



supporting conservation
education

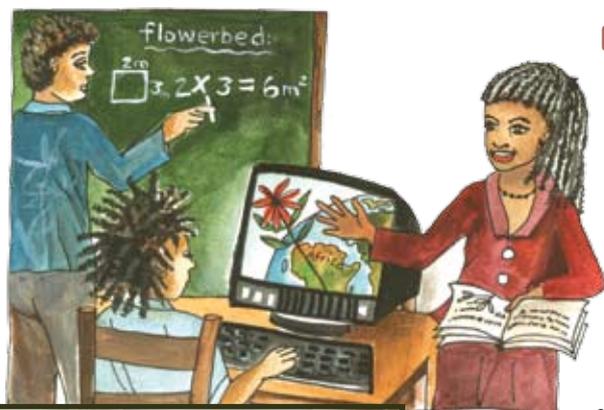
The C.A.P.E. 2000 Strategy acknowledges that if the people of the Cape Floristic Region are to understand the benefits of biodiversity and participate in addressing biodiversity issues, then environmental education processes in the region must be strengthened.

For decades, many organisations and individuals have been involved in raising awareness, developing environmental literacy and involving people in environmental action projects in the region. But over the years, as conservation budgets have declined, a number of organisations that were once leaders in the field have lost environmental education capacity. Guided by the Rhodes University Environmental Education and Sustainability Unit, C.A.P.E. is striving to reverse this trend by developing a strategic framework for conservation education in particular, conducting audits of organisational capacity and resource materials, and providing professional development opportunities for practitioners.

This chapter reflects on a range of existing environmental education and youth development initiatives in the region and describes how the advent of C.A.P.E. has started to provide existing programmes with a stronger biodiversity conservation focus.

CHAPTER 6 Supporting conservation education

6.1 A long tradition and a vibrant programme



(i) Biodiversity conservation and education in the Cape Floristic Region

The big picture of conservation education in the Cape Floristic Region (CFR) is so expansive that the challenge in this section is to select a few illustrative examples to focus on drawn from the numerous projects and programmes. We shall look in detail at a few current initiatives. It is also important to acknowledge the many committed educators who have inspired and enabled learners of all ages to understand more about, and care more deeply for, the fynbos and “fyn mense” (fine people) of this region.

Centres of influence

Conservation education has been one of the strongest influences on the development of what could be called the environmental education movement in Southern Africa. Led by government and

non-governmental organisations, such as the Wildlife and Environment Society of South Africa (WESSA), CapeNature, WWF-SA and the Environmental Education Association of Southern Africa (EEA-SA), environmental education evolved out of concerns about the need to conserve nature and the natural resources of the country.

Many of the early efforts in conservation education were championed by environmental education centres, which became popular throughout South Africa in the 1980s. It is worth noting, however, that one of the very first “centres” dedicated to teaching scholars about the natural environment was established at the Kirstenbosch National Botanical Gardens in 1923. Run for 70 years by the Provincial Department of Education, the Nature Study School was taken over by the National Botanical Institute in 1993 and renamed the Gold Fields Environmental Education Centre (Chapter 6.3 iv). This and other centres, such as the Parmalat Enviro Centre near Kommetjie and the Environmental Education and Resources Unit at the University of the Western Cape, continue to provide people with places to meet, share, learn, and mobilise around environmental concerns. Unfortunately, declining levels of investment in education as a key performance area

Why conservation education?

C.A.P.E. refers quite specifically to “conservation education” rather than environmental education or education for sustainability. C.A.P.E. sees its role as supporting education initiatives with a particular focus on biodiversity.



Luzuko Primary School in Gugulethu was one of the first schools in South Africa to receive their Eco-Schools flag.

in some conservation organisations has resulted in the loss of some highly influential environmental educators, centres and programmes.

C.A.P.E. meets Eco-Schools

It is not surprising that schools are very often the focus of environmental campaigns and programmes. They are, after all, sites of learning and socialisation, where environmental knowledge can be infused and the habits of sustainable living inculcated. An organisation or project wanting to disseminate information or promote a cause can reach large numbers of people relatively efficiently and effectively through these institutions. In fact, schools do sometimes feel besieged by the good causes they are expected to adopt!

The international environmental programme Eco-Schools has developed a useful framework that helps schools to respond more strategically to environmental challenges by identifying their particular environmental priorities and developing policies and action plans for sustainable management and lifestyle choices. Since the programme was first introduced in South Africa in 2002, a growing number of schools have signed up, with 224 nationally and 20 in the CFR achieving Eco-Schools status in 2005. Some C.A.P.E. partner organisations are finding that the Eco-Schools programme is helping them to work more productively with schools, and some have chosen to support a cluster of local schools as a “node co-ordinator”.

Rhian Berning, regional co-ordinator of Eco-Schools in the Western Cape, reports that Crestway Secondary School in Retreat on the Cape Flats, is one school that has made a significant contribution to local biodiversity conservation. “Learners protested against the Blouvlei wetland



being converted into a parking lot for the library,” reports Rhian. “They motivated that the area be leased to the school and have been granted a ten-year lease from the City of Cape Town. Now they are cleaning up, protecting and utilising the area for environmental education. The learners played an integral, proactive role in preventing the destruction of the wet-

Environmental education centres in the Cape Floristic Region involve hundreds of thousands of learners in environmental learning and action every year.

Educators doing it for themselves

One of the most inspiring stories of environmental education capacity development in the CFR is an initiative undertaken by Natsoc (the Naturalists’ Society), an interest group started during the 1980s by a group of biologists, mainly from the University of the Western Cape, and teachers employed by the then House of Representatives. For Natsoc members, the Potberg Environmental Education Centre at De Hoop Nature Reserve became their second home. The educators regularly took their students there on field trips, and as a group, they shared their knowledge of the diverse ecosystems at the reserve as well as field work and outdoor education skills. As their competence grew, they started sharing their knowledge and skills with colleagues. The cadre of skilled and committed environmental educators that was developed as a result of these processes of peer education and mentorship has had a significant impact on environmental learning in schools, community groups and further education institutions, and on environmental education policy in the Western Cape Education Department (WCED). Potberg has continued to be involved in the Environmental Education Lead Teacher Project co-ordinated by the WCED’s district office, serving the southern areas of Cape Town.

Enabling environmental education in the City of Cape Town

C.A.P.E. has identified the critical role of municipalities in enabling biodiversity conservation and sustainable livelihoods. At the Fynbos Forum workshop, the City of Cape Town stood out as a local authority that has taken its role in environmental education to heart. Through the vision and commitment of its environmental education co-ordinator, Lindie Buirski, the City's Environmental Management Department has taken the lead in supporting and strengthening environmental education processes in the City.

