

VICE CHANCELLOR'S DISTINGUISHED AWARD
FOR COMMUNITY ENGAGEMENT

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The Biological Control Research Group (BCRG) in the Department of Zoology and Entomology focuses on understanding the ecology, biology and management of invasive aquatic weeds. Invasive aquatic weeds, both floating and submerged, continue to pose a threat to the integrity of South African aquatic ecosystems and the quantity and quality of potable water, costing the government millions of Rands to control each year. Their research comprises the development of biological control methods for these invasive plants, which can then be implemented by various stakeholders, from governmental organisations, to local communities and private landowners. Their expertise has been called upon to assist in the control of these weeds beyond our borders, throughout Africa, and into Europe, the USA, and as far away as Australia and New Zealand. But the BCRG believe that their research should go beyond the lab and out into the community, where it should be implemented through open communication and the transfer of appropriate technology. They maintain that biological control, and the science behind it, has the ability to empower local communities to manage their own natural resources. To this end, the BCRG runs a fully accredited Weed Biological Control Short Course through Rhodes University which teaches community members the basic tenets of invasive weed ecology and biological control. Further, the BCRG runs the Disabled People's Weed Biological Control Short Course in partnership with Grahamstown Area Distress Relief Association (GADRA) with the ultimate goal of providing trained individuals with job opportunities.

Their mass-rearing programs, in which biological control agents are cultivated for study and distribution, have been run in partnership with the Working for Water initiative, SAEON Elwandle Node, GADRA, and local Grahamstown schools. Their mass rearing programs have employed people with disabilities from the Grahamstown local community to assist in the general maintenance of the mass-rearing the facility, as well as the collection of insects for release. Further, a mass rearing programme has been initiated at Ntsika Secondary School,

where biological control agents for water hyacinth, South Africa's worst aquatic weed, and agents for various cactus species, will be mass reared for release around the country.

Additionally, the research group has expanded their project beyond the science of biological control, working hard to demystify science, and demonstrate that, by using the appropriate techniques, the layman is also able to play an active role in the production and distribution of biocontrol agents, ultimately enabling anyone to take responsibility for the control of invasive alien weeds in South Africa. Their Biology Internship programme run in collaboration with Victoria Girls High School, Graeme College and Ntsika Secondary School encourages environmental stewardship in our local community, improving the quality of young science graduates and initiate a positive and productive relationship between a tertiary institution and grade school learners.

The reciprocal nature of their work has meant both the University and the broader community of Grahamstown have benefitted from their engagement initiatives. Professor Bernard, the Dean of Science, in support of the team's nomination writes

'Professor Hill and his group undertake basic research in applied fields and the new knowledge generated contributes to solving pressing environmental and agricultural issues which will improve the quality of life for people in our country. In this work he has created employment and training opportunities for disabled members of our community and learning opportunities for local learners. All of this done without fanfare, at little or no cost to the university and for the best possible reasons. Professor Hill and his group are wonderful examples of the positive contribution that we can make towards change in our country.'

