

Darwin Initiative Annual Report

Darwin Project Information

Project Ref Number	15/038
Project Title	Restoring island biodiversity: The reintroduction of endemic Mauritian reptile communities
Country(ies)	United Kingdom and Republic of Mauritius
UK Contract Holder Institution	Durrell Wildlife Conservation Trust
UK Partner Institution(s)	Durrell Wildlife Conservation Trust and University of Bristol
Host country Partner Institution(s)	Mauritian Wildlife Foundation and National Parks and Conservation Service
Darwin Grant Value	£181,995
Start/End dates of Project	June 2006 to May 2009
Reporting period and annual report number	1 Apr 2007 to 31 Mar 2008. Annual report 2.
Project Leader Name	Dr Carl Jones
Project website	http://www.mauritian-wildlife.org and www.durrell.org
Author(s), date	Dr N. Cole (UoB/DWCT), Dr C. Jones (DWCT), Mr. R. V. Tatayah (MWF), Mr. V. Bachraz (NPCS), April 2008.

1. Project Background

The unique ecosystem of the oceanic island of Mauritius was once underpinned by one of the richest reptile diversities in the world. The reptiles occupied the main functional groups as predators, prey, grazers, seed dispersers and pollinators. Since the 16th Century extensive habitat destruction and the introduction of numerous alien species have severely depleted and fragmented the unique reptilian fauna, such that the important ecological links and food webs integral to native ecosystem stability are impoverished. Many of the reptile species are now restricted to one or a few of the offshore islands and are vulnerable to further disturbances and ultimately extinction.

For the past 30 years the Durrell Wildlife Conservation Trust (DWCT), and more recently in conjunction with the Mauritian Wildlife Foundation (MWF) and National Parks and Conservation Service (NPCS), has been instrumental in restoring island ecosystems by eradicating predatory and herbivorous mammals responsible for reptile extinctions and habitat destruction. For the restoration process to continue it is a necessity that reptile species are re-established on islands where they used to occur, thereby restoring reptile communities and past ecological relationships. Extensive island surveys and detailed scientific studies have been fundamental to underpinning the re-establishment of reptile communities and four species have been selected for initial trial translocation, based on their current suitability and great need for conservation. All were once widespread throughout Mauritius, but have undergone catastrophic declines: the Durrell's night gecko *Nactus durrelli* and Telfair's skink *Leiolopisma telfairii* became restricted to Round Island, the south-eastern variant of the Bojer's skink, *Gongylomorphus bojerii* sp. became restricted to Ilot Vacoas, and the Lesser night gecko *Nactus coindemirensis* can now only be found in restricted areas of Flat Island, Gunners Quoin, Ilot Vacoas and Pigeon Rock. Four recipient islands have been chosen based on the past distribution of the species, habitat and food resources, bio-security and lack of introduced competitors and predators. Ilot Chat has been chosen for the release of the Durrell's and Lesser night gecko, Ile aux Fouquets for the release of the Bojer's skink and Gunners Quoin and Ile aux Aigrettes for the release of the Telfair's skink.

The rarity and cryptic nature of the island reptiles means that many of the species are largely unknown to Mauritians. Training Mauritian individuals from the MWF and NPCS in herpetological conservation and monitoring techniques is therefore of paramount importance for the future survival of this diverse and

biologically important group of animals. Under the supervision of the UK partner, Mauritians will conduct the translocations and monitoring to assess the success and impact upon each island. The re-establishment of healthy reptile populations on the islands will help restore functioning ecosystems, aid in securing the unique endemic Mauritian biodiversity and reduce further risks of extinction within one of the most important biodiversity hotspots.

Map of Mauritius and offshore islands mentioned in text



2. Project Partnerships

For the past two decades the DWCT together with the MWF have held a Memorandum of Agreement with the Ministry of Agro-Industry and Fisheries, through the NPCS, to facilitate co-operation on joint conservation projects such as this. All three partners continue to be strongly involved with the project, from fieldwork, field courses, workshops, reporting and presentations. In-situ training of individuals by Dr N. Cole, UK Project Manager, has continued throughout the second year and as such supports the strong and cohesive partnership that has developed since the project started.