The City's Environmental Education and Training Strategy and its monitoring and evaluation handbook for environmental education serve to guide and strengthen the City's initiatives and those of its many partners. One of the City's initiatives that has had a profound effect on schools and environmental organisations is the annual Youth Environmental School. Every year since 1998, children and teachers from primary schools all over the City have participated in a week-long programme of environmental lessons provided by City departments and environmental service providers, which has raised awareness of environmental issues as well as the organisations and learning support materials that can help people live more sustainably. This annual event has also strengthened networking among environmental education providers in the City and, through the implementation of an evaluation component, provided partners with valuable feedback to help them improve the quality of their programmes.

Through organising or supporting a busy programme of environmental events, workshops, resource material development initiatives and partnership projects such as Eco-Schools and the EduTrain, Lindie has done more than most people to enable environmental education in the largest metropolitan area in the CFR.



Lindie Buirski, City of Cape Town environmental education coordinator, has taken the lead in supporting and strengthening environmental education processes in the city.

in this publication. Richard Cowling, a C.A.P.E. Gold Award winner received this recognition, for among other things, his contribution to a whole generation of scientists and practitioners (Chapter 7). Working with learners of a very different age, Ali Corbett of Cape for Kids has developed story books about the adventures of "Monty the Mongoose" that have delighted thousands of pre-schoolers over the last ten years. Presenting regular environmental puppet shows at venues like Kirstenbosch, Table Mountain and Rondevlei, Ali and her team focus on an age group that is often overlooked by conservation organisations, but who are open and responsive to learning and caring about their world.

The scope of it

At the Fynbos Forum in 2004, a workshop session was held to investigate the scope of environmental education processes in the region. People involved in a wide range of initiatives, from public awareness, community development and formal education to agricultural extension and skills training, shared their experiences.

In addition to numerous projects supporting environmental learning and action in schools, the session also revealed that there is a lively tradition of community participation in biodiversity monitoring and conservation projects in the region. The Protea Atlas Project and CREW were highlighted as projects encouraging community participation and a "learning through doing" approach (Chapter 4.2). People also reported on initiatives in agricultural areas, such as LandCare (Chapter



Deliberations at the Fynbos Forum and C.A.P.E. Partners' Conference have resulted in sound recommendations for both policy and practice in the Conservation Education Programme, managed by Jayne Coleman (left).

land and made a short video of their success story. Crestway High School achieved Eco-School status in 2005 and certainly is a role model for other schools!"

Educating at many levels

In the CFR, the educators based at further education institutions—the universities and colleges—have had a profound impact on many generations of students, equipping them with knowledge, honing their critical faculties and fanning the "fire in the belly" that has motivated people to initiate many of the projects

5.2), the Gouritz Initiative (Chapter 2.7) and the Badger / Beekeeper Extension Project, which are vital because of the challenge to conserve biodiversity within productive landscapes. Some of the workshop participants (e.g. Flower Valley Conservation Trust and Green Futures, (Chapter 5.3 i)) discussed the accredited training programmes they were developing, which were starting to contribute to the development of sustainable nature-based livelihoods in the region.

What have we learned?

The Fynbos Forum workshop identified a number of issues as well as opportunities in relation to environmental education processes in the region:

- In most conservation organisations, education capacity and resources are extremely limited; there is a need for capacity building in education and communications.
 - Education programmes must be relevant to their particular context (e.g. age, social group, language, aspirations). It is important to monitor and evaluate programmes.
 - Working through existing community structures, meeting places and communication channels is effective and contributes to the sustainability of programmes.
 - In a region of huge biodiversity, there is a need for more site-specific information.
 - The cities are generally very well provided for in terms of environmental service providers and education programmes; rural areas tend to be overlooked.
 - An “us and them” approach tends to polarise rather than involve people and is not effective.
 - The process of accrediting training providers and courses is extremely bureaucratic, slow and challenging, especially for micro-enterprises. However, trainees would rather attend accredited courses.
- *Enthusiastic individuals or “champions” can have an enormous influence within their communities.*
 - *The new National Curriculum for schools provides numerous opportunities for environmental learning, but many educators need a period of mentoring and support to integrate biodiversity and sustainability issues.*
 - *Environmental education processes within the CFR can be strengthened by networking. Networks such as the EE Friends and GREEN exist, and there are also opportunities to communicate via the C.A.P.E. Coordination Unit and the Fynbos Forum.*
 - *Opportunities to share information about biodiversity and sustainable living are limited only by the imagination.*

(ii) The C.A.P.E. Conservation Education programme

C.A.P.E. has identified education and capacity building as one of its cross-cutting programmes. In September 2004, the C.A.P.E. Conservation Education programme was launched to work with C.A.P.E. partners to strengthen learning and local action for sustainable living in the CFR. The project management team is based at the Rhodes University Environmental Education and Sustainability Unit in Grahamstown.

Through the C.A.P.E. Conservation Education programme, developments in biodiversity conservation policy and practice in the region can inform approaches to conservation education, and vice versa. For instance, the project team has identified a number of biodiversity research and planning approaches in C.A.P.E. that resonate with active learning approaches in the National Curriculum (see diagram). Practically, educators and learners in the CFR can survey landscapes, audit biodiversity, investigate ecosystem services and livelihoods and assess risks. These investigations can inform discussions on



Rob O'Donoghue, now Professor of Environmental Education at Rhodes University, manages to combine the challenges of academic rigour in conservation education research with its practical application in the field. Indeed, his particular approach to action research embodies learning for local action, particularly among educators, whatever their background. This approach provides a firm foundation for the C.A.P.E. Conservation Education programme.

A question of sustainability

Do we know what sustainable development is so that we can educate people “for” it? Sustainability is a question; as educators, we need to provoke people to ask questions, rather than lead people to answers we already have.

