Darwin Initiative: Half Year Report

(due 31 October 2007)

Project Ref. No.	15/005
Project Title	Conservation of the Mangrove Finch *Cactospiza heliobates*
Country(ies)	Ecuador
UK Organisation	Durrell Wildlife Conservation Trust
Collaborator(s)	Charles Darwin Foundation (CDF), Galápagos National Park (GNP)
Project Leader	Hywel Glyn Young
Report date	22nd October 2008
Report No. (HYR 1/2/3/4)	HYR3
Project website	*Not yet available*

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).

There were visits to the field site at Playa Tortuga Negra in April (10-23) and September (1-19). The Mangrove Finch breeding season ended late this year in early May following late rains – the gauges showed that almost twice as much rain fell this season as last season. In total 60 mangrove finch nests and 3 woodpecker nests were observed and fledging success was higher than in the previous season. 61.7% of the nests produced at least eggs (n=37), and from these nests 37.5% fledged successfully (12 out of 32 nests, as five nests were excluded as still active at the end of the survey period). In 2007, 56% of the 41 observed nests had at least eggs, and 21.7% fledged successfully. In 2008, the proportion of abandoned eggs was less (3.1% versus 17.4% in 2007) as was the proportion of nests predated during the incubation phase (34% versus 47%). However, the amount of nestlings that died as a consequence of Philornis parasitism was higher (15.6% versus 4.3% in 2007). The high success was probably also down to the successful rat control programme. Rat poison has to be put out in a very regular manner, e.g. every three months to keep rat density low. Greater intervals, even during the dry season, result in an immediate increase in rat densities through immigrations from outside e.g. rat monitoring undertaken after a six month period between poisonings in Playa Tortuga Negra showed **1**) rat densities as high as before new treatment started and **2**) 80% of the rats caught were males suggesting a recent immigration.

The captive breeding programme at the Charles Darwin Foundation in Puerto Ayora was initiated at the beginning of 2008 and Durrell Wildlife Conservation Trust staff member Harriet Good was seconded to this programme from late March to September. Harriet oversaw the acclimatisation of 10 Woodpecker Finches (received from a behavioural research project) into the newly constructed 'Darwin' aviaries, development of a suitable diet that could be sourced locally and production of husbandry guidelines. Three Galápagos mockingbirds were also included in the programme before their eventual release and diets and guidelines for this species were also developed. The high incidence of Avian Pox in Puerto Ayora this year became influential in the captive birds' management (see below).

Harriet Good and Cristina Georgii (CDF) organised a workshop on the 'management of captive birds' on 2-3 September in Puerto Villamil, Isabela. This course presented basic knowledge about finches in general, Mangrove Finch in particular, health issues (especially Avian Pox), housing, handling, cleaning etc. and was attended by 12 people.

Student projects by Abraham Loaiza (foraging behaviour) and Viviana Quimbiamba (parasite

load of captive birds) have progressed well and Abraham began to write up his results at the end of September.

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 captive Woodpecker Finches proved difficult to sex locally through blood-sexing but are now assumed to be 9.1 (nine males, one female) through behaviour and sexing by a lab outside of Galápagos. This heavy bias towards males is probably a function of using tape-lures to trap birds and we will attempt to capture more females or known pairs later in 2008.

There were high levels of Avian Pox noted within several passerine species in Puerto Ayora this year. All 10 Woodpecker Finches in the aviaries contracted the disease and had to be monitored closely and, when necessary, receive veterinary treatment (from Sharon Deem of St Louis Zoo). Two birds died but all others have recovered. The levels of pox are causing concern about future captive work including proposed collection of Mangrove Finch for possible captive breeding or translocation to sites elsewhere in Isabela. Avian Pox is unrecorded in Mangrove Finch and it unclear why this is, it may be a feature of saline environments in that the disease carrier (a mosquito) may be absent or it may be that this finch species has good resistance. It is important to understand this better before any captive work is planned and this will be discussed at a Mangrove Finch workshop in November in Puerto Villamil.

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 <u>planned</u> modifications to your project schedule/workplan or budget should <u>not</u> 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. **<u>Please state your project reference number in the header of your email message eg Subject: 14-075 Darwin Half Year Report</u>**