This project supports the commitment of Government to meet the CBD requirements. Co-operation between the project partners and associated organisations supports the Government's implementation of Article 5. Ongoing training of individuals in the necessary techniques to conduct herpetological research and conservation, ecosystem monitoring, translocations and involvement in the Workshop on Management Plans for Conservation & Management of Offshore Islets Republic of Mauritius 2008 supports the country's National Biodiversity Strategic and Action Plan (2006-2015) in accordance with Articles 6, 7, 8, 9c, 10b and 12 of the CBD. The project partners have been strongly involved with the

National Invasive Alien Species Strategy Workshop 2007 supporting the country's commitment to meet the requirements for Article 8h and 10b of the CBD. Nationwide publicity of this project contributes to the country's implementation of public education and awareness of biodiversity issues in accordance with Article 13 of the CBD.

The International Zoo Veterinary Group (IZVG), UK continues to support the project in the screening of all samples sent and advice on veterinary health related issues. Regional partnerships with the National Coast Guard (NCG) and the Police Helicopter Squadron remain strong and their involvement has been essential for all northern island work.

The cohesive nature of the partnerships generated in this project and the transparency by which the work is conducted by all partners has been a great strength to the project. Having both host organisations working together with the UK partner affords the project the flexibility of an NGO with the jurisdiction of a government agency.

The strength of the partnership described in report 15-038 AR1 remains and the UK lead institution continues to have the infrastructure and capacity to be an effective project partner within Mauritius.

Other Collaborations: Collaboration with this project and trained personnel from previous Darwin Initiative projects, 'Information system for biodiversity and conservation management in Mauritius (Ref 8-064)' and 'Rediscovering the neglected insects of Mauritius - building in-country capacity (Ref 12-005)' continues. Collaboration with the Darwin Initiative project 'Ex-situ conservation of the rare and threatened plants of Mauritius (Ref 15-035)' has recently evolved, whereby project staff assist by collecting seeds or report on fruit phenology when on the remote islands.

Links remain with the project and the M.Sc. course at the Applied Ecology and Conservation Department, University of East Anglia, UK. Links between the project and undergraduate/post-graduate field courses within Mauritius, La Réunion and other UK Universities are currently being explored. A strong collaboration has started with a recent Rare Pride Campaign in Mauritius, which is focusing upon the underlying social and economic factors threatening biodiversity on the southeast islands, involved in this project.

This project is directly linked with the CBD technical focal point. The NPCS, Ministry of Agro-Industry and Fisheries, is directly responsible for all issues related to the conservation of terrestrial fauna and flora in Mauritius. The NPCS is the nominated Focal Point for the Subsidiary Body for Scientific, Technical and Technological Advice to the CBD and the Ministry of Environment and National Development Unit is the national focal point to this convention.

3. Project progress

3.1 Progress in carrying out project activities

Output 1. Reptile establishment: Activities to translocate the second cohort of 20 Bojer's skinks from Ilot Vacoas to Ile aux Fouquets proceeded as planned in January 2008. An additional activity to translocate 80 endemic orange-tail skinks, *Gongylomorphus* sp. from Flat Island to Gunners Quoin was undertaken and successfully completed in February 2008 (see below under Output 4). Monitoring activities have been completed, but have proved to be unnecessarily excessive and logistically difficult to accomplish with the time frame when the same result in achieving the output can be achieved in two not three visits per year, as proposed to and accepted by the Darwin Secretariat in January 2008. Nevertheless, all island visits were completed in 2007 and are currently in progress for 2008. Monitoring in the second year has demonstrated that the translocated skink populations are in better body condition than the populations they were removed from, that populations remain free of infectious diseases and dispersal and recruitment are occurring. This was also true for the night geckos that were effectively established and co-existing on Ilot Chat; however the island was recently invaded by rats, which has decimated the gecko populations. An additional unforeseen activity has therefore been the removal of rats from Ilot Chat and the close neighbouring island Ile aux Singe. Monitoring has also demonstrated that the severe drought from October to January has caused the decline of several island reptile populations and may have reduced the survival of eggs laid by Telfair's skinks in all populations.

Output 2. Translocation impact: Activities to assess the impact of the translocations are progressing in parallel to the monitoring of the translocated populations. Population estimates and trends have been obtained for all terrestrial vertebrates demonstrating that some non-native species populations have declined as a result of the translocations. Invertebrate and dietary utilisation data have been collected for all island populations, although data collection has been limited for small populations of small reptiles from which the collection of faecal samples for diet analysis is understandably limited. Nevertheless, analyses are continual and initial results for the Telfair's skinks suggests their selection for food is similar to that on Round Island, but overall they remain generalists in terms of diet and habitat selection. It is

also evident that the Telfair's skinks are having an active role in seed dispersal of mostly native and endemic plants on Ile aux Aigrettes and to a lesser degree, given the lower number of native species, on Gunners Quoin.