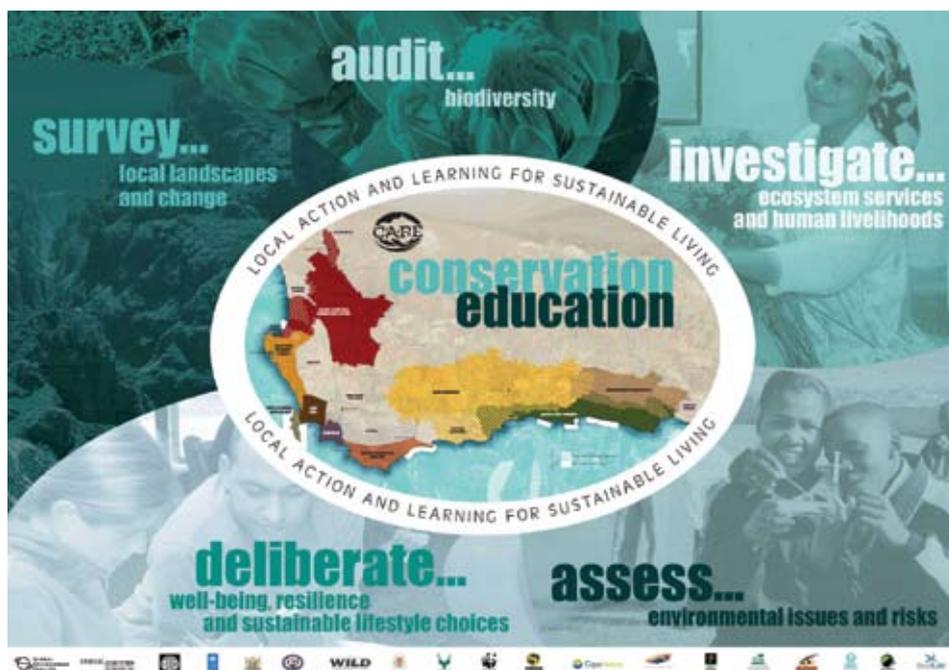
—Rob O'Donoghue



C.A.P.E. Conservation Education programme activities

The C.A.P.E. Conservation Education programme works with C.A.P.E. partners and provides support through the following activities:

- Co-ordination and networking
- Strategy development
- Professional development
- Materials development
- School and education sector support



The C.A.P.E. Conservation Education programme has identified opportunities for learning and action that respond to issues of biodiversity and sustainable living in the CFR.

human well-being and lifestyle choices, enabling educators and learners to make informed decisions about living sustainably.

The C.A.P.E. Conservation Education Programme began with a road show and audit of resource materials for conservation education at the end of 2004.

During 2005 a number of people involved in conservation education in the CFR participated in a certificate course run through Rhodes University, which served to strengthen conservation education capacity and networking in the region. This section highlights some of the projects that participants in this in-service professional development course have been involved with (see articles on the education initiatives of GREEN (6.3 v), Kirstenbosch (6.4 iv), Natures Valley Trust (6.1 ii), SEED (6.3 iii) and Table Mountain National Park (6.3 ii)).

An audit of resource materials

The resource materials audit led to the compilation of a data base of many of the materials that are available to support biodiversity conservation education in the CFR. This list of books, field guides, magazines, posters, videos, websites and teachers' guides is available from the C.A.P.E. Conservation Education co-ordinator. It will be updated on a regular

basis to ensure that it serves as a useful first port of call for people seeking information on biodiversity and conservation education in the region.

The audit revealed a large number and variety of materials dealing with the biodiversity of the region, most of which provide fairly generic information. However, because of the high levels of endemism in the CFR, the challenge is to develop materials that help people to identify, investigate and care for the biodiversity of their particular area. The Botanical Society's series of wildflower guides is an excellent example of field guides that focus on particular areas and therefore enable relative novices to make sense of South Africa's rich biodiversity. A number of C.A.P.E. partners also demonstrated that digital technology can enable people to design and produce small print-runs of interpretative and educational materials that are relevant at a local level. For example, CREW, Nature's Valley Trust and the Table Mountain National Park have used digital photography and desktop publishing very effectively to develop full-colour materials such as plant identification guides for vegetation monitors, interpretative signage for self-guided trails, and activity cards for visiting school groups.

The audit encouraged educators to work more closely with researchers and



Jayne Coleman's involvement as C.A.P.E. Conservation Education co-ordinator, began at the C.A.P.E. Strategy workshop in 2000. She brought with her experience from the Land Claims Commission and on-the-ground experience in the Eastern Cape. Jayne has been responsible for the compilation of a database of materials available to support biodiversity conservation education in the CFR. Jayne discusses the programme with Rob O'Donoghue and Trevor Sandwith.

The EnviroLearn portal

The Department of Education has set up an environmental education Internet portal, enhancing access by schools to environmental information and learning activities. www.envirolearn.org.za.

resource managers and to draw on the rich stores of biodiversity information being compiled through C.A.P.E., for example by the BGIS Unit (Chapter 7.5). Closer collaboration can enhance both the relevance of conservation education programmes, and the ability of researchers and resource managers to communicate with the public.

Educational materials tend to be used most effectively when they are developed to support learning and action within the context of a programme, rather than when they are produced as an end in themselves. People intending to develop materials should consider the context in which they will be used and in some cases may need to help people to use the materials. A pilot phase is also recommended in order to refine the resource materials through observing them in use.

The audit noted that people wanting to develop resource materials for schools must take the requirements of the curriculum into account. The fact that the new National Curriculum provides many environmental learning opportunities should encourage environmental organisations to identify where they can most usefully support learners and teachers with information and active learning opportunities.

What have we learned?

- *One of the principles upon which the new National Curriculum in South Africa is based is to promote a healthy environment, as defined by the Constitution. All learning areas provide opportunities for environmental learning, and conservation agencies need to explore how they can best use these opportunities to work with schools.*
- *Simply “raising awareness” about environmental issues like biodiversity loss is not enough; it tends to lead to a sense of fear and disempowerment. Learning through doing enables people to become aware and learn while doing something practical about these issues.*
- *Once-off education projects have limited value; in order for education processes to be sustained and effective, they need to be embedded within institutions.*
- *For conservation agencies to be effective, they need to make education an integral part of their core business.*
- *To support local action, locally relevant information is necessary. Conservation agencies can help to adapt generic materials for local use.*



Heila Lotz-Sisitka heads the Rhodes University Environmental Education for Sustainability Unit. With a background in participatory educational materials development, she has been a leading figure in establishing environmental education in Curriculum 2005 and the National Qualifications Framework in South Africa. Her research interests include Curriculum Policy Research, course accreditation within the National Qualifications Framework, environmental education in industry and participatory approaches to adult learning.



Andy Gubb

Andy Gubb provides leadership for the Western Cape Branch of the Wildlife and Environmental Society of Southern Africa. He has championed the role of NGOs, not only as advocacy organisations, but more recently, as effective project implementers. Andy has not been afraid to take on even the most powerful adversaries when the principles of environmental justice or sound decision-making are at stake. It has largely been under his influence that the membership of WESSA has been effective in a range of programmes, including EcoSchools, CoastCare, Working for Water and many “Friends” groups that undertake local environmental action programmes. A willing and active participant in the many C.A.P.E. structures, Andy provides a critical and constructive voice in CFR conservation circles.





