

## Case study: Restoring Afromontane forests and grasslands

# Amathole region

The Amathole region is an area of high biodiversity that includes threatened Afromontane forests and grasslands. Widespread invasive alien plants and other pressures are resulting in degradation of the ecological infrastructure that not only affects several Critically Endangered species, but also impacts on ecosystem services that are important to people, such as flow of clean water. The use of the Critically Endangered Cape Parrot and Amathole Toad as flagship species has helped to encourage a number of conservation actions in the area. The establishement of the Amathole Catchment Forum will help to co-ordinate these efforts into a broader, landscape initiative that will promote sustainable catchment management.



### Background

The Amathole region is identified as a Key Biodiversity Area within the Maputaland-Pondoland-Albany Hotspot. This area is highly biodiverse and is habitat to a large number of endemic and threatened species. Amongst these is the Cape Parrot, a Critically Endangered South African endemic. There were originally large flock sizes covering a wider range in South Africa, possibly as far south as Cape Town, but the species is now limited to small populations in remaining patches of Afromontane forest, including the Amathole Mountains. The region is also important for several species of threatened amphibians. The most significant of these is the Critically Endangered Amathole Toad, of which no individuals were observed for a decade prior to 2011, and only six individual adults have been found thereafter. Evidence suggests that the species is limited to seepage areas within the Afromontane grasslands that occupy the majority of the Amathole region and are interspersed with mistbelt forests, thornveld and thicket habitats.

Over the last 250 years most of the large hardwoods, particularly the Yellowwood tree (*Podocarpus* sp.), in the Afromontane forest patches along the Amathole mountain range were selectively harvested for saw timber. Due to the increasing demand for timber and to protect indigenous timber from further exploitation, commercial plantation forestry became established along the mountain range. A by-product is reduced run-off from mountain catchments and further encroachment by pine and eucalyptus trees. In addition, black wattle and blackwood have become invaders along the catchments and rivers, shading out indigenous trees, degrading riparian zones and encroaching on grasslands. The Afromontane grasslands have been heavily impacted by overgrazing, agriculture and plantation forestry.



#### Action

A number of non-governmental organisations (NGOs) have been working independently within the Amathole region on a variety of projects. Much of the work has been focussed on community conservation, natural resource management and specific threatened species.



*Wild Bird Trust*: extensive historical logging has decimated the traditional food source of the Cape Parrot (the fruit of the Yellowwood tree) and reduced the availability of nesting sites. Combined with several other factors (including an illegal pet trade), the species is Critically Endangered and suffering from extremely high incidence of the serious Psittascene beak and feather disease. The iziKhwenene (Cape Parrot) Project aimed to uplift local communities by involving them in the rehabilitation of the most disturbed Afromontane forest patches on communal land. Community members are encouraged to collect yellowwood seeds, grow the seedlings and sell them back to the project for forest restoration. They have received training from Permaculture SA to improve germination success. Furthermore, 18 local community members are employed in fixed term contracts to assist with the removal of invasive plants and the planting of indigenous trees. Funds for this portion of the project are received from the Department of Environmental Affairs, Natural Resource Management (NRM), Land User Incentives programme, via Wildlands Conservation Trust. This has helped to create livelihoods for community members.

Endangered Wildlife Trust (EWT): the EWT's Amathole Freshwater Species Conservation Project, a collaboration of the Threatened Amphibian Programme and the Source to Sea Programme, has taken a number of measures to help ensure the conservation of threatened amphibian and fish species. It has initiated biodiversity stewardship with interested landowners at three sites where the Amathole Toad occurs. The EWT has also been working closely with forestry companies to improve the management of priority sites for this species and prevent further afforestation at a single identified site. Alien plant clearing is being conducted under the national NRM programme. Baseline data that is being collected will assist the development of species conservation plans and the tracking of the impacts and progress of the NRM work. The EWT Amathole Freshwater Species Conservation Project is also implementing conservation efforts for the threatened fish species of the region, such as the endemic Border Barb, for which conservation plans will include alien plant clearing, stream rehabilitation and general catchment restoration.

#### Achievements

Both the Cape Parrot and the Amathole Freshwater Species Conservation projects have successfully made use of Critically Endangered species to campaign for the conservation and restoration of ecosystems. These 'ecosystem ambassadors' have the potential to inspire significant levels of public interest. Flagship species give a 'face' to the issues, provide an indication of the common threats and show what can be done to promote conservation and restoration of ecosystems. When conducting education, awareness and interacting with the media, it is valuable to create a rallying point around a specific species of concern. These projects have successfully used social media, school education and community awareness programmes to encourage public support for the species. Importantly, action taken for these species is also likely to assist in the protection of other biodiversity and ecosystems in this biodiverse region with high levels of endemism.



#### **The Amathole Catchment Forum**

The various NGOs acting in the Amathole region realised that by collaborating with each other, they would be able to share experience, expertise and resources. Regional co-operation would also allow projects to avoid duplicating their efforts while still focussing on the priorities. These organisations have since established a formal partnership, in the form of the Amathole Catchment Forum, which aims to promote sustainable catchment management in the Amathole region. The forum is led by the EWT as part of its Healthy Catchment Alliance and it will represent the interests of the local stakeholders to the broader Mzimvubu-Tsitsikamma Catchment Management Agency. A large number of partners including government, NGOs, research institutions and community representatives are members of the forum. Through this forum, the different groups working within the Amathole region will be able to co-ordinate their efforts towards the catchment management in the broader region.

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