Output 3. Monitoring continued by host partners: Guidance, monitoring and training by the UK partner's fulltime Project Manager, Dr Cole has continued throughout the second year as planned. When working as a team the host partner project staff are capable of conducting small island trips alone and readily assist in the training of new staff, volunteers and visiting students. In addition to the training of the core project staff a further 22 people from both host partners have accompanied the project for island trips over the year and have been trained in the various techniques used. During the monitoring periods on Ile aux Aigrettes, island staff, tour guides and volunteers of MWF have been shown and in many cases taught population monitoring, reptile capture and handling and disease screening techniques by project staff. In November 2007, the Island Species-Led Action (ISLA) course, was ran by DWCT in conjunction with DICE, University of Kent, the host partners and co-funded by the Human Resources Development Corporation, Ministry of Education and Human Resources. Sixty individuals from both host partners, MWF Rodrigues, the Forestry Service of Mauritius and the ecotourism company of Ciel and Nature Ltd., participated in the ISLA course. The course involved lectures, presentations, discussions and activities in the classroom and in the field (see Annex 3.1).

Output 4. Lessons learned: All activities that have been conducted during the second year lead to this output. Unexpectedly, the lessons learnt on this project were put to the test, when the host partners had to take action to secure the future existence of the orange-tail skink. Plans to restore and re-establish populations of the orange-tail skink were intended for the protocol of future translocations at the end of this project. However, recent plans and actions to develop Flat Island for tourism have placed the skink at risk of extinction. The herpetological/ecological expertise and confidence attained by the host partners as a result of this project permitted them to take action rapidly and effectively.

Output 5. Greater awareness: The project remains part of the existing ecotourism and education programmes on Ile aux Aigrettes with tour guides disseminating information about the project, recording skink observations and encouraging visitor participation (see Annex 3.2). Project staff also interact with the visitors on a daily basis, particularly with organised tour groups and visiting national and international school/university groups explaining more about the project and the work involved. Project news and progress have been dispersed to national and international stakeholders every four months through the MWF newsletter, which is available online. Additionally, details about Mauritian conservation and the project are now found on the new DWCT website. In April and May 2007 a story about conservation on Ile aux Aigrettes including the translocation of skinks was released internationally by Reuters to numerous newspapers in Europe, the Middle East, India, Asia, Australia, Indian Ocean, North America and Africa and many online news organisations (see Annex 3.3). In April 2007 one of the main national newspapers released two articles about the skinks on Ile aux Aigrettes (see Annex 3.4 & 3.5). In November 2007 project staff were filmed working on and talking about the project for a national TV programme by the Mauritius Broadcasting Corporation, which will be aired later in 2008. In March 2008 a field guide to the reptiles and amphibians of Mauritius was completed (currently in print) to raise awareness about the herpetofauna of the country and its offshore islands. Project staff have been involved with numerous school and public educational activities and in December 2007 presented the island reptile poster (see Annex 3 of report *15-038 AR1*) at the two day National Science Festival at the Rajiv Gandhi Science Centre, where project staff talked to the public about Mauritian reptiles and the project. In January 2008 project staff assisted in a sensitisation workshop for the NCG to inform high ranking officers of the sensitivity, biological importance and threats facing the island biodiversity to encourage effective policing of the use and abuse of Mauritian lagoons, coastline and islands (see Annex 3.6 for copy of the project related presentation). In January 2008 this project also started collaborating with a Rare Pride Campaign to address the misuse of the southeast islands and raise awareness of the unique biodiversity amongst the 150,000 inhabitants in the adjacent coastal area, including local tour operators and fishermen that use the islands. This project will play a major role in the Rare Pride Campaign given its involvement with the southeast islands and as such the flagship species chosen by the Campaign is an endemic reptile. In March 2008 the Rare Pride Campaign conducted a questionnaire survey amongst the inhabitants of the region about the islands, their use, the laws and their biodiversity. A section within the questionnaire asked residents of their knowledge about this project and the conservation of reptiles on the islands. The results from the survey will be used as a baseline, from which the Rare Pride Campaign with the assistance from this project intend to improve awareness where it is poor.

3.2 Progress towards Project Outputs

Output 1. Reptile establishment: Completion of planned and additional reptile translocations in the second year, following those conducted in the first year represents major steps towards achieving reptile establishment on islands. With monitoring activities demonstrating survival and recruitment within the skink populations it appears highly probable that establishment will be achieved. However, invasive alien species are a constant threat to the outcome of this project, as shown with the release of mammalian predators on Ilot Chat and the decimation of a healthy and flourishing, translocated, night gecko community. The removal of rats has been achieved and issues involving the risks of invasive species and their spread were disseminated to the NCG during January's workshop and will be included within the Rare Pride Campaign's public awareness programme to protect the southeastern islands.

