

## ISLA 2007

Timetable- Monday 12th- Wednesday 21st November 2007

### Module 1 Understanding species decline

Monday 12th November

What's so special about islands?

## Mauritius



Time	Topic	Objectives	Format	Facilitator(s)	Location - MWF Office (Grannum Rd, Vacoas)
08:30	Welcome	Official opening of the course...	Talk		
08:45	Course introduction	To outline course format explaining main aims and highlighting mix of skills and understanding- key focus on developing cross-institutional understanding and developing critical thinking skills	Talk	JC	
09:00	Hopes and expectations	To identify individual aims for the course and highlight areas for potential adaptation to meet expectations. To provide an opportunity for participants to introduce themselves and outline their main activities	Activity	JC	
09:30	Building bridges in conservation	To highlight the importance of collaboration, teamwork and communication particularly in island species conservation in which conservationists are isolated	Team-building activity	JC	
10:00	Presenting the conservation organizations (MWF, NPCS, Forestry Service)		10 MIN POWER POINT PRESENTATIONS	TBA	
<b>10:30 BREAK</b>					
11:00	Why are we here? The importance of island biodiversity	To provide an overview of the importance of islands in terms of the uniqueness of their biodiversity and the contribution that studies on islands have made to our understanding of evolution and the impact of habitat size and isolation on species abundance. To introduce the value of islands as living laboratories on which we can clearly see the impact of human activity on species loss and the power we have to turn species around	Lecture	CJ	
11:45	Evolution on islands- a dynamic system	To outline the features of islands that determine their suitability for colonisation (e.g. island topography, size, climate, area, isolation). To introduce the concept of the dynamic nature of speciation on islands and the processes that may drive evolution and extinction	Lecture	JG	
<b>12:30 LUNCH</b>					
13:30	What's so special about the Mascarenes?	To highlight the importance of the Mascarenes to global biodiversity in terms of its unique species and associated habitats. To emphasise the contribution that endangered species management and recovery on the Mascarenes has made to our understanding of biodiversity conservation and the importance of the organisations involved in this process	Lecture	VT	
14:30	Conservation issues in the Mascarenes	To provide an opportunity for participants to reflect on the issues they have to deal with and the problems they face in achieving conservation success. Information generated during this session will be referred back to during the course	Small group discussion	JC/JG to facilitate	
<b>15:30 BREAK</b>					
15:45	Conservation issues in the Mascarenes...continued	To provide an opportunity for participants to present their thoughts on the issues they have to deal with and identify commonalities between the groups	Group presentations/ whole group seminar	JC/JG to facilitate	
16:30	Evening showing of DVD on Durrell Wildlife "The Ark in Action"				"Ark on the Move" relating to Round Island & GD
<b>17:00 END</b>					
	Evening reading- Focal species information for tomorrow's activity				

Tuesday 13th November

What's happening to island biodiversity?

Time	Topic	Objectives	Format	Facilitator(s)	Location - MWF Office (Grannum Rd, Vacoas)
08:30	Patterns of extinction- islands stand out again?	To explore the extent of extinctions on islands in both current and prehistoric times and consider the main agents of destruction with a particular focus on introduced species	Lecture	JC	
09:15	Does species loss really matter to the Mascarenes?	This session provides an opportunity to consider the fundamental question, should we (in conservation, in society) really be concerned about species loss within the Mascarenes? Would further decline impact on human life on the islands or is species conservation only of interest to those doing it?	Small group discussions/feedback	VT	
10:30	<b>BREAK</b>				
11:00	Diagnosing threat- what is the problem?	What is/are the main factor(s) causing population decline and how might they impact on the species? This questions forms the basis for the session which introduces problem-solving tools (causal-flow diagramming/ brainstorming) and their role in applying objective processes to our analysis of the threats facing a species.	Lecturette	JC	
11:30	Over to you- what's the main threat?	Practical activity applying the tools introduced in the previous session. Participants will be encouraged to think laterally about how multiple threats may impact on a species. They will begin to construct causal flow diagrams depicting these linkages of cause and effect leading to population decline and predict the impact of particular management/research actions based on this analysis	Small group activity	JC/VT to facilitate	
12:30	<b>LUNCH</b>				
13:30	Over to you- what's the main threat? Continued...	Continuation of small group activity followed by presentation and feedback	Small group activity/ feedback/ whole group discussion	JC/VT to facilitate	
15:00	<b>BREAK</b>				
15:30	Understanding species decline- building ecological histories	To consider the role of ecological histories in painting a picture of "pristine" conditions and identifying likely historic causes of both ecosystem change and individual population decline, particularly for species not yet in a critical state. This will lead on to a general discussion about goal-setting- do we want to restore systems to the way they were 10, 20, 50, 100, 1000+ years ago?	Lecture	CJ	
16:30	<b>END</b>				

