

## **Project Update: September 2009**

### **Staff development**

Since January 2009, Renu Karoo has maintained its staff of four full-time employees (Wilfred Luttig, Meraai Isaacs, Caroline van de Ross, and Maxelene Jaftha), and two students (Aneleh Vorster and Rudi Swart) who are working with Renu-Karoo for a year to complete the experiential training requirement of their Nature Conservation degrees. The whole team assists in developing and selling Renu-Karoo products, in environmental education and research activities associated with restoration projects. Wilfred and Caroline passed their learner driver tests in March 2009 and Wilfred plan to take his driver's test next month.

### **Indigenous seed production and collection**

Renu-Karoo established seed orchards in June 2006, and despite problems including drought, erosion and saline ground water, the orchards have flourished. The demand for indigenous Karoo seed is increasing. An increased public awareness of land degradation in the Karoo and the need for restoration is driving this growth in the market. Moreover, Renu-Karoo advertisements placed in the Afrikaans language farming magazine "Landbouweekblad", and information on our website and on other sites which carry our link, has made us accessible to this market. Our clients include the Wilderness Foundation of South Africa, a professional land restoration company, and a number of game and livestock farmers.

The unusually cold, wet autumn and winter stimulated excellent flowering and seed production by Karoo bushes in the Prince Albert district. Our seed orchard yielded 60 kg of seed of three kinds of indigenous bush seeds in September 2009. To expand our seed collecting capacity, we have established links with a team of self-employed women who weed and maintain gardens and grave-yards in the village, and employ them on an ad hoc basis to weed the seed orchard and collect indigenous seeds with our team in the orchard and along roadsides. Caroline van der Ross is largely responsible for productivity and quality of the seed collection and will one day also take responsibility for transporting seed pickers. We have also invested in a leaf-blower that we use to harvest seed mechanically. This is hand sorted and cleaned before it is packed, weighed, labelled and stored in the cool, dark seed store in the Renu-Karoo shed.

### **Indigenous plant propagation**

The shaded nursery built at Wolwekraal in January 2009 has now been improved by the addition of mist sprayers. These are improving the quality and quantity and increasing the range of seedlings and cuttings that we propagate. In addition to growing a wide range of locally indigenous shrubs and succulents for use in local gardens, we are producing trays of rooted cuttings of hardy indigenous shrubs for restoration work. These include *Pentzia incana*, *Portulacaria afra* and *Elytropappus rhinocerotis*. Most of the propagation work is carried out by Meraai Isaacs who takes responsibility for the nursery. Anneleh Vorster is developing a spreadsheet for tracking plant additions and sales.

## **Compost**

Wilfred Luttig is responsible for the composting component of the business. Demand for compost is growing. Local gardeners bring us their garden wastes and buy compost by the bag. Some gardeners have driven from neighbouring villages (100-150 km away) to collect loads of unbagged compost. Over the past six months, Renu-Karoo sold 20 cubic metres of compost to gardeners and the local Municipality and used approximately 3 cubic metres in the indigenous nursery and our on-site vegetable garden. Plants are grown in a mixture of 50% compost and 50% sand, and the production of our own compost has greatly reduced expenditure on planting substrate. We are proud to report that the local Municipality used Renu-Karoo compost, plants and staff skills to establish seven gardens in public places to give the village an indigenous and water-friendly image.

## **Knowledge-based services**

Over the past three months Sue Milton, Richard Dean and Nature Conservation students Anneleh Vorster and Rudi Swart Renu-Karoo staff have been involved in assessment of habitat suitability for re-introductions of indigenous game, particularly Mountain Zebra in the southern Karoo. The assessment reports included advice on restoration of natural vegetation to improve habitat quality. Although most of our clients are private landowners, we have also had the opportunity to serve the *Wilderness Foundation of South Africa*, an NGO that manages large tracts of land for conservation purposes. This NGO is actively involved in restoration of damaged vegetation on its protected areas and purchased 53 kg of indigenous seed from Renu-Karoo in August for this purpose.

Our on-going monitoring of vegetation rehabilitation in ostrich camps for the Ostrich Business Council Biodiversity is starting to yield results. Preliminary findings are that large-seeded shrubs (*Tripteris sinuata*) and nursery-grown plugs of *Pentzia incana* survived and grew far better than smaller seeded shrub and grass species in that area. Petra de Abreu, a Masters student sponsored by Asset Research (see [www.rncalliance.org](http://www.rncalliance.org)) and supervised by Sue Milton and Prof. Timm Hoffman at UCT will continue the research on natural vegetation establishment in old ostrich camps next year.

## **Environmental education**

Sue Milton and Anneleh Vorster ran three conservation days for farmers over the past three months. These included talks and field demonstrations on how to assess the condition of natural grazing land and how to facilitate recovery of bare, eroded and species-poor overgrazed rangeland.

On 26 September 2009, 21 students and teachers from St Cyprians High School in Cape Town spent four hours with Sue Milton learning about environmental and social problems in small Karoo villages. They visited water sources, looked at water use, water and waste disposal, learned how poverty resulted in use of wildlife as bushmeat and trees as fuel, and were introduced to the remarkable plant species richness of the area. They then visited the Renu-Karoo nursery, seed store and compost facility to see how a small business could address local environmental and social problems.

Sue Milton presented talk on possible effects of climate change on the local environment and economy and approaches to mitigation for the World Conservation day event in the village. This event was attended by local organisations and by school children. The talk was also published in the local newspaper. For the local labour day celebration Sue demonstrated how to grow trees from seed, and Renu-Karoo donated indigenous trees to three enthusiastic school goers.



Left: (A) Renu-Karoo presented talks on conservation and rangeland restoration for farmers up to 300 km from the village. (B) The Cyprian's high school from Cape Town visited. Right: (A) Mist sprayers installed in August. (B, C) Anneleh and Meraai now have a wider range.



Left: (A) Seeds collected by hand or with a petrol-driven leaf blower. (B, C) labeled and stored. Right: (A) The wet autumn and cold winter on the Swartberg mountains provided ideal growing conditions for Karoo shrubs. (B) The *Tripteris sinuata* bushes.



Left: A) The compost project has grown to 10 heaps. (B) Bagged compost sells well to local gardeners. (C) Compost was also key to the success. Right: Renu-Karoo seed orchard development from June 2006 to September 2009.



To supplement seed from our seed orchard we collected seed from road