Outputs 2. Translocation impact: Monitoring is producing sufficient data to assess changes in resident vertebrate and invertebrate populations (see Annex 3.7). Dietary selection and habitat choice are used to determine the role of the translocated reptiles in causing changes in resident populations against normal environmental variation. The collection and analyses of these data are crucial for an impact assessment, but cannot be fully realised until at least two years of post-translocation data have been obtained and therefore will be achieved by the end of the project. An important assumption not originally included, but now evident is the increasing severity of weather systems that hinder access to islands and affect data collection. It has therefore been requested and accepted that two not three island trips occur in each year so that the project can remain flexible to changing and uncontrollable circumstances.

Output 3. Monitoring continued by host partners: The ISLA course and additional training activities conducted over the past year have allowed non-project related staff to gain background knowledge of techniques used. See Annex 3.1 for effectiveness of the ISLA course. A greater understanding of project procedures allows individuals to be involved and support continued monitoring. The long term trainees are now proficient in conducting island reptile surveys, data collection, sample analyses and are teaching the techniques to others. An unavoidable high turnover of staff from NPCS over the past year has meant that whilst many individuals receive basic training there has been little consistency to reinforce skills. This has recently been resolved and a new NPCS staff member has been assigned to all project field trips to be accompanied by staff members with previous training. Training will therefore continue through the next year to ensure that the output is achieved for both host partner organisations.

Output 4. Lessons learned: The activities which lead to outputs 1-3 represent progress toward output 4, already indicated by the fact that the host partners were effective and pro-active in addressing threats to the survival of the orange-tail skink. Future protocols for reptile monitoring and translocations by the host partners within Mauritius will be achieved by year 3.

Output 5. Greater awareness: This output continues to be achieved by the ongoing activities to increase awareness about reptile diversity and its importance to the unique Mauritian ecosystem. During educational visits the reptile project, particularly the posters, generates a huge amount of interest. At one of the 39 schools visited so far it was found that pupils were conducting a project on the reptiles of Round Island after reading about the project and receiving a reptile poster. Twenty of these schools have since visited Ile aux Aigrettes to learn more about the conservation work on the island. Ecotourism and education activities on Ile aux Aigrettes continue to be a huge promoter of this project and for enhancing biodiversity awareness. Collaboration with the Rare Pride Campaign is expected to have a great impact in achieving output 5.

3.3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
4C	Number of Mauritian/UK postgraduate students to receive training	1/1	1/1			4
4D	Number of training weeks for Mauritian/UK students	4/10	4/1			19
5	The number of Mauritians to receive at least one year of training	4	2			4

6A	The number of individuals to receive training on the ISLA course		60			60
6B	Number of training weeks on ISLA course		2			2
	Number of Mauritians/International staff and volunteers to receive training from one week to one month in project field techniques	13/5	27/12			57
8	Number of weeks to be spent by UK project staff on project work in the host country	40	47			87
9	Number of species management/action plans produced for MWF and NPCS		1			1
11B	Number of papers to be submitted to peer reviewed journals					
14A	Number of seminars/workshops given to present or disseminate information or findings on the project	2/1	3			6
14B	Number of seminars/workshops attended to present or disseminate information or findings on the project		4			4
15A	Number of national press releases in host country	3	2			5
	Number of international press releases		1			1
16A	Number of newsletters/books to be produced	2	3/1			6
	Estimated circulation of each newsletter to individuals, international organisations and national stakeholders	300	2000			
	Average monthly Internet hits on MWF/DWCT website detailing the project and access to newsletter	2000	20000 / 50000			
	Number of poster campaigns within host country	2				2
18A	Number of national TV programmes or features within Mauritius	2				2
19A	Number of national radio interviews or features within Mauritius	2				2
20	Estimated value of physical assets handed over to host partners					

Table 2 Publications

Type	Detail	Publishers	Available from	Cost £
Annual report to stakeholders (Annex 3.7)	Restoring island biodiversity, the reintroduction of endemic Mauritian reptile communities: A Darwin Initiative project. 2006/07 Progress Report. Cole, N., Jones, C., Buckland, S., Mootoocurpen, R.,	MWF, Vacoas	MWF, Grannum Road, Vacoas, Mauritius email: executive@mauritian-wildlife.org	

