

Darwin Initiative: Half Year Report

(due 31 October 2011)

Project Ref. No.	17-008
Project Title	<i>Can Hunting and Conservation of Endemic Annamite Ungulates be Reconciled?</i>
Country(ies)	<i>Vietnam (Lao)</i>
UK Organisation	<i>Department of Geography, University of Cambridge</i>
Collaborator(s)	<i>WWF Greater Mekong Vietnam Programme; Vinh University</i>
Project Leader	<i>Nigel Leader-Williams</i>
Report date	31/10/11
Report No. (HYR 1/2/3/4)	3
Project website	

- 1. Outline progress over the last 6 months (April – September) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).**

1.1 Gaps in syllabuses

Activity completed.

1.2 Planning new teaching materials

Vinh University are in negotiation with the Wildlife Conservation Society, Vietnam regarding a course on wildlife trade issues in Vietnam.

1.3 Lectures by DICE [UK] staff at VN Universities.

As discussed in the previous annual report, individual lectures have been replaced by short courses. The following short courses were given at Vinh University:

- 1) Conservation Management. Prof. Nigel-Leader Williams, Cambridge. 11th to 14th of August.
- 2) Biodiversity Economics. Prof. Douglas MacMillan, DICE. 4th to 7th August.

Both courses were attended by undergraduate and masters zoology students from Vinh University

1.4 Development of new teaching materials.

Vinh University are currently in the process of reviewing the existing educational materials produced by the project. In addition to materials for the two courses above, materials available also include 5-7 day short courses in Social Science Survey Techniques (Dr Rajindra Puri, DICE), Basic Ecological Survey Techniques (Dr David Sewell, DICE), GIS (Dr Lê Trần Chấn, Vietnam Geography Institute), and manuals on community mapping and interviews for Saola records produced by the Project Officer, noted in previous reports. Further translation and revision is required to finalise these materials as project outputs that will be useful in Vietnam.

1.5 Training for Vietnamese University Staff

No activities planned in this period

2.1 Community mapping training

Completed (though some further training will take place as part of range-wide community mapping initiative: see section 3.5)

2.2 Training in GIS

Completed

2.3 Training in basic ecological survey methods

Completed

2.4 Training in basic social science survey methods

Completed

2.5 and 2.6 Masters in Conservation Biology at DICE

Both Nguyen Anh Quoc (WWF) and Nguyen Xuan Truong (FPD Hue) have submitted their dissertations which are currently being assessed by external examiners. Results are due on 22/11/11.

Mr Quoc's research involved interviews about hunting behaviour in two villages in Quang Nam province (see 3.7 for more details). Mr Truong's research involved analysis of patterns affecting snare distribution based on data from community mapping and from enforcement patrols.

2.7 Training for FPD rangers in using monitoring data

Two rangers from each of the new Saola Nature Reserves in Thua Thien Hue and Quang Nam Provinces, received training in a new quadrat-based field survey method for snares and other indicators of hunting (see 3.8). Three days of field training in the method were given in the Hue Saola Nature Reserve in May and 6 days in the Quang Nam Nature Reserve in July.

3.1 Range-wide database

No activities planned for this period

3.2 Participatory GIS

The final layer of place-names from the community mapping work has been completed. In the second half of FY3, a related WWF project funded by the Critical Ecosystems Partnership Fund (CEPF) will conduct community consultations in the villages using the 3 nature reserves which have been identified by this project. The consultation will include the handing back of printed maps to local communities.

3.3 Expert workshop

The second meeting of the Saola Working Group was held in Vinh (20-22 April) and Hue from (25-26 April). The project contributed some funds to the meeting and both the Project Leader and Project Officer attended both sessions.

The report of the meeting is under preparation by the Chair of the Saola Working Group.

3.4 Community mapping in Thua Thien Hue and Quang Nam

Fieldwork for community mapping in the project focal site has now concluded. The Project Officer is currently at Cambridge, engaged in GIS analysis of the results relating to use of forest products by local communities. The results will be published in November 2011 in a report, but preliminary results have already been submitted to WWF's CEPF and CarBi projects to identify communities most likely to be affected by the establishment of the new protected areas.

A technical challenge is meaningfully representing the reported areas of use of different villagers as, in some cases, villages appear to consist of dispersed clusters of intensively used sites, whose boundaries cannot be readily defined.

