

Project Update: August 2013

We successfully conducted fieldwork from January to April 2013 on the Darwin finch and *Philornis downsi* project. We monitored 98 tree finch nests and found *Philornis* parasites in all nests with hatchlings (100% prevalence). Mean *Philornis* intensity was higher than in previous years, at 46 larvae per nest. Chick mortality was 93%. The most surprising finding was that hybrid nestlings had higher survival than nestlings from pure genetic populations 1 or 2 (the small and medium tree finch respectively). This finding points to adaptive hybridisation in this system, which is now the main focus of research. We have a window of opportunity to test ideas about why the hybrids are surviving better under novel parasites. Perhaps novel genetic combinations between the parental species is the answer to higher survival of hybrid nestlings.

We are now conducting the genetic analyses to test how the three genetic populations differ in relation to survival from *Philornis downsi*. We thank the Rufford Grant most sincerely for funding without which this work would not have been possible.



Finch captured in mistnet. ©Bodo Peters



Searching failed nests for parasites: dead chicks (left) and *Philornis* larvae (right). ©Matthias Schmidt



Dead tree finch chick through *Philornis* parasitism. ©Katharina Peters



Small Tree Finch chick with bands. ©Svenja Gantefoer