

Darwin Initiative: Half Year Report

(due 31 October 2008)

Project Ref. No.	15/033
Project Title	Monitoring bat biodiversity: indicators of sustainable development in Eastern Europe
Country(ies)	Romania, Bulgaria
UK Organisation	Institute of Zoology, Zoological Society of London
Collaborator(s)	The Bat Conservation Trust, The Romanian Bat Protection Association, The Green Balkans, The Nature Park Roussenski Lom, The Institute of Zoology Bulgarian Academy of Sciences, The Bulgarian Bat Research and Protection Group.
Project Leader	Dr. Kate E. Jones
Report date	31 st October 2008
Report No. (HYR 1/2/3/4)	HYR3
Project website	http://www.ibats.org.uk

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).

Target: *Jan 2008 – Romanian 2nd year data and 1st year pilot data Bulgarian data analysed. Analysis, report and scientific publication on effect of road design on bat biodiversity in Romania based on two years data.*

The original target was 200 km of monitoring transects per country (Romania and Bulgaria) and these were analysed by May 2008. The target was not met by the original deadline partly because the web data portal took longer than planned to develop and the project was much more successful than anticipated. We completed 601 km (20 transects) in 2006 (Romania), and 4498 km (128 transects) in 2007 (1804 km, 53 transects in Romania and 2694 km, 75 transects in Bulgaria). Additionally we expanded into two other countries in 2007: one transect in Croatia (32 km) and covering 290 km in Hungary (8 transects). By the May 2008 workshops in Romania and Bulgaria, sonogram analysis of half of all transects in Romania and Bulgaria was completed and statistical analysis performed on the results to report at the workshops. We also began habitat analyses with these data, modelling the habitat and climate specificity of all bat species across the region using Ecological Niche Factor Analysis. We presented preliminary results at the European Bat Research conference in August 2008 but we need to confirm these results with the remaining data. All analyses for Bulgaria, Hungary and Croatia for 2007 have now been completed and the remaining half of the Romanian transects are in the process of being analysed due for completion in December.

Target: *March 2008 – 4th workshop run by trained Bulgarian personnel to train Bulgarian volunteers.*

We held our fourth workshop on the Black Sea in Shkorpilovzi in Bulgaria. ZSL/BCT assisted Elena Tilova (The Green Balkans) run the workshop inviting a total of 24 participants (13 volunteers from last year and 11 new volunteers). The workshop provided feedback to the existing volunteers from the activities and results from last year with additional lectures on more general aspects of bat biology and conservation and more advanced sonogram analysis training. We also visited the capital Sofia and officials from the Ministry of Environment. We reported on the progress of the project to them and they agreed to incorporate the bat monitoring protocols into their official biodiversity monitoring program for Bulgaria. We moved

the date of the workshop to May 2008 because it gave us an opportunity to hold an additional workshop in Baile Herculane in Romania. BCT assisted Abigel Szodoray-Paradi (Romanian Bat Protection Association) run the workshop inviting a total of 19 participants (11 volunteers from previous years and 8 new volunteers). This workshop was funded from funds raised by RBPA from The Matra KNIP (The Netherlands Embassy Matra KNIPP Programme) and the Romanian Environmental Ministry Environmental Funds Programme.

Target: *September 2008 – 3rd survey data collected by Romanian volunteers and 2nd year survey data collected by Bulgarian volunteers. Data uploaded to online database.*

The 2008 surveys were successfully completed across the region. All the event data has been uploaded to the database, although we have some final data error checks to perform before finalising these data. 58 transects (1448 km) were carried out in Romania, 89 transects (3122 km) in Bulgaria and 7 transects (250 km) in Hungary. We aim to have all data checks completed in the next few weeks so sonogram analysis for the project targets of 200 km per country can be completed and as many as possible of the remaining transects by the beginning of Jan 2009. Spatial modelling of these data will be performed in the months following this to be submitted for publication in March 2009.

Other progress:

We have made some progress in extending the program outside Romania and Bulgaria. In March 2008, ZSL/BCT ran an iBats training workshop in Thailand to Prince Songali University to set up a bat monitoring project to monitor bumblebee bats (funded with £5000 from ZSL and British Ecological Society). This visit also enabled a Darwin project progress meeting in Bangkok with ZSL/BCT.

In April 2008, ZSL gave an invited oral presentation 'Indicator Bats Program: using citizens to deliver science and conservation' to the Belgium Bat National Conference (Brussels, April 2008) and to discuss incorporating the iBats protocols into their monitoring project in Brussels with Alex Lefevre (visit funded by Brussels Department of Environment). Also ZSL held a meeting with Jean-Francois Julien and Christian Kerbiriou in Paris (C.R.B.P.O. of the Museum of Natural History, France) to discuss incorporating their French national bat monitoring program into iBats. <http://www.mnhn.fr/vigie-nature/Chiro.htm> (visit funded by ZSL).

In May 2008, we gave an invited oral presentation 'iBats: Global acoustic monitoring of bat biodiversity' at 'Biodiversity Research – Safeguarding the Future', the Pre-COP 9 scientific meeting in Bonn, 12-16th May 2008 (visit funded by COP9).

In July 2008, ZSL conducted a 10 day scoping trip to Mongolia to establish feasibility of establishing a bat monitoring project following the iBats protocols (funded by Darwin Initiative) and we submitted a report in August from this trip to the Darwin Initiative.

In August 2008, we presented the results of the Romanian and Bulgarian surveys and also the methodologies to use bats as indicator species at the XIth European Bat Research Symposium in Cluj-Napoca, Romania, August 2008. Oral presentations: 'Indicator Bats: Establishing the first National monitoring program for Romania's bats' and 'Developing a methodology for using bats as indicator species' (visit funded by Darwin grant). We also used the opportunity to have a project progress meeting with the Romanian collaborators and we bought some replacement monitoring equipment (2 GPS systems). We also attended the EuroBats meeting in Cluj, Romania in August 2008 and in collaboration with BCT presented a report for a feasibility study for developing a PanEuropean monitoring network and establishing an international NGO 'BatLife-Europe'.

We have also incorporated the monitoring data from the UK in the iBats web data portal. Currently there are 31 UK transects covering 1088 km. We have also secured funding for a project to start the development of an automatic analysis system for calls within sonograms and a neural network to identify species working with Dr. Stuart Parsons (University of Auckland, New Zealand).

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.

The project has been hugely successful and is rapidly expanding and we need to build more capacity for analysis of the sonograms, either through training more volunteers in each country or the development of automatic analysis programs. We are working on both of these solutions.

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

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?

None

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**