6.2 The children of C.A.P.E.

(i) Conservation education in the City of Cape Town's nature reserves

Politically and administratively, the City of Cape Town has been in a state of transition for over a decade. Separate municipalities have been welded into a UniCity, and elected representatives and managers have come and gone. Despite the ongoing belt-tightening a, it is noteworthy that a

number of the reserves have managed to make conservation education a priority, and have made considerable and effective progress.

Making a plan for education

In 2004 an evaluation of conservation education programmes in four nature reserves revealed that, despite a severe shortage of nature conservation posts within the City, one reserve had chosen to dedicate one of its two conservation positions full-time to education. In another reserve, the Friends group had made education a priority, and appointed a full-time education officer plus a part-time assistant to run their well-equipped resource centre. The managers and friends of these urban nature reserves know that education capacity is essential in order to enhance access to, and support for, these open spaces in the midst of densely populated suburbs.

The reserves that participated in the survey, Helderberg, Rondevlei (Chapter 2.3), Tygerberg / Durbanville and Zandvlei Nature Reserves, are not the only ones offering education programmes. Cape Flats Nature (Chapter 2.3) co-ordinates programmes at four small natural areas, a Friends group is active at Rietvlei, and the Blaauwberg Conservation Area (Chapter 2.3) appointed an education officer in 2005.

At Zeekoevlei Nature Reserve, a non-profit Trust runs the Zeekoevlei Environmental Education Programme (ZEEP), employing five staff members plus international volunteers to offer high quality, low-cost three-day programmes for schools and community groups from the Cape Flats. Participants have the unique experience of spending one of the two nights in a bush camp at Rondevlei, the only wetland in Cape Town with resident hippos. The educators provide environmental programmes for schools that are relevant to the curriculum and can custom-design programmes that include life-skills, leadership and health education.

Sharing across the City

With the formation of the UniCity and the planning of a Biodiversity Network (Chapter 2.3), the opportunity exists to build on the efforts of these nature reserves, and to develop a more integrated approach to conservation education across the network of natural areas in the City.

Transforming young lives at Zandvlei

Zandvlei, which enters the sea at Muizenberg on the False Bay coast, is one of the most important functioning estuaries in the CFR. The Zandvlei Trust is an NGO that has been taking a keen interest in the conservation of the vlei since 1988. In partnership with the City of Cape Town, which manages the nature reserve, the Trust started an education and outreach programme in 2002. In only three years, school visitor numbers have grown from 300 to more than 2000 per year, with most children arriving either on foot from local schools or by train.

The Zandvlei Trust has a special relationship with three local schools – children from Lavender Hill and Steenberg have formed environmental clubs and visit the reserve regularly. The club from Zerilda Park Primary has been visiting every month for more than five years, and these experiences have had a profound effect

on some of the learners. Erika Foot, the manager of Zandvlei Nature Reserve has experienced the transformative impact of conservation education on one young learner, Giovanni, who started visiting Zandvlei in Grade Five, a number of years ago: “He became so interested in the environment that he would take bird books out of the library on weekends. He developed his own knowledge and shared it with others. Giovanni often gets a group of children together during the school holidays and takes them on guided tours of the reserve.”



Giovanni with a leopard toad.

As part of the evaluation process in 2004, the education officers participated in an “Educators’ Week” during which they visited one another’s centres, shared programme ideas and materials, explored new opportunities and developed common procedures and systems. Having worked fairly independently and in different contexts, the education officers had much to learn from the approaches of their peers, and the week was an eye-opener in terms of what different people and centres had to offer. They left determined to make Educators’ Week an annual event.

Benefiting from biodiversity

The City’s network of nature reserve is ideally placed to serve the people of Cape Town and provide access to a wide range of natural areas and biodiversity, from wetlands and coastal areas to fynbos and renosterveld. Small reserves scattered throughout the metropolitan area mean that, in theory at least, most communities can enjoy the recreational, educational and economic benefits of biodiversity literally “on their doorstep”. This reduces the cost of transport and can serve to enhance the sense of local ownership of these natural areas by neighbouring communities. However, it is generally only those natural areas that have adequate staff and basic facilities that are truly accessible to people. In a society where most people see the bush as a hazardous place where people are in danger, having biodiversity on your doorstep may not necessarily be seen as an advantage. It can take as little as access control and clean toilets to start turning a natural area into a community asset rather than a liability.

Despite limited staff, the nature reserves in the City that have education officers offer an impressive range of services, including educational visits for all ages from pre-school to the elderly, environmental clubs, overnight camps, teacher workshops, an annual environmental Olympiad, and support for school projects. The four education officers who participated in the evaluation engage with about 20 000 people each year between them; that’s 20 000 opportunities to make these natural areas and their biodiversity more meaningful to neighbouring communities and visitors.

A vision worth cultivating for the City’s network of nature reserves is to make



quality biodiversity experiences accessible to all neighbouring communities, and that every learner in Cape Town should visit a City nature reserve at least once during their school career. With the nature reserves recently having amalgamated with the environmental planning department in the City of Cape Town, it may be time to start developing a more co-ordinated approach to conservation education within the City’s Biodiversity Network.

What have we learned?

- *Conservation education programmes in local nature reserves are helping the City of Cape Town to achieve a key objective in its Biodiversity Strategy: the empowerment of the citizens of Cape Town with regard to biodiversity issues in order to effectively share, own and take collective responsibility for the City’s exceptional biodiversity resource.*
- *Conservation education in the City of Cape Town’s nature reserves could be managed as an integrated programme. This would increase co-ordinated planning and reporting, analysis of the overall effectiveness of programmes, and opportunities for staff to collaborate to address issues of common concern (e.g. visits from township schools).*
- *The majority of groups visiting the City’s nature reserves for education programmes are from areas close to the reserves; in addition to communities benefiting from their neighbouring reserves, the reserves also benefit from greater support from their neighbours.*
- *Conservation education programmes in natural areas need to provide more opportunities for active learning in order to enhance not only environmental literacy, but also action compe-*





tence (the will and ability to take action) in response to understanding of environmental issues and risks.

- The new National Curriculum, with its emphasis on the development of skills and its foundation in principles of a healthy environment and social justice, can guide the development of relevant, innovative education programmes in urban nature reserves.
- The appointment of a full-time education specialist would provide needed guidance and support for education officers in the City's nature reserves and improve career opportunities.
- Because senior management required education officers to report on monthly visitor statistics only, it appeared that they had little interest in programme content or quality.
- Most of the education programmes in the City of Cape Town's nature reserves depend on partnerships with other organisations (e.g. Friends groups, clubs, Trusts and environmental organisations).

