SUSTAINABLE USE OF PNG'S WILDLIFE

REPORT OF A WORKSHOP



"Protecting biological diversity around the world"
A research programme funded by DEFRA, British Government

Darwin Initiative project 14-003: 'Socio-economics of insect farming in Papua New Guinea', 2005-2008

JAIS ABEN RESORT, MADANG, P.N.G.

20-21 FEBRUARY 2007

Welcome and introduction Tim Bayliss-Smith Cambridge University		Topic	Speaker
10.00 No. Sustainable use of wildlife – global and local issues Tim Bayliss-Smith	09.15-		
10.00 PNG's National Biodiversity Strategy and Action Plan Eric Kwa (UPNG Law)	09.20		(Cambridge University)
10.00-	09.20-	Sustainable use of wildlife – global and local issues	Tim Bayliss-Smith
10.45 Coffee Coffee	10.00		
11.00	10.00-	PNG's National Biodiversity Strategy and Action Plan	Eric Kwa
11.00- Overview of economic incentives for conservation Brendan Moyle (Massey University, NZ) 11.45- Why do we have CITES? Rob Small (Cambridge University) 12.30 Lunch Jane Mogina (UPNG, Biology) 13.45- The PNG Insect trade Queen Alexandra Birdwing Butterfly Florence Jicki (UPNG Bio.) 14.45- Crocodiles Eric Langelet (Mainland Holdings) 15.45- Eaglewood Leo Sonari (WWF) 16.30- Incentive led conservation and the roles of middlemen and government in the wildlife trade Jane Mogina (Jane Mogina, chair) Wednesday 21st February: POLICIES TO ENCOURAGE SUSTAINABLE USE 10.00	10.45		(UPNG Law)
11.45 Why do we have CITES? Rob Small (Cambridge University)	10.45	Coffee	
11.45- Why do we have CITES? Rob Small (Cambridge University)	11.00-	Overview of economic incentives for conservation	Brendan Moyle
12.30	11.45		
12.30 Lunch	11.45-	Why do we have CITES?	Rob Small
13.30- 13.45 Review of biodiversity conservation and trade in PNG Jane Mogina (UPNG, Biology)	12.30		(Cambridge University)
13.45	12.30		
The PNG Insect trade Queen Alexandra Birdwing Butterfly 14.45 Queen Alexandra Birdwing Butterfly 15.45 14.45 16.30 16.30 16.30 Incentive led conservation and the roles of middlemen and government in the wildlife trade 18.00 18.00 19.15 Introduction: the need for sustainable use within the National Biodiversity Strategy 10.00 Role of DEC within the wildlife trade 12.00 What can be done to assist in trade regulation? permitting procedures technology (databases, websites, etc) 12.30 Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. Tea Rob Small (Cambridge U.) Florence Jicki (UPNG Bio.) Florence Jicki (Mainland Holdings) Leo Sonari (WWF) Anna Martin (PNGFA) Discussion (Chaired by Rob Small) Florence Jicki (Mainland Holdings) Leo Sonari (WWF) Anna Martin (PNGFA) Discussion (Chaired by Tim	13.30-	Review of biodiversity conservation and trade in PNG	
14.45 Queen Alexandra Birdwing Butterfly	13.45		
14.45	13.45-	The PNG Insect trade	Rob Small (Cambridge U.)
15.45 14.45 Tea 15.30- Eaglewood Incentive led conservation and the roles of middlemen and government in the wildlife trade Discussion (Jane Mogina, chair) Wednesday 21st February: POLICIES TO ENCOURAGE SUSTAINABLE USE 109.15- Introduction: the need for sustainable use within the National Biodiversity Strategy 10.00- Role of DEC within the wildlife trade Barbara Roy, Robert Sine (DEC) 11.00 Coffee 11.30- New wildlife regulations under the 2003 Trade 12.00 Amendment Act 12.00 Amendment Act 12.00 What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc) 12.30 Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea (Mainland Holdings) Leo Sonari (WWF) Anna Martin (PNGFA) Discussion (WF) Anna Martin (PNGFA) Discussion (Chaired by Rob Small) Discussion (chaired by Rob Small)	14.45	Queen Alexandra Birdwing Butterfly	Florence Jicki (UPNG Bio.)
14.45 Tea	14.45-	Crocodiles	Eric Langelet
15.30- 16.30 10 10 10 10 10 10 10	15.45		(Mainland Holdings)
16.30 Incentive led conservation and the roles of middlemen and government in the wildlife trade Discussion (Jane Mogina, chair)	14.45	Tea	
Incentive led conservation and the roles of middlemen and government in the wildlife trade Wednesday 21st February: POLICIES TO ENCOURAGE SUSTAINABLE USE O9.15- Introduction: the need for sustainable use within the National Biodiversity Strategy 10.00- 11.00 Role of DEC within the wildlife trade Barbara Roy, Robert Sine (DEC) 11.30- New wildlife regulations under the 2003 Trade Amendment Act 12.00 What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc) 12.30 Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea Introduction: the wildlife trade Jane Mogina Date Mogina Decident Outpure Jane Mogina Decident Outpure Jane Mogina Joha Mogina Joha Mogina Decident Outpure To ENCOURAGE SUSTAINABLE USE Decident Outpure Jane Mogina Jane Mogina Jane Mogina Joha	15.30-	Eaglewood	Leo Sonari (WWF)
Mednesday 21st February: POLICIES TO ENCOURAGE SUSTAINABLE USE	16.30		Anna Martin (PNGFA)
Wednesday 21st February: POLICIES TO ENCOURAGE SUSTAINABLE USE 109.15- Introduction: the need for sustainable use within the National Biodiversity Strategy 10.00- Role of DEC within the wildlife trade (DEC) 11.00	16.30-	Incentive led conservation and the roles of middlemen	Discussion