## Module 2 Managing endangered species recovery

Wednesday 14th November

### Practical field skills in endangered species recovery

Time	Topic	Objectives	Format	Facilitator(s)	Location
08:30	An introduction to the day	To outline the skills and experiences that will be provided during the day	Short talk	JC	Offsite- PETRIN ,MARE LONGUE, BRISE FER
08:45	Guided tour of field camp	For the benefit of those participants who have not experienced fieldwork in the camp this tour will provide an overview of the history of the site (why was it chosen? How has it changed?) and the main work being conducted currently.	Guided Tour	Kelly Edmunds/ Anna Reuleaux/ Jason Malham	
09:15	<b>BREAK</b>				
09:45	PARALLEL ACTIVITIES: 1) Setting traps- the right and wrong way 2) What makes a good nest site?- choosing and positioning echo boxes	1) Setting traps practical- This session will be used to provide training in the most effective way of positioning and setting mongoose/cat traps and potential problems with the methodologies used 2) What makes a good nest site?- This session is designed to train staff in identifying the most suitable locations for echo nest boxes and to provide an explanation for the current design of the boxes used- could they be improved?	Practicals	Kelly Edmunds/ AnnaReuleaux/ Jason Malham	
11:00	PARALLEL ACTIVITIES: 1) Setting traps- the right and wrong way 2) What makes a good nest site?- choosing and positioning echo boxes	1) Setting traps practical- This session will be used to provide training in the most effective way of positioning and setting mongoose/cat traps and potential problems with the methodologies used 2) What makes a good nest site?- This session is designed to train staff in identifying the most suitable locations for echo nest boxes and to provide an explanation for the current design of the boxes used- could they be improved?	Practicals	Kelly Edmunds/ AnnaReuleaux/ Jason Malham	
12:30	<b>LUNCH</b>				
13:30	PARALLEL ACTIVITIES: 1) Phenology Practical 2) Supplementary feeding- risks and benefits	1) Phenology practical-an introduction to native plant identification and monitoring, with a discussion on the importance of phenology monitoring for integrated species conservation 2) Supplementary feeding practical- beginning with an introductory talk on some of evolution of the supplementary feeding programme participants will be encouraged to discuss whether or not we should be continuing with the programme and the pros of cons of the choice we make	Practicals	Kelly Edmunds/Amruta Rane/ Jean Claude Sevathian/ Jason Malham	
15:00	<b>BREAK</b>				
15:30	PARALLEL ACTIVITIES: 1) Phenology Practical 2) Supplementary feeding- risks and benefits	1) Phenology practical-an introduction to native plant identification and monitoring, with a discussion on the importance of phenology monitoring for integrated species conservation 2) Supplementary feeding practical- beginning with an introductory talk on some of evolution of the supplementary feeding programme participants will be encouraged to discuss whether or not we should be continuing with the programme and the pros of cons of the choice we make	Practicals	Kelly Edmunds/Amruta Rane/ Jean Claude Sevathian/ Jason Malham	
<b>END</b>					