	Tatayah, V., Bachraz, V., Nundloul, V., Seewajee, P. 2007.			
Action plan for orange-tail skink translocation (Annex 3.8)	Translocation of the orange-tail skink: An addition to the Darwin Initiative project. Cole, N. 2007	MWF, Vacoas	As above	
Book**	A Field Guide to the Reptiles and Amphibians of Mauritius. Cole, N. 2008 <i>In print</i>	MWF, Vacoas	As above	£1094
Newsletter MWF No.7 - April 2007 (Annex 3.9)	Helicopters, Jeeps. Boats, Cyclones & Skinks, Cole, N., 2007	MWF, Vacoas	MWF, Grannum Road, Vacoas, Mauritius http://www.mauritian-wildlife.org/newsletters.php	
Newsletter MWF No.8 - August 2007 (Annex 3.10)	One year into the Darwin Reptile Translocation Project, Cole, N., 2007	MWF, Vacoas	As above	
Newsletter MWF No.9 - December 2007 (Annex 3.11)	Searching for the Lighthouse Skinks, Cole, N., 2007	MWF, Vacoas	As above	
** A hard copy will be sent once printed.				

3.4 Progress towards the project purpose and outcomes

Ongoing monitoring activities continue to demonstrate that all translocated skink populations are surviving and reproducing. Initial impacts upon the islands' ecosystems are positive with evidence of endemic and native seed dispersal and declines in persistent introduced vertebrates. These findings and additional translocations represent major steps towards the re-establishment of sustainable reptile populations for future species survival and the restoration of island ecosystems. The night gecko community on Ilot Chat was included in the above statements until the arrival of rats between October and December 2007. The loss of this system demonstrates the vulnerability of biodiversity in the region and is a disappointment for the project staff, but much as been learnt from which progress can be made. Indicators remain adequate in measuring project outcomes and the assumption of continued support by host partners still holds true and strong.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

It is too early to determine the full positive impact upon biodiversity made through the actions conducted within this project. Nevertheless, the continued success of three out of five translocations and a sixth translocation to date contributes greatly in securing the future survival of vulnerable reptile species in one of the world's leading global biodiversity hotspots. The reptile translocations are also increasing the profile of the offshore islands for the preparation of new management plans for conservation and management of the offshore islands by the Mauritian government. Furthermore, the level of involvement within the host country will ensure benefits to Mauritian biodiversity.

4. Monitoring, evaluation and lessons

Monitoring and evaluation of the project to achieve the outputs in line with the project purpose are covered in sections 3.1-3.4. Progress on this project through the second year continues to be a learning process. The arrival of rats on Ilot Chat has destroyed the night gecko community, but has allowed project staff to witness the impact of introduced predators and be taught techniques by the project manager to detect and eradicate in an effective and environmentally safe manner, and to conduct post eradication monitoring. We have also demonstrated that the translocation of two night gecko species to the same island is a suitable management strategy for these geckos and what we have learnt from this system will guide the protocol for further translocations.

5. Actions taken in response to previous reviews (not applicable)

6. Other comments on progress not covered elsewhere

The accidental or purposeful introduction of invasive alien species to the surrounding Mauritian islands remains the greatest threat to the success of this project and the conservation of the regions unique biodiversity? Staff from this project have been strongly involved in government workshops (National Invasive Alien Species Strategy Workshop 2007, Management Plans for Conservation & Management of Offshore Islets Republic of Mauritius 2008, NCG Island Sensitisation Workshop 2008, Rare Pride Campaign Workshop 2008) and associated meetings addressing the threats posed by invasive alien species and the misuse and abuse of the islands. This has also culminated in international and national press releases about invasive alien species in Mauritius. Unfortunately, editors removed the affiliation of interviewees to the Darwin Initiative, which also occurred in many papers in the last international press release, despite repeated requests during the interviews. These press releases have therefore not been included in the Project Standard Output Measures, because they do not mention the Darwin Initiative, but occurred as a direct result of the Darwin Initiative's presence in Mauritius and have been included in Annex 3.12 & 3.13. Seminars about the project and project progress have been presented in the UK at the University of Bristol, University of Plymouth and at the DWCT (see Annex 3.14 for presentation).