(ii) Nature's Valley Trust

Nature's Valley is a small coastal village lying alongside the Groot River estuary, just east of Plettenberg Bay on the southern Cape coast. Entirely surrounded by the Tsitsikamma National Park and Marine Protected Area, the village attracts residents and holiday-makers who appreciate its natural beauty and tranquility.

In December 2000, a group of local families who were concerned about the possible impacts of inappropriate development on the area, launched a community initiative to proactively maintain the environmental integrity of Nature's Valley and its surrounds. The Nature's Valley Trust (NVT) now takes the lead in mobilising an environmentally aware community, promoting appropriate and sustainable development in the area, and minimising negative impacts on the environment. Its energetic members have raised funds, formed partnerships and taken on a num-



Julie Carlisle, project manager of Nature's Valley Trust, has been involved in projects such as the re-introduction of the Brenton Blue butterfly to Nature's Valley, raising awareness about threats to the Salt River in The Craggs near Plettenberg Bay (home to unique aquatic insect species probably dating back to the ancient continent of Gondwanaland) from a number of proposed new property developments, and the establishment of the Salt River as an "outdoor classroom" in Nature's Valley.

ber of projects to conserve and restore their natural environment.

Bring back the Brenton Blue!

Just how far the community is willing to go in their efforts to restore their natural environment is demonstrated in their project to "Bring back the Brenton Blue". This critically endangered butterfly, the emblem of NVT, was found in the valley until the 1980s. Unfortunately, it lived exactly where most people wanted to build their houses—in the coastal dune fynbos between the estuary and the forest. Fortuitously, right in the middle of the residential area of Nature's Valley, a small area of coastal dune fynbos still remains. Without regular veld fires, the fynbos vegetation had become very old and the butterfly's host plant (*Indigofera erecta*) could no longer be found. After considerable negotiation with neighbours, NVT organised a controlled burn in this remnant patch of fynbos! In early summer of 2005, hand-reared butterfly larvae were carefully placed on healthy specimens of the regenerated host plant; the community now eagerly awaits the emergence of the first Brenton Blues in Nature's Valley in about 25 years.

Children's routes through Nature's Valley

The diversity of natural ecosystems in and around Nature's Valley is remarkable, and NVT has been making sure that

NVT Mission

To maintain the long term environmental integrity of Nature's Valley and surrounds by becoming proactively involved in issues that impact on the future of the area.



The Natures Valley Trust provides children from local schools and holiday visitors alike with exciting opportunities to experience and protect their environment, including coastal monitoring.

the “little people” of the valley have fun exploring them. Drawing on her storytelling and design skills, NVT Project Manager, Julie Carlisle, has created fascinating “outdoor classrooms” for children of all ages, complete with resource booklets and activities.

The Hobbit Trail wends its magical way through a tiny patch of indigenous forest; Billy (the Brenton Blue butterfly) leads children on a journey through the Fynbos Reserve; and the Treasure Route opens their eyes to unexpected finds in the local botanical garden. Using WESSA’s “Adopt a Beach” materials (Chapter 4.3), young people from two local schools regularly monitor the beach and rocky shore; and the Jurassic Trail draws attention to unique and ancient invertebrates recently discovered in the Salt River.

Julie explains that developing outdoor classrooms has enabled NVT, which lacks the staff or resources to visit schools, to make the diverse habitats of the valley accessible and interesting to teachers, learners and families. While having fun in beautiful surroundings, children gain a deeper insight into these sensitive habitats and learn to think critically about actions that impact negatively on these environments. The outdoor classrooms are also having an impact on the community as a whole, with parents reporting that their children are sharing with them what they have learnt and experienced.

During 2005, four Grade Eight learners from The Craggs Primary School impressed audiences at both the C.A.P.E. Partners’ Conference and The Fynbos Forum with a play they had written about the Brenton Blue butterfly after a class



Ashby Prins, Brigette Alexander, Ashleigh Solomons and Nathan Windvogel from Craggs Primary presented their own play on the Brenton Blue Butterfly at the C.A.P.E. Partners’ Conference.

visit to Nature’s Valley. It showed not only how much they had learnt about the environment in the Fynbos Reserve outdoor classroom, but also that they were willing to advocate its conservation. “Never underestimate a child’s ability to absorb information and reason through



Weird, wonderful and VERY old!

The Salt River near Nature’s Valley is a unique river system. A few years ago, surveys revealed that it is home to a number of very unusual aquatic insect species, most of which had not yet been described by scientists. These insects seem to be related to species that lived before the super-continent Gondwanaland broke up, and Africa separated from South America, Australia and Antarctica. Some of these insects were so unusual that scientists had to create new groups (genera) in order to classify and name them.

Ongoing developments in the Salt River catchment pose a very real threat to the quantity and quality of water in the river, and to the survival of these strange invertebrates. NVT has raised funds to commission a survey to monitor the health of the river, and a stakeholder engagement process to produce management guidelines for river users.



Advocate Naledi Burwana-Bisiwe hands over a C.A.P.E. Recognition Certificate to Julie Carlisle for the project work being undertaken by the Nature's Valley Trust.

action, or to critically look at his or her environment," Julie cautions. "Children have an enormous capacity to make a difference and to raise awareness in their own communities."

Seeking tangible benefits from conserving nature

People who live in the area are not only interested in the Salt River because of its strange insects, but also because this small river supplies The Craggs with water. Plans to build a low-cost housing development, Kurland Village, in the catchment of the Salt River resulted in concerns about possible impacts on river flow and water quality. As an "interested and affected party", NVT participated in meetings to discuss the environmental impacts of the development. Misgivings about the quality of the environmental management plan drove a wedge between the Nature's Valley and Kurland Village communities, and it soon became clear that something needed to be done to address the misunderstandings and foster more positive relationships between these neighbouring communities.

Adopting a 'triple bottom line' approach has helped the communities to move beyond the stage where focusing on their separate interests left them vulnerable to political manipulation by the developers. They have worked together to develop a project that both raises awareness of the value of the natural environment and contributes towards local job creation.

NVT invited 18 people from the area who are part of the CoastCare programme to become accredited Tsitsikamma Eco-Guides, providing them with an opportunity to earn an income from sharing the Nature's Valley environment with visitors. They appointed an accredited company to run a six-month eco-guiding course focusing on various aspects of local natural history and culture, plus training in small business development and marketing. SANParks is a partner in this project and provides the office space from which the trainee guides can operate. The training experience is very practical, with the students participating in market research and the development of a business plan, and obtaining practical experience as "development guides" during the December school holidays. Once qualified, the Eco-Guides will be able to earn an income from conducting interpretative trails in the forest, fynbos and along the coast, as well as specialist birding and cultural trails.