10.00	18.00	and government in the wildlife trade	(Jane Mogina, chair)
Role of DEC within the wildlife trade		day 21 st February: POLICIES TO ENCOURAGE SUST	CAINABLE USE
11.00 Coffee Table 11.00 Coffee 11.30 New wildlife regulations under the 2003 Trade Barbara Roy (DEC) 12.00 Amendment Act Rob Small (Cambridge University) 12.30 Event 12.30 Lunch Discussion (chaired by Rob Small 12.30 The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea Tea Discussion (chaired by Tim 16.00- An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim 16.00- Discussion (chaired by Tim 17.00- Discussion (chaired by Tim 18.00- Discussion (chaired by Tim 19.00- Discussion (chaired by Tim			Jane Mogina
New wildlife regulations under the 2003 Trade Amendment Act What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc) Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. Tea An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim	10.00	National Biodiversity Strategy	
12.00 Amendment Act 12.00 What can be done to assist in trade regulation? 12.30 permiting procedures technology (databases, websites, etc) 12.30 Lunch 14.00- The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea 16.00- An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim	10.00	National Biodiversity Strategy	Barbara Roy, Robert Sine
12.30 What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc) 12.30 Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea 16.00- An Action Plan for a sustainable trade in wildlife in Rob Small (Cambridge University) Discussion (chaired by Rob Small) Discussion (chaired by Rob Small)	10.00 10.00- 11.00	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee	Barbara Roy, Robert Sine
12.30 permiting procedures technology (databases, websites, etc) 12.30 Lunch 14.00- The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea 16.00- An Action Plan for a sustainable trade in wildlife in (Cambridge University) Discussion (chaired by Rob Small)	10.00 10.00- 11.00 11.00 11.30-	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade	Barbara Roy, Robert Sine (DEC)
technology (databases, websites, etc) Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. Tea An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim	09.15- 10.00 10.00- 11.00 11.30- 12.00	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC)
12.30 Lunch 14.00- The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea 16.00- An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim	10.00 10.00- 11.00 11.00 11.30- 12.00 12.00	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC) Rob Small
information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. 15.30 Tea 16.00- An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim	10.00 10.00- 11.00 11.00 11.30-	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act What can be done to assist in trade regulation? permiting procedures	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC) Rob Small
 information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. Tea An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim 	10.00 10.00- 11.00 11.00 11.30- 12.00 12.00	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc)	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC) Rob Small
16.00- An Action Plan for a sustainable trade in wildlife in Discussion (chaired by Tim	10.00 10.00- 11.00 11.00 11.30- 12.00 12.00 12.30	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc) Lunch	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC) Rob Small (Cambridge University)
	10.00 10.00- 11.00 11.00 11.30- 12.00 12.00 12.30	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act What can be done to assist in trade regulation? permitting procedures technology (databases, websites, etc) Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC) Rob Small (Cambridge University) Discussion (chaired by Rob
	10.00 10.00- 11.00 11.00 11.30- 12.00 12.30 12.30 14.00- 15.30	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc) Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other.	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC) Rob Small (Cambridge University) Discussion (chaired by Rob
	10.00 10.00- 11.00 11.00 11.30- 12.00 12.30 12.30 14.00- 15.30	National Biodiversity Strategy Role of DEC within the wildlife trade Coffee New wildlife regulations under the 2003 Trade Amendment Act What can be done to assist in trade regulation? permiting procedures technology (databases, websites, etc) Lunch The insect trade: towards streamlined regulation and information exchange. Can the regulated trade be more efficient? Can the trading agencies help DEC to monitor sustainable use? How we can help each other. Tea	Barbara Roy, Robert Sine (DEC) Barbara Roy (DEC) Rob Small (Cambridge University) Discussion (chaired by Rob Small)

