

## ANNEX 1: PROJECT ACTIVITIES AND TIME SCHEDULE

UPDATED 1 OCTOBER 2004

### ACTIVITY 1: WORKSHOPS

To organise 3-5-day workshops for staff members and research visitors; keep track of attendees list and programme details

<b>activity details</b>	<b>person(s) in charge</b>	<b>deadline</b>	<b>progress</b>
Launching the project in the UK	V. Savolainen	June 2003 in the UK	Completed 1-3 July 2003 at Kew and attended by 15 people from the UK and 4 from South Africa
Launching the project in South Africa	G. Reeves, with F. Conrad	September 2003 in South Africa	Completed on 3-5 September 2003 at Kirstenbosch and attended by 2 people from Kew and 27 from South Africa
Beyond a DNA bank	V. Savolainen, with G. Reeves and M. Powell	September 2004 in South Africa	Completed 13-15 September 2004 at Kirstenbosch Research Centre. Attended by 32 participants.
Concluding the project, the future of the DNA bank	V. Savolainen, with G. Reeves and M. Powell	September 2005 in South Africa	pending

## ACTIVITY 2: FIELDWORK & LABORATORY RESEARCH

To bank DNA extracts at the Leslie Hill Molecular Systematics laboratory, with duplicates at Kew, for at least one species of all ca. 2,200 angiosperm genera, and to produce a 'tree of life' for South African plants based on *rbcL* sequences to be used in setting conservation priorities; keep track of all MTAs.

<b>activity details</b>	<b>person(s) in charge</b>	<b>deadline</b>	<b>progress</b>
Collect 500 genera	J. Manning & G. Reeves	September 2003	See below
Collect 500 genera	J. Manning & G. Reeves	March 2004	see pdf of list of genera collected on DNA bank website
Collect 500 genera	J. Manning & G. Reeves	September 2004	563 genera now represented in the bank Collecting trips arranged and scheduled for September-November 2004
Collect 500 genera	J. Manning & G. Reeves	March 2005	pending
Collect 200 genera	J. Manning & G. Reeves	September 2005	pending
Process 500 samples in the DNA bank with Herbarium vouchers	G. Reeves, with F. Conrad and DNA bank manager	December 2003	293 DNA extracts (representing 293 species) previously archived at NBI have been processed into the DNA bank; see pdf of list of taxa on the DNA bank website
Process 500 samples in the DNA bank with Herbarium vouchers	G. Reeves, with F. Conrad and DNA bank manager	March 2004	1363 DNA extracts previously archived at Kew have been processed into the DNA bank; see pdf of list of genera on DNA bank website. A further 673 DNA extracts representing 473 species have been added by the NBI.

activity details	person(s) in charge	deadline	progress
Process 500 samples in the DNA bank with Herbarium vouchers	G. Reeves, with F. Conrad and DNA bank manager	September 2004	563 genera and ca. 3000 extracts now represented in the S. African DNA bank.
Process 500 samples in the DNA bank with Herbarium vouchers	G. Reeves, with F. Conrad and DNA bank manager	March 2005	pending
Process 200 samples in the DNA bank with Herbarium vouchers	G. Reeves, with F. Conrad and DNA bank manager	September 2005	pending
Produce 200 <i>rbcL</i> sequences for angiosperm genera	G. Reeves, with F. Conrad	September 2004	201 <i>rbcL</i> sequences retrieved from GenBank September 2003; an additional 202 species representing genera found in South Africa were downloaded, although they are not species from South Africa. A further 120 <i>rbcL</i> sequences have been generated taking the total number of sequences from South African genera to 321.
Produce 200 <i>rbcL</i> sequences for angiosperm genera	G. Reeves, with F. Conrad	March 2005	pending
Produce 100 <i>rbcL</i> sequences for angiosperm genera	G. Reeves, with F. Conrad	September 2005	pending

### ACTIVITY 3: COURSES, LECTURES & PRACTICALS

To train researchers and students in biotechnology and management of genetic resources; keep track of dates, courses notes, number of attendees, etc.