Ta Dinh Thanh, a Masters student at Hue university supported by the project, has submitted his thesis based on the community mapping data he collected and is awaiting the examination. The thesis analyses the information on distributions of ungulate species given by communities in Quang Nam province, adopting the same analytical approach as Nguyen Minh Duc's thesis last year, but focussing on a different area. Three Hue University Masters theses have now been completed based on the community mapping work.

3.5 Range-wide community mapping

This activity includes the main remaining fieldwork for the project. The remainder of the work is now scheduled for March-June 2012 and will be conducted in collaboration with the Zoological Society of London (ZSL) as outlined below.

The Wildlife Conservation Society of Lao has conducted community mapping and interview surveys for Saola in 18 villages in Saychamphone district, Bolikhamxay province, Lao. WCS used their own funding but followed the protocols developed by this project. We expect that the data from this work will be shared with our data for analysis but clearance still needs to be sought from the provincial authorities.

Nguyen Trong Dong and Pham Thi Thu Huyen have completed their community mapping fieldwork in Pu Huong Nature Reserve and are entering the data.

The Project Officer has begun discussion with two more Vietnamese Masters students, and a group of Laotian undergraduates from Vinh University regarding this work

A grant of 100,000 Hong Kong Dollars (approximately £8050) has been received by ZSL from the Ocean Park foundation for "Identifying Priority Areas for Conservation of Saola (*Pseudoryx nghetinhensis*) using Local Ecological Knowledge". The work, which is based on community mapping, will be conducted in Nghe An and Ha Tinh provinces Vietnam, and Bolikhamxay province Lao. Students from Vinh University supported by the project will be the main field assistants and the grant is therefore an important source of co-financing for this project. Dr Samuel Turvey, of ZSL, will bring valuable experience of conducting similar work in China as well as knowledge of analytical techniques (probabilistic extinction modelling) that will increase the applicability of the data to conservation planning for endemic ungulates.

We hope to further increase the coverage of the activity through additional collaborations, in the manner of that described above with WCS Lao. It is our hope that other institutions working in different parts of the Central Annamites will adopt our methods to conduct community mapping and interview surveys such that a pool of standardized data can be collected and analysed.

3.6 Species distribution modelling

No activities planned for this period.

3.7 Training for research into hunting patterns

Nguyen Anh Quoc (WWF Quang Nam and DICE) conducted interview based fieldwork in two villages in north Quang Nam from 15 May to 30 June. Through semi-structured interviews with 28 individual hunters, as well as focal group discussions and interviews with knowledgeable

local officials, he collected qualitative data on hunting techniques, and descriptive quantitative and qualitative data on who within the village hunts and where they hunt. Mr Quoc also collected qualitative data reasons for hunting and on trends in hunting activity in the recent past. The final section covers hunters' perceptions about hunting, and anti-hunting legislation. Quantitative data were collected through interview on economic returns from hunting and alternative livelihoods. These data have been presented in Mr Quoc's Masters thesis which also contains a comparative analysis of the two villages which appear to be at different stages of integration into the national wildlife trade network.

3.8 Landscape wide snare and habitat surveys

This period has seen progress in analysis of the data that are being collected by forest guard and ranger teams. Patrolling by forest guards so far has been concentrated in the Thua Thien Hue Saola Nature Reserve, with plans to expand to Bach Ma and Quang Nam in the immediate future.

Two students, Nguyen Xuan Truong (FPD Hue and DICE) and Yasmine El Bahayaoui (Catholic University of Louvain, Belgium) have been involved in this work, working closely with the Project Officer.

Mr Truong's work, for his Masters' dissertation involved GIS processing of the data stored in the software MIST and presenting this in a GIS with a measure of survey effort by the patrol teams (km walked per 1km square) as well as counts of traps to determine trap density. Trap density appeared to vary greatly within the reserve. In his dissertation, Mr Truong analysed the effects of three spatial variables: percentage of primary forest cover, distance from the Ho Chi Minh Highway (which bisects the reserve) and distance from villages on trap density as recorded by the teams.

Ms El Bahayaoui's work took a different analytical approach to the same question, using the software 'Presence' (© Proteus Research and Consulting Ltd) to look at the expected occupancy of traps throughout the reserve. The results of the analysis suggested that, in contrast to Mr Truong's analysis of density, but in accord with popular perception, there are traps within every 1km square of the reserve, or there were at the time the patrols began. However, the density of traps may vary across squares.

The two analytical techniques are probably complementary. The method of dividing the number of traps detected by survey effort is limited in squares where survey effort is very low and where no traps are detected at all. This may create a misleading impression that traps are absent. Occupancy statistics address this issue but, on the other hand, cannot make comparison of density, only presence. Further work on analysing data collected by patrol teams will continue in the next period.