Sustainable Use Workshop field trips

Thursday 22 February

1. Marine Protected Areas near Alexishafen, Madang

Jane Mogina Tim Bayliss-Smith Rob Small Amanda Malagui Jan Messersmith

2. Ohu Butterfly Farm, Madang

Hais Wassel Michael Hudson Peter Nano Beno Kotaseao Catherine Aisi Florence Jicki Brendan Moyle

Acknowledgements

The organisers would like to record their particular thanks to the management and staff of Jais Aben resort for very efficient service, excellent conference facilities, bamboo band, and general support for the workshop.

Thanks too to Paul Chatterton, WWF, for his provision of sustainable Piper methysticum refreshments.

WORKSHOP PARTICIPANTS

PROJECT PARTNERS

<u>Department of Geography, University of Cambridge:</u> Tim Bayliss-Smith (Ph.D, Reader in Pacific Geography) Rob Small (Doctoral Student)

<u>Department of Biology, University of Papua New Guinea:</u>
Jane Mogina (Ph.D, Lecturer in Biology, and Director of Mama Graun)
Florence Jicki (Honours student)

<u>Insect Farming and Trading Agency, UNITECH, Lae:</u> Catherine Aisi (IFTA Manageress)

Amanda Malagui (Rainforest Habitat)

Wau Ecology Institute, Insect Ranch:

Michael Hudson (Director) Peter Nano

Beno Kotaseao

Department of Environment and Conservation, PNG Government:

Barbara Roy (Enforcement)

Robert Sine

OTHERS

Eric Kwa (Ph.D., Law Faculty, UPNG)

Eric Langelet (Mainland Holdings Crocodile Farm, Lae)

Alphonse Mara (Sepik Wetlands Management Initiative)

Benny Gowap (Sepik Wetlands Management Initiative)

Leo Sunari (WWF agarwood)

Paul Chatterton (WWF Madang)

Brendan Moyle (Ph.D., Massey University, New Zealand)

Anna Martin (PNG Forestry Authority)

Hais Wassel (Ohu Butterfly Farm)

Tom Pringel (Department of Biology, UPNG)

Darren Bito (Binatang Research Centre, Madang)

Petr Klimes (Binatang Research Centre, Madang)

Martin Mogia (Binatang Research Centre, Madang)

Steven Sau (Binatang Research Centre, Madang)

Markus Manumbor (Binatang Research Centre, Madang)