This project aims to demonstrate to both visitors and residents of Nature's Valley and Kurland Village that when natural ecosystems are conserved, people benefit. By ensuring that the Kurland Village development does not negatively impact on the sensitive Salt River ecosystem, not only will the river be more likely to supply sufficient clean water to meet local needs, but the Eco-Guides will be able to earn an income from introducing people to this and other unique ecosystems. This innovative response to a conflict situation promises to address not only concerns about biodiversity conservation and local economic development, but also to contribute to better relationships between neighbouring communities in this part of the Garden Route.



Brenton Blue Champs.



6.3 Working with the educators

(i) Ushering in the United Nations Decade of Education for Sustainable Development (UNDESD)

The 1992 Earth Summit in Rio de Janeiro marked the beginning of an unprecedented effort to understand and work toward achieving sustainable development – addressing human needs holistically by integrating environmental, economic and social goals. The World Summit on Sustainable Development (WSSD) held

in Johannesburg in 2002 highlighted the vital role of education, not only in building awareness of the need for sustainable development, but in fostering the necessary changes to make it a reality at all levels. Even so, sustainable development is still a foreign concept to most people, and we generally lack the will and motivation to make the necessary changes in our lifestyles and actions. As a result, the global environment continues to deteriorate. The United Nations therefore appointed UNESCO as the lead agency to promote Education for Sustainable Development during the decade 2005-2014, creating an opportunity to rally the support of people at all levels to learn to live in a way that sustains all life on earth.

The **United Nations Decade of Education for Sustainable Development (UNDESD)** was officially launched at United Nations Headquarters in New York on 1 March 2005, by UNESCO's Director General Koïchiro Matsuura. Recognising the significance of this international initiative, the EE Friends, a network of environmental educators based in Cape Town (Chapter 7.6) approached the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) to launch the Decade in the Western Cape at the Sustainable Development Conference in June 2005. MEC Tasneem Essop gave her full support and consequently the Western Cape became the first province in South Africa to launch the Decade. This took place on 20 June 2005 at the International Convention Centre, with the MEC for Education, Cameron Dugmore, officiating.

In the Western Cape, environmental educators have seen the UNDESD as an opportunity to initiate new partnerships and programmes:

- The City of Cape Town hosted its first Youth Environmental Symposium during World Environment Week 2005, providing learners from Grades 7 to 12 with a platform to share their environmental concerns, dreams and projects. Learners from more than 20 schools presented their posters and displays, computer presentations, videos and environmental dramas on a range of issues affecting them and their City. In response to what they had heard in the presentations, they participated in discussions and drew up a list of recommendations for the Junior Mayor.

Objectives of the UNDESD

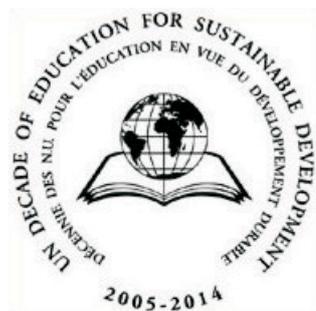
- *Enhance the profile of the central role played by education and learning in the common pursuit of sustainable development;*
- *Facilitate networking, exchange and interaction among stakeholders;*
- *Provide an opportunity to refine and promote the vision of, and transition to, sustainable development – through all forms of learning and public awareness;*
- *Improve the quality of teaching and learning in ESD;*
- *Develop strategies at every level to strengthen capacity in ESD.*



- EnviroEds and SEED (6.3 iii), with the support of the City of Cape Town and in collaboration with six environmental organisations, worked with the Western Cape Education Department (WCED) to pilot an environmental education course for teachers at the Cape Teaching Institute (CTI), the WCED's in-service professional development college. Fifty teachers participated in the five-day course "Enabling Environmental Education in the Intermediate Phase". The course enabled teachers to work closely with environmental service providers to interrogate the National Curriculum Statements, identify environmental learning opportunities, research their issues



The City of Cape Town celebrated the start of the United Nations Decade on Education for Sustainable Development by launching a Youth Environmental Symposium and an environmental education course for teachers at the education department's Cape Teaching Institute.



From the official UNDESSED launch address ...

At the heart of the UNDESSED is a simple idea with complex implications; after being taught over past centuries to live unsustainably, we now have to learn to live sustainably ... Ultimately, the test of the Decade of Education for Sustainable Development will be its capacity to foster educational change and improvement so that, in learning to live sustainably, we learn to live together in peace and in productive harmony with our environment. Education has a key role to play in addressing challenges like poverty, wasteful consumption, environmental degradation, urban decay, population growth, gender inequality, health, conflict, and the violation of human rights. Education must help us to acquire the values, attitudes, capabilities and behaviours essential for meeting those challenges.

*Koïchiro Matsuura,
Director-General of
UNESCO
1 March 2005, UN
Headquarters, New York*

in depth with the help of the service providers, and develop exciting lesson plans. The programme served not only to strengthen environmental learning in the curriculum but also to enhance networking between environmental service providers and the WCED.

- The WCED, DEA&DP and CapeNature have joined forces in a pilot programme to strengthen environmental education in the schools in the southern part of the City of Cape Town. By working with environmental organisations that support schools in this part of Cape Town, the WCED is trying to improve the co-ordination of environmental education and ensure that all schools in the district are responding to the imperatives of the UNDESSED.

The Decade is an opportunity to integrate the principles of sustainable development into a multitude of different learning situations. Through these initiatives, organisations and individuals can be catalysts for action, contributing to the goals and objectives of the Decade and participating actively in the global movement for sustainable development.

For more information, see the UNESCO website: <http://portal.unesco.org/education/en/ev.php>

(ii) Table Mountain National Park: environmental experiences programme – resourcing educators

The educational value of protected areas is self-evident. They are important heritage sites – part of the birthright of every citizen to know and enjoy. They are also magnificent “outdoor classrooms” where students of all ages can experience, investigate and respond to a multitude of learning opportunities. The new National Curriculum for schools promotes active environmental learning in all areas of learning, giving teachers and learners more reasons than ever before to get to know their local heritage sites.

Ironically, while the need for education support in protected areas has been increasing, declining government spending on conservation agencies has resulted in a number of organisations shedding their education departments. When the Table Mountain National Park (then the Cape Peninsula National Park) was



Ally Ashwell has specialised in developing resource materials for conservation education. She is seen here with Trevor Farr who has been one of the driving forces in CapeNature's Youth Development programme that incorporates conservation education approaches. Collaboration among environmental education practitioners is a hallmark of the EE friends network, who work with people from all walks of life. Whilst common principles of environmental education are applied with diverse stakeholders, resource materials are customised to meet a particular need.

established in 1998, education was not a high priority and the decision was made to develop resource materials for teachers and to leave it up to them to organise their own visits to the Park. A wonderful resource pack was developed, covering topics as diverse as the history, ecology and management of various sections of the Park. It soon became clear that this was not enough; teachers needed guidance to become familiar with the TMNP, to work through the materials and to develop appropriate fieldwork lessons for their learners.