Thursday 15th November

*The theory & practice of endangered species recovery*

Time	Topic	Objectives	Format	Facilitator(s)	Location - MWF Office (Grannum Rd, Vacoas)
08:30	Small populations- what's going on on the inside?	To introduce participants to the fundamentals of small population biology highlighting the impacts of genetic drift and loss of genetic material on the survival of threatened species. This session will demonstrate the importance of increasing population size rapidly. Through a practical computer activity participants will begin to appreciate the consequences of not acting to save a species that has been reduced to low numbers	Lecture/ Practical	JG	
09:45	From theory to practice- the importance of small population dynamics for conservation managers	To demonstrate the application of small population theory to the practice of species conservation on islands. This session will highlight through case studies from the Mascarenes and beyond the importance of incorporating population size information into management decisions. The concepts of "effective population size" and minimum viable populations" will be discussed	Lecture/ whole group discussion	JG	
10:30	<b>BREAK</b>				
11:00	Intensive species management- lessons from the Mascarenes and beyond	To provide an overview of some of the species-centred techniques that have been employed to recover critically endangered species from the edge of extinction. This talk will critically review a range of case studies with particular reference to the pioneering work carried out to restore Mascarene species- what lessons have we learnt?	Lecture	CJ	
11:45	Back to your species- what could you do to turn it around?	Following a brief lecture on priority-setting tools participants will revisit the species they investigated during the causal flow diagramming. Following brainstorming as to the range of hands-on management interventions they could take groups will set priority actions to increase productivity or reduce mortality. Participants will be expected to identify the potential risks associated with each course of action identified and begin to consider how these risks could be minimised. Pros/cons fixes will be used to help them in determining most suitable management action to take	Lecturette/ small group activity	JC/ VT to facilitate	
12:30	<b>LUNCH</b>				
13:30	Back to your species- what could you do to turn it around? Continued....	Continuation of group work followed by feedback and questions in a whole group seminar	Small group activity/ Feedback & discussion	JC/ VT to facilitate	
15:00	<b>BREAK</b>				
15:30	Captive breeding for reintroduction- ingredients for success?	With reference to case studies from around the world this session will consider the strengths and weaknesses of captive breeding as a conservation tool recognising that for some species it may be the only option in the short-term. More detailed analysis of the programmes to reintroduce or support critically endangered birds on Mauritius will be used to identify important steps in the process to maximise the chance of success. How far are we willing to take reintroduction? Are we ready to take species out of their range for conservation purposes?	Lecture/ whole group discussion	CJ	
16:30	<b>END</b>				
	Tentative: Field Practical: Mauritius Fruit Bat Conservation			CJ/MWF Rodrigues Staff	

### Module 3 Restoring island systems

Friday 16th November

#### The theory & practice of island system restoration

Time	Topic	Objectives	Format	Facilitator(s)	Location - MWF Office (Grannum Rd, Vacoas)
08:30	How well are we managing introduced species and minimising the risk of future establishment?	To critique current systems in place in the Mascarenes to control/eradicate invasive alien species and identify areas for improvement	Lecture	Resource Person from NPCS	
09:15	Should animal welfare figure in our control programmes?	To consider the welfare issues surrounding the methods employed to control introduced species. Should we have concern for the animals welfare and do we meet these concerns? Should we deal with non-targets in the same way?	Discussion	Grace Maglio	
10:30	<b>BREAK</b>				
11:00	Eradicating invasives on Round Island- a historical perspective	To provide a concise history of the invasive alien species control and eradication programme on Round Island highlighting some of the mistakes made and lessons learnt along the way. If we had another Round Island to work on, would we do things any differently?	Lecture	Ashok Khadun/ Round Island Warden	
11:45	Plant gene bank- current efforts to preserve Mascarene floral diversity	To outline the project being run by NPCS in collaboration with Kew to create a seed bank of Mascarene species. The talk will also summarise the objectives of the plant nursery that has been set up in Curepipe and its contribution to conserving plant communities in the Mascarenes	Lecture	Resource Person from NPCS	
12:30	<b>LUNCH</b>				
13:30	Restoring reptile communities- the Darwin project that's paying for this course!	To provide an overview of the Darwin reptile project and how it fits within a history of reptile work on the Mascarenes	Lecture	Nik Cole	
14:15	Institutional strengths and weaknesses in long-term management	To provide an arena in which participants from respective organisations can reflect on their own strengths and weaknesses as long-term site managers. How well -placed are we to manage sites long-term as individual organisations?	Small group activity- brainstorming	JC/VT to facilitate	
15:00	<b>BREAK</b>				
15:30	Active introductions of alien species- the use of analogues	To consider the potential role that analogue species can play in restoring ecosystem functions to islands using the giant tortoises on Round Island as a case in point. How widely used have analogues been in the world? Should we be considering other alien species for introduction? What are the characteristics of an ideal analogue?	Lecture/ discussion	CJ to lead	
16:30	<b>END</b>				