<b>activity details</b>	<b>person(s) in charge</b>	<b>deadline</b>	<b>progress</b>
Train 2 PhD students	G. Reeves with V. Savolainen	End of project (May 2006)	Ms Ferozah Conrad and Mr Christopher Cupido are registered for PhD degrees at UCT and based at NBI Kirstenbosh; Mr Kenneth Oberlander is registered at Stellenbosch University.
Train 4 MSc students	G. Reeves with V. Savolainen	End of project (May 2006)	Ms Amelia Mabunda and Ms Leanne Mannie are registered at UWC and UCT respectively on the Systematics and Biodiversity Science MSc program. Mr Paul Naude and Ms Collette Robinson are resistered at RAU. Amelia and Leanne have completed the coursework element of their MSc program and have commenced work on their respective projects.
Provide 1-week training for 12 undergraduates	G. Reeves with F. Conrad	January 2004	11 students from UWC received one-week training from 28 <sup>th</sup> July - 1 <sup>st</sup> August 2003; 15 students (8 from RAU, 2 from U of Stellenbosch, 4 from UCT & 1 from UWC) received one-week training from 23 <sup>rd</sup> - 26 <sup>th</sup> March 2004
Provide 1-week training for 12 undergraduates	G. Reeves with F. Conrad	January 2005	pending
Provide 1-week training for 12 undergraduates	G. Reeves with F. Conrad	January 2006	pending

Train DNA bank manager	G. Reeves with M. Chase	Training visit attended by end of 2003	1-month training at Kew completed by Ms Kholiwe Balele from 21 <sup>st</sup> January – 20 <sup>th</sup> February 2004.
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#### ACTIVITY 4: MANUAL, PUBLICATIONS & PUBLICITY

To produce one manual on DNA banking and management of genetic resources, one field guide on South African angiosperm genera, biotechnology protocols, at least three high-profile scientific publications and publicise the project and the Darwin Initiative through conference attendance, website and press release; keep track of all printed material.

<b>activity details</b>	<b>person(s) in charge</b>	<b>deadline</b>	<b>progress</b>
Manual	V. Savolainen, with M. Chase, C. Williams, K. Davis, M. Wolfson and G. Reeves	draft due April 2004	Chapters outlined and all contributors confirmed (26 in total). Martyn Powell (RBG Kew) assigned as assistant editor. All chapters are currently in the process of being drafted. Negotiations are underway with publishers.
Biotechnology protocols (DNA extraction, PCR and sequencing)	M. Powell	April 2004	
Fieldguide	J. Manning	draft due April 2005	'A photographic guide to the wildflowers of South Africa' published December 2003, see <a href="http://www.briza.co.za/">http://www.briza.co.za/</a> for ordering
Peer-review publications (1 published and 2	G. Reeves, with V. Savolainen	End of project (May 2006)	One communication "A plea for DNA banking" published in Science 304: 1445, 2004.

<b>activity details</b>	<b>person(s) in charge</b>	<b>deadline</b>	<b>progress</b>
submitted)			
2 conferences attended	G. Reeves, with V. Savolainen	End of project (May 2006)	'Southern Connection 2004' hosted by University of Cape Town attended by G. Reeves & V. Savolainen. Presentation given by V. Savolainen and symposium organised by G. Reeves. G. Reeves attended 'Evolution 2004' and gave a presentation "Genetic resources, systematics and the CBD: a plea for DNA banking" in a special symposium entitled "The CBD - why systematists should care".
2 press releases in the UK	V. Savolainen	End of project (May 2006)	Item published in Kew Scientist Oct. 2003, see <a href="http://www.kew.org/kewscientist/">http://www.kew.org/kewscientist/</a>
2 press releases in South Africa	M. Wolfson	End of project (May 2006)	2 items published in NBI news, Sept. 2003; March 2004. Biannual newsletter currently being printed as a joint publication with the NBI's Threatened Species Program and Millenium Seed Bank project. First issue to be published in October 2004.
Project website hosted at Kirstenbosch	G. Reeves and DNA bank manager	Website online August 2003	Online since August 2003, see DNA bank at <a href="http://www.nbi.ac.za/frames/researchfram.htm">http://www.nbi.ac.za/frames/researchfram.htm</a>