In 2004, the TMNP made a concerted effort to make the Park more accessible to Cape Town schools through their Environmental Experiences programme. A significant first step was entering into a formal agreement with the Western Cape Education Department by signing a Memorandum of Understanding. This enabled the education officers to work closely with curriculum advisors in the four education districts in Cape Town to develop a professional development programme for teachers. Because teachers were at that time being introduced to the new National Curriculum, an important aim of the workshops was for teachers to develop their own lessons based on the curriculum that incorporated a visit to the Park. Teachers participated in three workshops and a field trip to the Cape of Good Hope, sharing ideas and inspiration



Christa Botha, Education Officer with Table Mountain National Park, perceives that turning community attitudes away from poaching towards conservation is a slow process and that children are the key to achieving this aim.



with colleagues from other schools in their district. Each teacher who completed the course was then eligible to bring a class to the Park on the brand new Table Mountain Bus.

For many of the teachers, the field trip during the course was their first visit to the TMNP. It is therefore not surprising that, despite the workshops, many of these teachers still lacked confidence to conduct their own lessons in the Park. TMNP therefore made additional support available in the form of a group of Park volunteers. While the teacher is responsible for preparing and presenting the lesson, the volunteer (who may have only introductory knowledge of the curriculum) knows the area well and can welcome the group, answer questions about the TMNP, recommend an appropriate route and assist the teacher where necessary.

Through the Environmental Experiences programme, about 100 teachers from all over Cape Town were introduced to the TMNP. The Park is committed to keeping in touch with these educators and providing them with ongoing opportunities to get to know new sections of the Park, find out about other aspects of the environment and explore different approaches to learning.

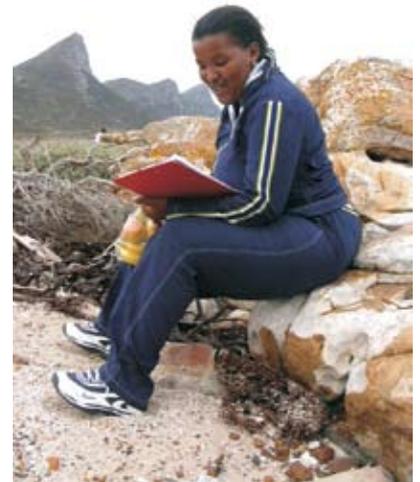
Table Mountain National Park: Working together for sustainable communities

The Table Mountain National Park (TMNP) is responsible for managing one of the richest areas of marine and coastal

biodiversity in South Africa. Despite its small area, about 43% of all the country's marine species are found around the Cape Peninsula. The pressures on the marine environment from development, pollution and over-exploitation are enormous, not to mention the impact of illegal poaching of abalone (perlemoen) and rock lobster.

In addition to trying to address the poaching problem through law enforcement (Chapter 2.2), the TMNP also recognises the need to educate the public about the impacts of poaching and to encourage communities to live more sustainably. Education Officer Christa Botha understands that there are no quick-fix solutions to this problem: "To change behaviour towards poaching in a community that has been using this resource for years is a very sensitive and slow process. The process of learning and changing is continuous and will need to be sustained over years to become a part of everyday life."

Because many of the people arrested and fined for poaching live in Ocean View, the TMNP decided to make a start by involving children from this community in a Sustainable Living pilot programme during Marine Week 2005. Christa invited 90 children from the two primary schools in Ocean View to visit the TMNP's marine education centre at Bordjiesrif at the Cape of Good Hope. During their visit, the children built an understanding of what



The Table Mountain National Park encourages teachers to bring learners to the Park, providing training, resource materials, subsidised transport and volunteer assistance.





the concept of sustainability means to them, and spent time exploring some of the most beautiful rock pools on the Cape Peninsula.

Christa was surprised to find that most of the children had very little knowledge of the marine environment, despite living in a community where many people make a living from the sea. She realises that it will take time to address this: “Environmental learning is a continuous life-long process and schools need guidance and support from environmental organisations.” The TMNP therefore intends involving the teachers from Ocean View in the Park’s teacher development programme next year, and introducing the schools to other environmental organisations like SEED, Kirstenbosch and Eco-Schools, which can provide ongoing support for environmental learning.



What have we learned?

- *In the new National Curriculum, environmental health is a fundamental principle and there are numerous environmental learning opportunities in all learning areas. The curriculum therefore provides environmental organisations with a basis for productive collaboration with schools.*
- *For environmental organisations to work productively with schools, it is advisable that they work through the Department of Education and become conversant with the curriculum and the realities in schools.*
- *Many teachers lack the site-specific knowledge and fieldwork skills to effectively integrate visits to heritage sites into their learning programmes. It is not enough to produce learning support materials and expect teachers to use them.*
- *Building the capacity of educators to integrate knowledge of, and visits to, natural and cultural heritage sites into their learning programmes is a developmental process, which cannot be achieved through once-off interventions. Ongoing engagement is necessary to build knowledge, skills and confidence.*



Conservation education activities apply sound education theory to learning in action. Addressing the needs of children and adults alike, the scope and depth of activities can be customised to meet learners’ needs.

- *Under-investment in education capacity in conservation organisations militates against the development of substantive and sustained programmes with education stakeholders. For example, in the case of the Environmental Experiences programme, valuable lesson plans developed by teachers in 2004 have not yet been published.*
- *By collaborating closely and strategically with other environmental organisations and projects, it is possible to provide schools with a framework and sustained support to enable environmental learning and action.*
- *Addressing critical environmental issues requires both short- and long-term approaches; law enforcement needs to be complemented by education and sustainable livelihood opportunities.*
- *The imperative to live more sustainably is not just about what others should be doing; it is primarily a challenge that applies to each one of us. The TMNP Sustainable Living project urges us to reflect on the environmental and social impacts of our own lives, and to engage with the individuals and organisations that can guide and support us to live more sustainable lives.*

(iii) Rediscovering indigenous food plants - Schools Environmental Education and Development (SEED)

On the Cape Flats, the NGO SEED (Schools Environmental Education and Development) is introducing an innovative angle to their Education-through-Permaculture programme. Co-ordinator of their “Curriculum for Growing” project, Kirsten Zsilavec explains: “SEED is involved in establishing food gardens using common exotic food plants. Because we are experiencing a loss of indigenous plants and indigenous knowledge, I thought it would be an interesting challenge to plant a few indigenous edible plants and see what the learners thought about them as a potential food source.”