**Monday 19th November****Practical field skills in island restoration**

<b>Time</b>	<b>Topic</b>	<b>Objectives</b>	<b>Format</b>	<b>Facilitator(s)</b>	<b>Location</b>
08:30	The history of Ile aux Aigrettes	To provide an introduction to the island it's origins, historic relationship with people and current status as a conservation and tourist site. What are the current projects running and what does the future hold for the island?	Field tour	TBA	Ile aux Aigrettes
09:30	PARALLEL ACTIVITIES: 1) Mauritius fody/pink pigeon fieldwork 2) Plant propagation & care 3) Reintroduced reptile monitoring	1) Mauritius fody/pink pigeon practical- this activity will involve participants having the opportunity to learn how to handle, take biometrics and observe how to ring pink pigeon or Mauritius fody chicks and complete the associated data sheets 2) Plant propagation and care practical- this activity will begin with an introductory talk on the plant nursery (propagation and quarantine for plants for transport to Round Island) followed by a short practical on plant propagation and care of plants out on the island. The point to make is that plants should receive the same level of post-release care as our animals 3) Assessing the impact of reptile reintroductions -what do they eat, where do they go, what do they do	Practicals	1) Kelly Edmunds/Lucy Garrett/Ruth Cole 2) Martine Goder 3) Nik Cole and colleagues	
<b>10:30</b>	<b>BREAK</b>				
11:00	PARALLEL ACTIVITIES: 1) Mauritius fody/pink pigeon fieldwork 2) Plant propagation & care 3) Reintroduced reptile monitoring	1) Mauritius fody/pink pigeon practical- this activity will involve participants having the opportunity to learn how to handle, take biometrics and observe how to ring pink pigeon or Mauritius fody chicks and complete the associated data sheets 2) Plant propagation and care practical- this activity will begin with an introductory talk on the plant nursery (propagation and quarantine for plants for transport to Round Island) followed by a short practical on plant propagation and care of plants out on the island. The point to make is that plants should receive the same level of post-release care as our animals 3) Assessing the impact of reptile reintroductions -what do they eat, where do they go, what do they do	Practicals	1) Kelly Edmunds/Lucy Garrett/Ruth Cole 2) Martine Goder 3) Nik Cole and colleagues	
<b>12:30</b>	<b>LUNCH</b>				
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<b>15:00</b>	<b>BREAK</b>				
15:30	Opportunities & threats of eco-tourism	Beginning with a short presentation from the guides on the change in tourist numbers visiting the island and the revenue generation it has created, this session will provide an opportunity for participants to consider other potential benefits and threats that ecotourism could present for the island and conservation in the Mascarenes in general. Should we be promoting eco-tourism as a means of supporting our conservation efforts?	Facilitated discussion	JC/Danny Thisbe	
<b>16:00</b>	<b>END</b>				

## Module 4 Developing conservation collaborations

Tuesday 20th November

### Building understanding and consensus

Time	Topic	Objectives	Format	Facilitator(s)	Location - MWF Office (Grannum Rd, Vacoas)
08:30	Understanding stakeholders- moving from positions to needs	This short lecture will introduce the concepts of positions and needs and highlight the value in moving from one to the other in achieving consensus on what actions should be taken. Moving people from taking positions to expressing needs is a fundamental aspect of managing stakeholder processes. It is relevant in any context where people with diverse points of view are required to reach a joint decision	Lecture	JC	
09:00	Fundamentals of engagement- how good are we at listening?	To demonstrate and develop participants listening skills through active participation in a listening activity	Lecturette/ Small group activity	JC	
10:00	<b>BREAK</b>				
10:30	Appreciating diverse viewpoints- the positive side to invasive species in the Mascarenes	To consider the extent to which invasive alien species are of benefit to the islands and therefore in conflict with biodiversity conservation goals. What are the social, aesthetic, cultural and economic values of alien invasive species in Mauritius? (e.g. guava, deer? others?)	Lecture/discussion	Hans Paupiah	
11:15	Understanding needs- the case of the ugly orange	To demonstrate through an activity the importance of understanding why someone (or an organisation) appears to oppose your own goals and objectives. The emphasis will be on understanding the motivations that underlie opinions expressed and positions adopted.	Facilitated activity	JC/VT	
12:30	<b>LUNCH</b>				
13:30	Understanding institutions- working for....	To provide an opportunity for participants to reflect on their own institutional culture. Why do I work for this organisation and not another? Are there any improvements within the organisation that would make working for it more enjoyable/fulfilling? What does it mean to work for this organisation? What is its raison d'etre?	Small group (institutional) discussion	JC/VT to facilitate	
14:30	Understanding institutions- working for....continued...	Feedback and discussion- recognition of institutional differences and similarities	Feedback/ whole group discussion	JC/VT to facilitate	
15:00	<b>BREAK</b>				
15:45	Building the perfect team - what are the ingredients for success?	To emphasise the importance of teams in conservation and the steps taken to choose and manage these teams effectively for the benefit of species conservation and the habitats on which they depend. This session will conclude with a short discussion on the realities of life in the field camps and how we could improve it	Lecture	CJ / Kelly Edmunds	
16:30	<b>END</b>				