Press Release, 22.02.07

Madang meeting on Sustainable Trade in PNG's Wildlife

The workshop on Sustainable trade in PNG's Wildlife, held at Jais Aben resort in Madang, ended this week (22 February). It was attended by 25 stakeholders representing a wide range of NGOs, companies, government departments and university researchers, all with interests in a sustainable trade in wildlife – such as crocodiles, butterflies, beetles and other insects, eaglewood and many other PNG wildlife products. Officers from Department of Environment and Conservation (DEC) also participated. The workshop was organized by the Darwin Initiative project of Cambridge University and UPNG, led by Dr Tim Bayliss-Smith, Dr Jane Mogina and Mr Rob Small.

After two days of presentations and discussion there emerged a six-point Action Plan, which the workshop agreed could help PNG to move forward. All these actions are consistent with the Millennium Goals of the PNG Government, its Medium Term Development Strategy, and the emerging National Biodiversity Strategy (NBSAP) that has been prepared by DEC with help from Dr Eric Kwa, UPNG Law Faculty.

It was agreed by the workshop that NBSAP itself is a sound basis for future policy in the area of biodiversity conservation, but that more emphasis needs to be given within the strategy for sustainable trade in wildlife. Only by giving local communities real incentives for protecting areas and species can PNG make progress with its biodiversity conservation goals. Yet middlemen in the trade are essential, and they need to be encouraged by making their licences, permits, fees and paperwork less burdensome. Unless there is a viable and profitable legal trade, the illegal smuggling of wildlife will grow in scale, with negative effects on the conservation of many of the species involved.

The meeting also agreed that sustainable trade in CITES-listed species requires management plans, so that PNG can meet its international obligations and monitor wildlife populations successfully. CITES is the Convention on International Trade in Endangered Species, which PNG joined in 1979 soon after independence. A successful management plan already exists for saltwater crocodiles, whose skins earn PNG several million kina each year in export revenues, including more than 100,000 kina that is distributed each year to villages in the Sepik that make sustainable harvests of crocodile eggs. Every year DEC up-dates this plan for saltwater crocodiles, based on new surveys of the wild populations in the Sepik and up-to-date information about the volume of trade. Every year Mainland Holdings, Lae, the major crocodile farming company, provides DEC with new statistics on its egg purchases and skin exports. All this information up-dates the management plan and shows that a sustainable trade exists for this species.

This model of a species management plan needs to be copied for other species that are traded under CITES, Appendix II. Middlemen in the insect trade, for example IFTA in Bulolo and the Wau Ecology Institute, and in the eaglewood trade (WWF and PNG)

Forestry Authority), need to prepare such plans. The Cambridge University project has now promised, with help from UPNG, to start work on management plans for PNG's birdwing butterflies. The list of seven species that are legally exported does not, of course, include the world's largest butterfly, Queen Alexandra Birdwing Butterfly, which is on CITES Appendix I. Queen Alexandra is found only in Oro Province, and for this insect any kind of trading is illegal.

The meeting also agreed that some CITES regulations are unnecessary for PNG. For example, two of the butterfly species whose exports are controlled under CITES Appendix II are in fact so common in both PNG and West Papua that farming them for trade represents no threat at all to their populations. DEC might consider taking steps to down-list these two species, to reduce the load of unnecessary paperwork and to help the legal trade to flourish.

The workshop heard how the registered insect traders are struggling at present to achieve profits, since the world market for dead specimens is not growing and is being supplied increasingly with illegal insect exports, including some from West Papua and Solomon Islands. What is needed is for PNG to make trading easier (quicker permits, less paperwork), and to allow traders to diversify their products as in the crocodile trade. For insects, what is needed to keep up with overseas competitors is for PNG to allow exports of live pupae rather than just dead specimens. Barbara Roy of DEC explained to the workshop that live exports of wildlife will be permitted under the *International Trade (Fauna and Flora) (Amendment) Act* 2003. This Act has been passed by parliament but, unfortunately, so far it has not been put into effect by the Government.

