

## Wine and conservation in the Cape

Catherine Hughes & Kristal Maze

The Cape Floristic Region (CFR) is one of the hottest of the world's biodiversity hotspots and, together with the other four Mediterranean-type ecosystem hotspots Chile, California, the Mediterranean Basin and south western Australia, is a leading wine producing region. World over, expansion of the wine industry, the development of new cultivars and technology suggests that viticulture may expand into virgin lands previously considered unsuitable for agriculture. There is a growing concern among the conservation sector that the CFR's most threatened lowland habitats, as identified in the Cape Action Plan for the Environment (CAPE) as conservation priorities, may be targeted by this expansion.

The Western Cape's Mediterranean climate and cooling Benguela current makes it perfect for the cultivation of wine. With the proven positive effects of red wine on human health, world wine demand is on the increase. South Africa has a unique political profile, and only in recent years has the free market opened up to South African wine producers, allowing the industry to expand. Fertile, moister areas of species-rich Renosterveld are prime targets for conversion to vineyards and around 85% of West and South Coast Renosterveld shrubland has already been transformed either to wheat fields, vineyards or pastures. Renosterveld, a small-leaved vegetation type dominated by renosterbos (*Elytropappus rhinocerotis*), asteraceous species such as *Eriocephalus africanus* and an understory of grasses and bulbs, is one of the most threatened vegetation types in South Africa. Remaining areas of Renosterveld form tiny scattered fragments falling within agricultural areas which pose a significant conservation challenge.

The Botanical Society, in conjunction with the Percy FitzPatrick Institute at UCT, Elsenberg Agricultural College and funding provided by CABS and CELB units of **Conservation International**, has launched a study to investigate the possible effects of further wine expansion in the Cape Floristic Region. The primary focus is on the remaining islands of Renosterveld, of which almost nothing is conserved. Phase I of the study aims to assess the status of the South African wine industry and to identify economic drivers of vineyard expansion. Based on environmental and economic factors, geographic information systems will be used to predict areas suitable for viticulture. This project offers an opportunity to examine the potential threat of viticulture on biodiversity in one of the world's biodiversity Hotspots, as a pilot study for developing further research and potential mechanisms for engaging the industry in biodiversity "best practices". In the long term, the project will enable conservationists to work in conjunction with wine farmers and businesses to maximize both profit and job creation, while preserving viable regions of this rich vegetation type for future generations.

*Catherine Hughs is a MSc student at the Percy FitzPatrick Institute, University of Cape Town, Private Bag Rondebosch 7700, Cape Town, South Africa. E-mail: [chughes@botzoo.uct.ac.za](mailto:chughes@botzoo.uct.ac.za)*