In addition, Pham Doan Vong (Hue University and Bach Ma National Park) has been awarded his Masters degree for a thesis collecting data on snares and other signs of threat in randomly-distributed 200 x 200m quadrats within the Bach Ma extension. The method appears to have been a success inasmuch as a comprehensive dataset was collected and the Project Officer has worked with WWF to support additional quadrat-based surveys in the Thua Thien Hue and Quang Nam nature reserves. The work is continuing at present and aims to cover 100 squares. This initiative is being supported by co-financing from WWF and functions both as a survey and as a patrol. As a survey, its function is to serve as a check for the results that will arise from analysis of the MIST data. As a patrol, its function is to introduce an element of unpredictability and to get patrols away from major access routes to detect trappers who may be operating in these areas.

3.9 Targeted Saola surveys

Although no activities were planned under this heading, the Project Officer did undertake a three week exploratory survey trip to A Vuong, in the Quang Nam nature reserve from 12-27 July. Two international volunteers with particular skills accompanied the trip. Dr Vladimir Dinets is an experienced naturalist with a global experience of finding elusive species and Dr Timothy

Waters is a botanist. In addition, two young Vietnamese botanists (Pham Van The from the Institute of Ecology and Biological Resources, and Do Ngoc Dai from Vinh University) attended as did three other Vinh university students and two nature reserve staff.

The aim of the field survey was to investigate methods for detecting Saola and other Annamite ungulates, and a report on the results is currently being prepared. A secondary aim was to produce a list of easily identifiable understory plant taxa that could be used for future surveys to describe habitat and feeding sign. Five ungulate dung samples were collected, a notable improvement on previous success rates. These have been sent to CIBIO (Research Centre in Biodiversity and Genetic Resources) in Portugal for genetic analysis. This work is expected to inform further survey and monitoring work that will be conducted by WWF and the Saola Working Group as well as Vietnamese Universities in 2013-2015.

Collaboration with a research team at the University of Copenhagen has produced an exciting result which is likely to lead to an efficient new survey method for all Annamite ungulate species. Results are currently being prepared for publication.

3.10 Bioeconomic modelling

For two weeks in June, the Project Officer worked to draft a schema for a model based on reading of reports on wildlife trade in Vietnam and discussions with knowledgeable conservationists in Hanoi. This work informed plans discussed at the Steering Committee meeting and will continue in the upcoming period.

4.1 Research planning workshops

The second Steering Committee meeting for the project was held on the 8th of August at Vinh University. It was attended by the Project Leader, the Project Officer and the Co-Investigator from DICE as well as representatives of Vinh University, WWF and Hue and Quang Nam FPDs. Draft workplans were produced for the final 12 months of the project. These are currently being revised to fit the budget.

4.2 Protected Area Management Planning and Zonation

No activities planned for this period

4.3 Evaluation of PRUP approaches

No activities planned for this period.

4.4 Participatory resource use planning

The Project Officer attended workshops by WWF's CarBi project in Thua Thien Hue (July) and Quang Nam (11th August) and has been closely involved in planning a consultation with local communities under the CEPF project. These projects will devote significant funds towards working with local communities. At the Steering Committee, the suggestion was made that the current Darwin project would best operate in the focal area by informing the decisions made by these projects, rather than by attempting an independent and parallel community-based conservation approach. Under the CEPF project over USD 12,000 will be spent on consultation alone and the CarBi project has a total budget of approximately \$4 million of which an undefined but considerable proportion will be spent on community-based conservation. Influencing these projects is therefore a potentially far more productive way for the Darwin project to achieve its aims for community-based conservation. Currently the results of the community mapping are being used to plan consultation work, which is supposed to lead to future collaboration and mitigation of economic damage resulting from protected area establishment.

2. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project

and whether the changes will affect the budget and timetable of project activities.

Have any of these issues been discussed with the Darwin Secretariat and if so, have changes been made to the original agreement?

Discussed with the DI Secretariat: no/yes, in..... (month/yr)

Changes to the project schedule/workplan: no/yes, in.....(month/yr)

3. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan or budget should not be discussed in this report but raised with the Darwin Secretariat directly.

Please send your **completed form email** to Eilidh Young, Darwin Initiative M&E Programme at Darwin-Projects@ectf-ed.org.uk . The report should be between 1-2 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 14-075 Darwin Half Year Report**