7. Sustainability

The profile of the project remains high within the country and efforts to promote the work are detailed in sections 3.1, 3.2, 6 and 8. Non project partners, such as Ciel and Nature Ltd., the Forestry Service and members of the MWF section from the neighbouring island, Rodrigues, were included within the ISLA course and continue to show an interest in the project. The Mauritian branch of HSBC, potential financial contributors for Mauritian conservation projects, have also shown interest by sending one of their representatives to learn more about the project over a two week period in the field. This project is part of the long-term strategy of MWF and NPCS to restore islands and their biota. The Ministry of Agro-Industry and Fisheries has granted government support and commitment for the restoration of reptile communities to ensure that this project and future protocols have the continued input of both host partners in achieving the impact and legacy.

8. Dissemination

One of the main dissemination activities in the last year has been the ISLA course, which was directed towards non-project staff of host organisations and associated stakeholders (see Annex 3.1). Project details were disseminated to more than 11,000 visitors to Ile aux Aigrettes last year by the tour guides and talks given by project staff. The posters at the visitors centre on Ile aux Aigrettes and the notice board on the tour route give additional information for visitors (see Annex 3 of report *15-038 AR1*), which are now encouraged to help the guides record skink sightings along the tour route (see Annex 3.2). Two project related newspaper articles were released in the leading National Mauritian newspaper, *l'Express* (see Annex 3.4 & 3.5). The annual progress report (see Annex 3.7) was distributed to host partners and stakeholders in May/June 2007. Three newsletters (see Table 2; Annex 3.9 - 3.11) summarising progress on the project over the past year were distributed to approximately 2000 individuals, organisations, companies and stakeholders half of which are within Mauritius. Collaboration with the Rare Pride Campaign will be of great assistance in disseminating information regarding the project and related biodiversity issues to an estimated 150,000 Mauritians in the southeast, with further spill over effects forecasted. The creation of the first field guide to the reptiles and amphibians of Mauritius (currently in print) and its distribution by the MWF throughout Mauritius will disseminate information about the endemic, native and introduced herpetofauna of the region. The MWF and NPCS are already conducting education and public awareness programmes, by visiting schools and receiving groups in the field where details about this project are disseminated and copies of the island reptile poster are displayed or handed out. In line with Article 13 of the CBD the MWF and NPCS have an agreement to conduct activities for the promotion of biodiversity-related issues within Mauritius, such that dissemination will continue after the end of this project.

9. Project Expenditure

Table 3 Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

Item	Budget	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Salaries :			
Dr C. Jones			
Dr N Cole			
Dr A Greenwood			
V. Tatayah			
TOTAL			

10. **OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#)

The Indian Ocean island of Mauritius typifies the problems facing biodiversity on a global scale. Extensive habitat destruction and the introduction of alien species have caused numerous extinction events, most notably the dodo. These disturbances have also caused the loss of more than 60% of the endemic Mauritian reptile species from the main island and continue to threaten and impact upon the last remaining populations on the offshore islands.

As a direct result of this Darwin Initiative project Mauritians are reversing the decline of endangered reptile species. For the first time in more than 150 years the large and gregarious Telfair's skink, *Leiolopisma telfairii* has successfully reproduced in the wild outside of Round Island. At 219 ha and one of the few locations in the Mascarenes to have remained free of invading rats, Round Island represented the last location on Earth to support the Telfair's skink. With many of the Mauritian islands now cleared of rats this project has made it possible to conduct the first lizard translocations in the Indian Ocean. The translocations have included the movement of Telfair's skinks back to where they once occurred and within a year of this activity a new generation of skinks is emerging.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2007/08