A further recommendation of the workshop was that DEC establish a website, with help from Cambridge University, so that all stakeholders in sustainable wildlife exports have better access to information about PNG laws, CITES regulations, fees and the application forms needed for legal exports of species like crocodiles, certain reef fish, butterflies and other insects, orchids and eaglewood.

After two days of lively discussion, participants left Madang yesterday (23 February) to return to their various jobs all around PNG. It was generally agreed that the workshop had been a useful exchange of ideas. Hopefully, if the workshop's recommendations can be put into effect, then an even more successful yet still sustainable wildlife trade can emerge for PNG. If so, then the benefits for village communities, those employed by trading companies, PNG exports, and nature itself, will be substantial.

Dr Tim Bayliss-Smith Reader in Pacific Geography, University of Cambridge

Principal Investigator

Darwin Initiative project on Sustainable Insect Trading and Collecting in Papua New Guinea

ACTION PLAN AGREED BY THE WORKSHOP

There was agreement on six points for further action:

1. Encourage Sustainable Use by minimizing unnecessary regulations

The workshop recognized the large potential for sustainable use of wildlife as a way to diversify rural livelihoods, especially for areas of PNG lacking opportunities for cash incomes. Sustainable trade will also provide incentives for conservation of habitats and viable wildlife populations, and can generate exports for PNG's economy. It was also agreed that DEC's capacity to monitor, regulate and enforce is limited by its small staff and resources, so that a stronger *regulated trade* is the only sound way to minimize the illegal trade in wildlife.

ACTION: Cambridge University to continue discussions with DEC about removing unnecessary restrictions on the export of *non-protected species*, especially insect species whose abundance far exceeds any negative effects of human harvest. Setting quotas for such species increases costs and work loads without generating any conservation gains.

2. Species Management Plans

To meet CITES obligations and to ensure a sustainable trade in wildlife, *management plans* will be needed for all Appendix II species that are to be exported. Annual updates to the management plan for saltwater crocodiles are essential for a continuation of the trade, and this is working well through co-operation between Mainland Holdings and DEC. A management plan for agarwood (eaglewood) is in the pipeline. However, no management plans yet exist for the seven CITES-listed birdwing butterfly species.

ACTION: Cambridge University (Rob Small) and UPNG Biology Department (Jane Mogina and Florence Jicki), with Massey University (information from Brendan Moyle), and in consultation with DEC, in order to prepare birdwing butterfly management plans.

3. Export trade in live fauna

To enable product diversification for the insect trade (comparable to that already achieved for the crocodile trade), it is important that the regulations allow for live pupae export. This will be possible if and when the *International Trade* (*Fauna and Flora*) (*Amendment*) *Act* 2003 comes into force, but so far this process has been delayed.

ACTION: DEC to continue their lobbying efforts to activate this legislation.

4. Down-listing certain Appendix 2 species

CITES Appendix 2 includes two common species of birdwing butterfly, and logically these should be down-listed. Management Plans for these two species could be the prelude to a request to CITES for down-listing, to reduce unnecessary paperwork.

ACTION: DEC to consult TRAFFIC about CITES listing, using information provided by Cambridge University.

5. Sustainable trade in wildlife as a component of NBSAP

The draft National Biodiversity Strategy and Action Plan mentions sustainable trade as a way to generate *positive incentives* for conservation, but more emphasis needs to be given to this aspect.

ACTION: Eric Kwa (UPNG Law Faculty) to look again at NBSAP, in consultation with DEC.

6. Enhanced information flow, networking and public education

All participants at the workshop were already involved in educational efforts, training and publicity. However, new or improved data-bases and websites could increase networking and information flow, for everyone's benefit.

ACTION: UPNG/Mama Graun (Dr Jane Mogina) and Cambridge University (Rob Small), using data-bases and email addresses available from other stakeholders including Binatang Research Centre, Madang.

Written by:

Tim Bayliss-Smith (Cambridge University) on behalf of the Workshop

24 February 2007