**Wednesday 21st November**

**To the aviaries and beyond- where do we go from here?**

<b>Time</b>	<b>Topic</b>	<b>Objectives</b>	<b>Format</b>	<b>Facilitator(s)</b>	<b>Location</b>
08:30	Guided tour of aviaries	To provide an historical perspective on the evolution of the aviaries to the present day	Guided tour	Freddy Koenig	GDEWS Black River
09:00	PARALLEL ACTIVITIES: 1) Hand-rearing principles & protocols 2) Enrichment for the captive animals 3) Managing reptiles in captivity	1) Hand-rearing principles & protocols- this session will illustrate the practicalities of hand-rearing, taking into account hygiene concerns and chick monitoring 2) Enrichment for the echos- beginning with an overview of the captive echo breeding programme (problems encountered and solutions found) this session will provide the opportunity to learn some of the routine for echo care 3) Head-starting tortoises- an outline of the project and the reasons for it will lead onto a practical in taking biometrics from captive reptiles	Introductory talks/ practicals	1) Amanda Ladkoo/Freddy Koenig 2) Grace Maglio/Freddy Koenig 3) Nik Cole	GDEWS Black River
<b>09:45 BREAK</b>					
10:00	PARALLEL ACTIVITIES: 1) Hand-rearing principles & protocols 2) Enrichment for the captive animals 3) Managing reptiles in captivity	1) Hand-rearing principles & protocols- this session will illustrate the practicalities of hand-rearing, taking into account hygiene concerns and chick monitoring 2) Enrichment for the echos- beginning with an overview of the captive echo breeding programme (problems encountered and solutions found) this session will provide the opportunity to learn some of the routine for echo care 3) Head-starting tortoises- an outline of the project and the reasons for it will lead onto a practical in taking biometrics from captive reptiles	Introductory talks/ practicals	1) Amanda Ladkoo/Freddy Koenig 2) Grace Maglio/Freddy Koenig 3) Nik Cole	GDEWS Black River
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<b>11:30 LUNCH</b>					
12:30	The pink pigeon release	To outline the objectives of the planned release of pink pigeons in the lower gorges	Introductory talk	CJ/Kelly Edmunds	Lower Gorges (pink pigeon release site)
13:00	What message should be conveyed to park visitors?	Following on from the overview of the planned pink pigeon release participants will be given the task of designing ways of conveying a conservation message- what message should it be and how should it be conveyed? (poster, talks, exhibit etc.)?	Practical in small groups	JC/ Kelly Edmunds	Lower Gorges (pink pigeon release site)
<b>13:30 BREAK</b>					
14:00	What message should be conveyed to park visitors?	Presentation of groups awareness-raising schemes	Presentation/ whole group discussion	JC to facilitate	Lower Gorges (pink pigeon release site)
14:45	Final remarks	To summarise the course and thoughts for the future of biodiversity conservation in the Mascarenes	Short talk	CJ/JC	Lower Gorges (pink pigeon release site)
15:00	Course feedback	Is this something that should be run every year? How should we improve it?		JC/VT	
15:30	Certificate Presentations	To present certificates of attendance on the course		Senior MWF/NPCS staff	
<b>16:00 END</b>					

## **Lecturers**

### **Course Directors**

JC = Jamie Copsey (Training Programmes Development, Durrell Wildlife Conservation Trust)

CJ = Carl Jones MBE (International Conservation Fellow, Durrell Wildlife Conservation Trust)

### **Course Development Team**

JG = Dr. Jim Groombridge (Lecturer, Durrell Institute of Conservation & Ecology, University of Kent)

VT =Vikash Tatayah (Conservation Manager, Mauritian Wildlife Foundation)

### **Guest Lecturers**

Kelly Edmunds = Pink Pigeon Coordinator (MWF)

Jason Malham = Echo Parakeet Coordinator (MWF)

Anna Reuleux = Echo Parakeet Team Member (MWF)

Jean Claude Sevathian = Rare Plant Coordinator (MWF)

Amruta Rane = Pink Pigeon Team Member (MWF)

Grace Maglio = GDEWS Manager, Project Support Coordinator (MWF)

Ashok Khadun = Islets Restoration Manager

Nik Cole = Reptile Conservation Manager (Durrell Wildlife / University of Bristol)

Lucy Garette = Mauritian Fody Coordinator (MWF)

Ruth Cole = Olive White-eye Coordinator (MWF)

Martine Goder = Horticulture Coordinator (MWF)

Danny Thisbe = Ecotour Manager (MWF)

Amanda Ladkoo = Hand Rearing Coordinator (MWF)

Freddy Koenig = Projects Manager (MWF)

Christine Griffiths = Phd Student, University of Bristol/ University of Zurich)

Hans Paupiah = Project Manager (UNDP/GEF/FAO/GoM PROJECT)