Project summary	Measurable Indicators	Progress and Achievements April 2007 - March 2008	Actions required/planned for next period
<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 constrained in resources to achieve</p> <p>The conservation of biological diversity, The sustainable use of its components, and The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</p>		<p>Positive impacts upon island ecosystems have been detected as a result of the reptile translocations. Recruitment is evident within the translocated populations such that sustainable reptile re-establishment is highly probable.</p> <p><i>Additional translocation of the orange-tail skink has been undertaken to safeguard against imminent extinction risk.</i></p>	<p>(do not fill not applicable)</p> <p><i>NB Additions to the project are highlighted in red</i></p>
<p>Purpose The re-establishment of sustainable reptile communities in Mauritius to secure future reptile populations and restore functional island ecosystems.</p>	<p>Establishment of translocated reptile populations by yr 3. Evidence of benefits to recipient island ecosystems by yr 3. Effective management protocols for long term sustainability of biodiversity by yr 3.</p>	<p>Ongoing monitoring continues to facilitate confirmation of sustainability and positive impact upon island ecosystems. Training in the field, participation on specific training days and DWCT's ISLA course and continual interest and support within the host country greatly supports the project purpose and leaving a lasting legacy.</p>	<p>Progress report completed for the end of the project year. Monitoring of island ecosystems by host and UK partners will continue into the next period. Publicity in creating greater awareness of biodiversity issues will continue. A protocol for future reptile translocation agreed upon by all partners.</p>
<p>Output 1. The establishment of: Telfair's skinks on Gunners Quoin and Ile aux Aigrettes; Bojer's skinks on Ile aux Fouquets; night geckos on Ilot Chat; <i>Orange-tail skinks on Gunners Quoin</i></p>	<p>Survival and growth of individuals from translocated populations by yr1 and yr2. Evidence for recruitment of juvenile reptiles into the founder population by yr3. Trained individuals capable of conducting surveys alone by yr3.</p>	<p>All skink populations appear healthy and are surviving despite a severe drought in the region. There is evidence of recruitment for the Ile aux Aigrettes' and Ile aux Fouquets' skink populations. The introduction of rats to Ilot Chat has had a severe impact upon the survival of the established night gecko populations. Trained individuals are already conducting short island surveys alone. Such findings demonstrate the appropriateness of these measurable indicators in determining whether Output 1 will be achieved.</p>	
<p>Activity 1.1. The translocation of reptiles</p>		<p>The 2nd cohort of Bojer's skinks were successfully translocated to Ile aux Fouquets, the 3rd cohort will occur in the next period. <i>Orange-tail skinks were successfully translocated to Gunners Quoin.</i> These activities represent a major step in achieving Output 1.</p>	

Activity 1.2. Monitoring of reptile populations in donor and translocated populations.		Ongoing monitoring is progressing and indicates that skink populations are fit and healthy. However, monitoring has detected introductions of predatory alien species to Ilot Chat, which have been successfully removed, but have had severe impacts upon the established night gecko populations. These findings are encouraging for success in achieving Output 1 for the skinks, but as of yet not the night geckos. Monitoring will continue throughout the next period.
Output 2. Impact assessment of translocations.	Changes in populations of resident native and non-native vertebrates by yrs2-3. Evidence of seasonal impact upon island ecosystem by yrs2-3.	Post translocation impact assessments continue and demonstrate that Telfair's skinks are reducing the populations of non-native species and are dispersing seeds on recipient islands. These observations demonstrate that the indicators are appropriate for detecting changes and potential impact caused by the translocations.
Activity 2.1. Monitoring the impact of translocated populations on native and non-native species.		This is an ongoing activity and will continue throughout the next period. The activity is detecting changes in the native and non-native species. Such monitoring is essential for assessing the impact of translocated populations against natural variation/seasonal trends within each island ecosystem and is integral to achieving Output 2.
Output 3. Continued monitoring of established populations by host partners.	Individuals from both host partners trained by yr 2 to conduct reptile surveys.	Host partners are now capable of conducting reptile surveys after initial direction by the UK partner. There has been a high turn-over of NPCS staff, such that training remains at a high level within certain aspects of the work. Working together the host partners already demonstrate the ability to conduct the surveys and return with reliable data.
Activity 3.1. Continual training of individuals from host organisations in the methods used.		Training is ongoing. The project staff now demonstrate and teach colleagues, students and volunteers in the necessary techniques. The involvement of non-project staff is strongly encouraged. The ISLA course was held in Mauritius where all project staff participated and assisted by teaching field techniques. These activities will continue into the next period to ensure that Output 3 is achieved.
Output 4. Lessons learned and protocols disseminated for further reptile translocations.	Future procedures agreed upon with host organisations. Progress and management plan produced and distributed before the end of yr3.	This is an ongoing process and cannot be fully comprehended until near completion of the project. Discussions for future reptile re-establishment has already culminated in the recent additional translocation of orange-tail skinks. This is a good indicator that host partners will act upon an agreed future management plan/protocol.
Activity 4.1. See Activities 1.1, 1.2, 2.1 and 3.1		Ongoing progress on each of the activities, 1.1 to 3.1, is paramount to achieving Output 4 and will continue throughout the next period.

Output 5. Greater awareness of the unique Mauritian biodiversity.	Incorporation of the project within the ecotours and education by yr1. News broadcasts and newspaper articles by yr1-2. Scientific journal papers prepared by yr3.	Progress continues in disseminating information about the project and related biodiversity issues. Awareness is evident from feedback from courses and general public demonstrating the appropriateness of the indicator.
Activity 5.1. Publicity		The project is part of the existing ecotourism and education programmes on Ile aux Aigrettes. Newsletters, newspaper articles and television broadcasts have been released both nationally and internationally. A field guide to the amphibians and reptiles of Mauritius is currently in print, which will contribute toward achieving output 5. Publicity will continue into the next period.

