

Mary Seely, visionary scientist and dedicated teacher, turns 70

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Mary Seely's name has been indelibly associated with environmental science in southern Africa for more than three decades. Her name is also synonymous with that of Gobabeb, a place in the Namib Desert which marks the beginning of her journey into the science of arid ecosystems. The year 2009 is significant for two anniversaries: Mary's 70th birthday, and 50 years of research at Gobabeb. The story begins with an expedition of scientists in 1959, searching for a perfect site for the study of the unique insect life in the Namib. They found that Gobabeb—derived from its name in the Topnaar language, */Nomabeb*, meaning the 'place of the fig tree'—met their criteria, and it was established as a research station in 1962. Easy access to three distinct ecosystems offered great opportunities for comparative studies: the vast sand sea to the south; the stark gravel plains stretching to the north; separated by the ephemeral Kuiseb River.

Mary, an American biochemist, arrived there as a post-doctoral student in 1967 to work under the late Charles Koch, director of the Desert Ecological Research Unit. She was appointed director after his death in 1970—a young woman having such a leading position in that time and context, was, to say the least, both controversial and challenging. Undeterred, Mary led Gobabeb to become an international focal point for desert research, attracting visiting scientists from countries worldwide. She developed a prolific research platform at Gobabeb which included several post-doctoral positions, while also drawing on the cooperation of many scientists based elsewhere.

Most significant for Mary were alliances with several leading South African scientists, including Bob Brain, Shirley Hanrahan, Gideon Louw and Duncan Mitchell. From abroad came Cliff Crawford, Bill Hamilton, Nick Lancaster, Gary Polis, and many more. Over the course of three decades, with Mary at the helm, Gobabeb functioned as a productive scientific hub, with an output of more than 1 200 publications on desert climatology,

ecology, physiology, geology, geomorphology, archaeology and sociology.

What, during this first phase of Mary's career, were the keys to her success? It is clear that a convergence of fate, fortune and Mary's own special brand of energy, focus and self-motivation, all worked in her favour. The locality and research function of Gobabeb provided the perfect springboard to her career, together with the support of several colleagues and friends who helped to open doors, which she had no hesitation in entering! Much of the success of the Gobabeb research programme related to Mary's commitment to facilitating other people's research and becoming directly involved with research projects that were out of her own field, but that added to understanding of the Namib ecology. Gobabeb became a place where all were welcome. She has always worked tirelessly and without complaint, immersing herself fearlessly in the big issues, ever seeking out (and implementing) ways to do things better. She will be heard saying, 'Make use of what you have, then build on it.' She demonstrated this from the beginning, making minimal funds go a long way, while doggedly building up an increasingly viable and professional institution. An empathic human being, she is quick to offer a helping hand whether on a personal level, or to facilitate study and career opportunities for her protégés. 'Out of the box' thinking is Mary's challenge to all, be they aspirant scientists, peers and colleagues, or young people who are 'finding themselves in the desert'. Her favourite (and famous) comment on reviewing first drafts of publications is 'So what?', forcing the author to go back and find the 'gee whiz' aspects of the subject, and cut the waffle.

Mary's characteristic focus on her goals, and her perseverance in meeting them against all odds, paid off at the time of Namibia's independence in 1990. The second phase of her career began at this time, with a crisis: South African funding which had underpinned Gobabeb was withdrawn, and closure was imminent. But Mary saw beyond Gobabeb, to the potential for applying science in the development arena. Her establishment



of the Desert Research Foundation of Namibia (DRFN) opened a gateway in Namibia that served to connect science to development, translating desert knowledge into policy, training and capacity, awareness and sustainable development. She simultaneously activated Gobabeb as a site for integrated training, as well as maintaining its research and long-term monitoring functions, while dedicating enormous energy to securing funding for the research station.

Mary's work pioneered desertification and land degradation interventions, action-based as well as published. As the driving force behind Namibia's Programme to Combat Desertification (Napcod), her efforts have linked a range of United Nations conventions, government departments, the NGO sector and communities. So effective is this approach that most Namibian land degradation programmes are based on Napcod principles.

By now in 2009, Mary's 70th year, she is recognised widely for her contributions both as an academic and as an applied scientist: she has been awarded three honorary professorships, a fellowship and several D.Sc. and medal awards, and most recently has been appointed as land degradation advisor to the scientific and technical advisory panel of the Global Environmental Facility. She is author or co-author of more than 130 peer-reviewed publications, ten books, and numerous environmental reports, conference proceedings and popular articles. Through her research, publications and supervision (some 60 Masters and Ph.D. candidates), she has inspired several generations of scientists. Mary's commitment to training and education is evidenced by the many students participating in the programmes she has established, who now excel in natural and social science fields. She is regarded as a mentor by many leading or upcoming scientists in the region.

Although Mary retired in 2006 from her

position as director of DRFN, she has since focused her efforts on the union between the Namibian Nature Foundation and DRFN. The emergent Namibia Institute for Sustainable Development is a greatly strengthened NGO, which promises to effectively leapfrog many environmental hurdles. It will no doubt also offer Mary a challenging third phase in her career! Never neglecting her desert roots, she

continues her full involvement as active Gobabeb associate and member of the board of trustees. Her advice on environmental matters is called upon by numerous influential people from institutions and governments in Africa and worldwide. She certainly lives up to the adage, 'if you need something done, give it to a busy person'; she is well known for her unconditional willingness to help or advise

friends and colleagues, to initiate and participate in programmes, however busy she may be. When asked what motivates her incredible drive and commitment, she replies, 'Because I believe in the potential waiting to unfold, potential in the human resources that will ensure equity, efficiency and environmental sustainability'.

We thank Shirley Hanrahan, Carole Roberts, Emily Mutota and Sharon Montgomery for comments. □