

Darwin Initiative: Half Year Report

(due 31 October 2009)

Project Ref. No.	16-003
Project Title	Tools, training and research for managing ecohydrology of the Cape Flora
Country(ies)	South Africa
UK Organisation	The Open University
Collaborator(s)	SANBI, Cape nature
Project Leader	Jonathan Silvertown
Report date	October 2009
Report No. (HYR 1/2/3/4)	HYR 3
Project website	www.open.ac.uk/fynbos

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).

We have now completed full botanical and topographic surveys of 8 sites; identified suitable locations for our last two sites and initiated hydrological monitoring at these while continuing monitoring at the existing sites. We intend to survey the plants and topography of the remaining 2 sites next month (Nov 2009). Meanwhile, we are compiling the eco-hydrological database of fynbos species that will be an important part of the project's legacy.

Our good working relationship with the nature conservation bodies SANParks and Cape Nature continues and the results of our research were presented to the scientific services division of the latter at an informal seminar in Oct 2009. We shall be collaborating with them in producing flyers about our research for the use of rangers and the general public. Training of the target number of rangers has been completed, but we have been requested to train more and shall try to do this in 2010. On his own initiative, one of our trainees has just set up a hydrological monitoring plot in the N. Cape. Cape Nature have declared their intention to maintain hydrological monitoring of the 6 of our field sites that are on their land for at least 3y after our project ends. We have also discussed a follow-up DI project with them which they are very keen to support.

We have employed a replacement for our South Africa based research fellow. He is Mr. James Ayuk Ayuk who is enrolled as a PhD student at the University of the Western Cape and is co-supervised by Dr Guy Midgley, our collaborator at SANBI (Kirstenbosch). James started in August 09 and is modelling the expected future distribution of species that we have recorded in the light of the effect of projected climate change on soil hydrology.

Prof. Silvertown talked about project findings at two international conferences, as an invited speaker at the Ecological Society of America (Albuquerque, USA) and British Ecological Society (Hatfield, UK). An account of our project was published in *Veld & Flora* (journal of the Botanical Society of south Africa) and a scientific paper is in press in *Austral Ecology*. A major scientific paper on the results obtained at the 8 sites is in preparation. In October 2009 we briefed a feature writer for the daily Afrikaans newspaper Die Berger who was very excited about our work and said that she will be reporting on it in one or more articles over the next 12 months.

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.

Bush fires damaged two of our sites at Steenbras (Dec. 08) and Jonkershoek (March 09). Some of our dipwells and access tubes were damaged and had since been replaced. However, as our sites had already been surveyed, it had no negative effect on our research. On the other hand, these fire incidents offered us an opportunity to study post-fire regeneration of fynbos species, which has since then been funded by NERC Urgency grant (£45,000). This research not only complements our current work but is also hoped to lead to other opportunities.

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?

A hiatus in the climate modelling part of the project was created by the departure of the South African Res Fellow after on year and the time it took to find a replacement. In the event, SANBI decided the best use of remaining resources was to appoint a PhD student rather than a Post Doctoral Fellow (The DI Secretariat was consulted about this). The student (James Ayuk) has made a promising start. **We would like to request a no-cost extension of our project by one year** so that the money allocated for this part of the work can be used to fund a full 2 years of Mr Ayuk's work. In this time he should be able to achieve the original objectives of this part of the project. (The remainder of his PhD will be funded by SANBI).

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. Attached

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**

Point raised in the second annual review & requiring a response in this Half Year Report

1. What impact will the delay in the modelling have in the development of the conservation tools?

The conservation tools will not be affected by the delay in the modelling part of the project because they will be based upon the fieldwork which is on schedule.