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve 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>			
<p>Purpose</p> <p>The re-establishment of sustainable reptile communities in Mauritius to secure future reptile populations and restore functional island ecosystems.</p>	<p>Establishment of translocated reptile populations by yr 3. Evidence of benefits to recipient island ecosystems by yr 3. Effective management protocols for long term sustainability of biodiversity by yr 3.</p>	<p>Field survey reports and publications from all partners. Report of recommendations and working plan for future translocations.</p>	<p>The continued support of both host partners. Government continues to subsidise transport for island trips and stewardship of the islands remains in the hands of the Mauritian Wildlife Foundation.</p>
<p>Outputs</p> <p>1. The establishment of: Telfair's skinks on Gunners Quoin and Ile aux Aigrettes; Bojer's skinks on Ile aux Fouquet; night geckos on Ilot Chat.</p>	<p>Survival and growth of individuals from translocated populations by yr1 and yr2. Evidence for recruitment of juvenile reptiles into the founder population by yr3. Trained individuals capable of conducting surveys alone by yr3.</p>	<p>Report of collated data from seasonal field survey reports on each recipient island.</p>	<p>Unforeseen anthropogenic-related and stochastic events, such as intentional release of mammalian predators, arson or lightning fire; oceanic surges and high-class cyclones do not hinder establishment success.</p>

2. Impact assessment of translocations.	Changes in populations of resident native and non-native vertebrates by yrs2-3. Evidence of seasonal impact upon island ecosystem by yrs2-3.	Report on resident vertebrate population changes. Report on dietary analysis and seasonal shifts.	
3. Continued monitoring of established populations by host partners.	Individuals from both host partners trained by yr 2 to conduct reptile surveys.	Surveys conducted and field reports received.	Trained individuals continue to assess reptile populations and disseminate their knowledge to colleagues.
4. Lessons learned and protocols disseminated for further reptile translocations.	Future procedures agreed upon with host organisations. Progress and management plan produced and distributed before the end of yr3.	Records of meetings, feedback on report of progress and management plan. Copies sent to Darwin Initiative.	N/A
5. Greater awareness of the unique Mauritian biodiversity.	Incorporation of the project within the ecotours and education by yr1. News broadcasts and newspaper articles by yr1-2. Scientific journal papers prepared by yr3.	Copies of posters, pamphlets, articles and publications sent to Darwin Initiative.	Ecotours continue to run on Ile aux Aigrettes and that broadcasts and articles are high profile.
Activities	Activity Milestones		Assumptions
The translocation of reptiles.	Oct 06: Collection, health screening and pit tagging of larger reptiles completed and release onto recipient islands underway.		Continued logistical support from host partners and National Coast Guard.
Monitoring of reptile populations in donor and translocated populations.	Nov 06/07/08; Mar 07/08/09; July 07/08: Seasonal monitoring of all translocated populations, distribution, fitness, health, recruitment, mortality and comparisons of niche utilisation with donor populations.		
Monitoring the impact of translocated populations on native and non-native species.	Sept 06: Baseline population estimates collected on resident terrestrial vertebrates and repeated seasonally: Nov 06/07; Mar 07/08; July 07/08. Seasonal dietary analyses of translocated reptiles to determine the impact on recipient islands.		
Continual training of individuals from host organisations in the methods used.	Protocols of monitoring procedures agreed upon by July 06. Training at Jersey in 2006/2007. All seasonal monitoring trips accompanied by at least one individual from each organisation, such that training may be conducted in the field		Trained individuals are interested, enjoy the work and remain within host organisation.
Publicity.	High publicity release of Telfair's skinks on Ile aux Aigrettes in Oct 06 inviting government representatives. Posters disseminated to schools by the end of yr1 and newspaper articles released at the end of each year.		Public, tourist and government interest is sustained.

Annex 3 onwards – supplementary material (optional)

See attached Annex 3 folder on CD supplied

Checklist for submission

	Check
Is the report less than 5MB? If so, please email to Darwin-Projects@ectf-ed.org.uk putting the project number in the Subject line.	
Is your report more than 5MB? If so, please advise Darwin-Projects@ectf-ed.org.uk that the report will be send by post on CD, putting the project number in the Subject line.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	
Have you completed the Project Expenditure table?	Yes
Do not include claim forms or communications for Defra with this report.	