grant:					
* 1999/2000 30,870					
* 2000/2001 48,623					
* 2001/2002 50,400					
* 2002/2003 18,240					
<b>DARWIN GRANT : EXPENDITURE DETAILS</b>					
<b>Expenditure details</b>	<b>1999/2000</b>	<b>2000/2001</b>	<b>2001/2002</b>	<b>2002/2003</b>	<b>Total</b>
Rents, rates, heating, lighting, cleaning					
Postage, stationery					
Travel, subsistence					
Printing					
Conferences, seminars					
Capital items :					
Other : Field consumables (collecting vials, ethanol)					
Laboratory consumables (plastics; DNA extraction kits <i>Taq</i> polymerase; acrylamide, PCR primers, DNA size marker)					
Salaries					

**Table B**

<b>PROJECT OUTPUTS</b>		
<b>Year</b>	<b>Output ref. no.</b>	<b>Details</b>
<b>1999/2000</b>		
February	6A/B	CIRMF technician completes 6 months of training in laboratory techniques in UK
March	4A/B/C/D	Up to 30 students from Gabon and other Central African countries receive training in conservation biology over 6 weeks
March	8	UK postdoctoral scientist in Gabon for 4 weeks
<b>2000/2001</b>		
August	14B	Data presented at International Primate Society
November	6A/B	CIRMF technician receives nine months of training in laboratory techniques (6 months Gabon, 3 months UK)
March	4A/B/C/D	Up to 30 students from Gabon and other Central African countries receive training in conservation biology over 6 weeks
	8	UK postdoctoral scientist in Gabon for 6 months (April - August 2000 and March 2001)
<b>2001/2002</b>		
	11A	1-2 scientific articles submitted for publication (no dates)
	15A/B	Press releases explaining the results to be made in Cardiff and Libreville
March	6A/B	CIRMF technician receives 1 month of training in laboratory techniques in Gabon
	4A/B/C/D	Up to 30 students from Gabon and other Central African countries receive training in conservation biology over 6 weeks
	8	UK postdoctoral scientist in Gabon for 6 months (April - August 2001 and March 2002)
<b>2002/2003</b>		
June	8	UK postdoctoral scientist in Gabon for 3 months
	11A	1-2 scientific articles submitted for publication (no dates)
	12A/20	Genetic, demographic and biogeographic databases established and handed over (value 1,500 pounds)
	9	Reference collection of gorilla hair/DNA established CIRMF
August	13B	Management plan delivered to the Directeur de la Faune, Ministere des Eaux et Forets, Libreville (M. Mamfoumbi)
	14B	Final data presented at International Primate Society

	15B/C	Press releases explaining the results to be made in Cardiff and Libreville
	21	Permanent research unit established CIRMF
	23	UWC/WCS PhD student finishes (value £36,000)

**Table C**

<b>PROJECT IMPLEMENTATION TIMETABLE</b>	
<b>Date</b>	<b>Key Milestones</b>
<b>1999/2000</b>	
September	UK postdoctoral researcher and CIRMF technician appointed
September	Gabonese technician comes to the UK for training
September	UWC/WCS PhD student starts concurrently
February	Gabonese technician leaves UK
February	UK postdoc in Gabon establishing laboratory procedures. Transfer of methodology and commencement of analysis of gorilla hair
March	First 6 week course for students takes place
<b>2000/2001</b>	
March	Second 6 week teaching course takes place
August	Preliminary analysis of genetic data, and presentation at the International Primatological Congress
<b>2001/2002</b>	
March	Third 6 week teaching course takes place
<b>2002/2003</b>	
April	Training programme in population biology established
August	Final analysis of genetic data, and presentation at the International Primatological Congress

**Table D**

<b>KEY STAFF INPUTS</b>				
<b>Name</b>	<b>Grade/Position</b>			
Michael Bruford UWC postdoc	Reader, Biodiversity and Environmental Processes Group, UWC Postdoctoral Research Associate, Cardiff University			
E. Jean Wickings	Head, Unité des Genetique des Ecosystemes Tropicales, CIRMF			
Mireille Bawe-Johnson	Technicien, Unité des Genetique des Ecosystemes Tropicales, CIRMF			
Caroline EG Tutin	Head, Station des Etudes des Gorilles et Chimpanzees, CIRMF			
Lee JT White	Wildlife Conservation Society Fellow, Station des Etudes des Gorilles et Chimpanzees, CIRMF			
Kate Abernethy	Postdoctoral Fellow, Station des Etudes des Gorilles et Chimpanzees, CIRMF			
Kathryn J. Jeffery	PhD student funded by UWC and Wildlife Conservation Society			
<b>STAFF TIME ALLOCATIONS (% time spent on this work)</b>				
<b>Name</b>	<b>1999/2000</b>	<b>2000/2001</b>	<b>2001/2002</b>	<b>2002/2003</b>
Michael Bruford	20	20	20	20
UWC postdoc	100	100	100	100
E. Jean Wickings	20	20	20	20
Mireille Bawe-Johnson	100	100	100	100
Caroline EG Tutin	10	10	10	10
Lee JT White	15	15	15	15
Kate Abernethy	30	30	30	30
Kathryn J. Jeffery	100	100	100	100