Few people realise that most of the plants they eat originated in other parts of the world. While making children aware of this fact, SEED decided to introduce them to a few unusual indigenous food plants. The plants would give SEED the opportunity to introduce discussions on indigenous knowledge systems – and give the learners a good (edible) reason to value indigenous flora!

The “edible fynbos” project started off as a pilot project in 2005 and will continue to be refined through implementation in 2006. For Kirsten it has been a surprise to discover just how few edible plants the fynbos biome has to offer, and how little information is available on the subject. Because of the ever-present risks of poisoning, it is important to be absolutely sure about the plants chosen, how to prepare them and what information to present to the learners. Once a reliable list has been compiled, SEED will be able to introduce these species into its permaculture plantings, enhancing both the culinary and biological diversity of their food gardens. Being indigenous, these plants may also demand less water and fertiliser than the more commonly eaten exotic species.

Kirsten Zsilavec, Co-ordinator of the SEED “Curriculum for Growing” Project, has identified a paucity of information about indigenous knowledge in the use of fynbos plants and hopes that the project will help fill this gap and raise awareness about the heritage of the past. This project has in a very practical way illustrated to Kirsten why the fynbos biome was, in the past, able to support only small, relatively nomadic populations of San hunter-gatherers and Khoi herders. “There are not that many edible plant species, nor are they available throughout the year”, she says, suggesting that people may have migrated in response to the availability of food plants, as much as in response to the movements of game animals.

Kirsten makes a final, rather poignant, observation: “We have lost an incredible amount of indigenous knowledge ... and it is difficult to ‘trust’ the little we have, since there are very few sources to verify what we think we know to be right.” Hopefully this project will retrieve and consolidate much of this knowledge, and kindle a sense of respect for the people who once lived far more sustainably than we do today in this biologically diverse but food-scarce environment.



Rocklands Primary School learners were each given a different name of an indigenous edible plant and then proceeded to look for “their” plant in the school’s food forest.

(iv) Biodiversity, education and sustainability at Kirstenbosch

Generous funding from the National Lottery has enabled the Gold Fields Centre at Kirstenbosch National Botanical Garden to undertake an exciting and comprehensive education programme involving teachers and learners from schools in disadvantaged areas of Cape Town. Appropriately, in the wake of the transformation of the National Botanical Institute (NBI) into the South African National Biodiversity Institute (SANBI), this three-year project (2005-2007) focuses on Biodiversity and Sustainable Living.

Each year, this sponsorship enables Kirstenbosch to invite 50 schools to bring 180 learners each to the Garden for a fully-subsidised educational excursion. Determined to make the most of this opportunity, the Kirstenbosch education officers delved into the new National Curriculum documents looking for opportunities to make the programme as relevant as possible to schools. Thanks to the strong environmental focus of the curriculum, they were able to develop lessons on biodiversity and sustainable living to suit



Zwai Peter worked as an educator for Working for Water, building both understanding and know-how to support restoration programmes.



The Kirstenbosch courtesy bus.

five different grades at primary and high school levels. Dedicated education officers welcome the learners and provide an active learning experience in the Garden that is fun, challenging and memorable.

While the garden-based lesson stimulates a great deal of interest in biodiversity and sustainable living, it is not enough to ensure that learners engage fully with these topics. Kirstenbosch therefore also invites the educators of these classes to participate in a Teacher Professional Development programme that explores these two issues in greater depth. Over the course of three workshops, educators conduct a school environmental audit, develop an in-depth understanding of terms and concepts, and work on their own lesson plans.

Roleen Ellman is the education officer responsible for this part of the programme, while Sally Hey coordinates the lessons in the Kirstenbosch Garden. Roleen explains that they are trying to equip educators to continue exploring these topics with learners when they return to school after their visit to Kirstenbosch. "We are building the capacity of educators to engage with environmental education in all the learning areas," she says. "We focus specifically on the topics of 'biodiversity' and 'sustainable living' and encourage educators to

conduct lessons on these topics in their classrooms, school gardens, surrounding communities or local nature reserves."

In order to emphasise to schools that biodiversity and sustainable living are locally relevant issues, the Gold Fields Centre has especially invited schools situated close to protected areas on the Cape Flats to participate in the project. They have also asked Cape Flats Nature (Chapter 2.3) to provide follow-up support to help educators who have participated in the workshops at Kirstenbosch to develop and conduct their own lessons at Edith Stevens Wetland Park, Wolfgat Nature Reserve or the Macassar Dunes.

While 'biodiversity' and 'sustainable living' may be new topics in the curriculum, they are issues that feature prominently in the media and everyday discussions. Roleen was therefore surprised to discover, through the results of an audit that she conducted, that almost 90% of the educators involved in the programme in 2005 either had no understanding of these terms or only a vague idea of what they meant. Despite the importance of these issues and the fact that the National Curriculum requires educators to teach about them, most educators had never actually included these topics in their lessons.

The implications of this lack of environmental literacy are disturbing. Without the basic vocabulary or understanding of concepts, a large proportion of educators and, presumably, huge numbers of learners, are currently unable to participate in debates regarding biodiversity and sustainability. Without even introductory knowledge of these issues, it is unlikely that people will be concerned about them or indeed have the will or the ability to make informed decisions about sustainable living.

The Biodiversity and Sustainable Living project has proven not only to be a response to the need for more education around these issues; it has also served to demonstrate just how serious that need is. Through its comprehensive response to the need for greater environmental literacy amongst educators and learners, and its involvement of partners, Kirstenbosch is playing a vital role in ensuring that the people of Cape Town understand environmental issues and are prepared to make the choice to live more sustainably.



George Davis uses video technology to capture and communicate conservation messages involving people and action particularly in urban areas.

The sustainability game allows educators to create their own definition of sustainable development.



(v) Garden Route Environmental Education Network (GREEN)

Environmental education is alive and well in schools in the southern Cape. Teachers and learners from about 40 schools from Mossel Bay to Plettenberg Bay, and as far inland as Oudtshoorn, regularly participate in environmental projects, workshops and events with organisations such as WESSA, the Southern Cape Herbarium and Garden Route Botanical Garden, CapeNature, SANParks and SKEP. Helping to keep the momentum going is Lorraine McGibbon, co-ordinator of the Garden Route Environmental Education Network (GREEN). Funded by WESSA Southern Cape since 2003, with office space provided by the Garden Route Botanical Garden Trust, GREEN organises and supports a wide range of environmental education activities, including Eco-Schools (Chapter 6.1 i), Adopt-a-Beach (Chapter 4.2), regular workshops with teachers, Arbor Day events and the annual Schools Environmental Expo in George.

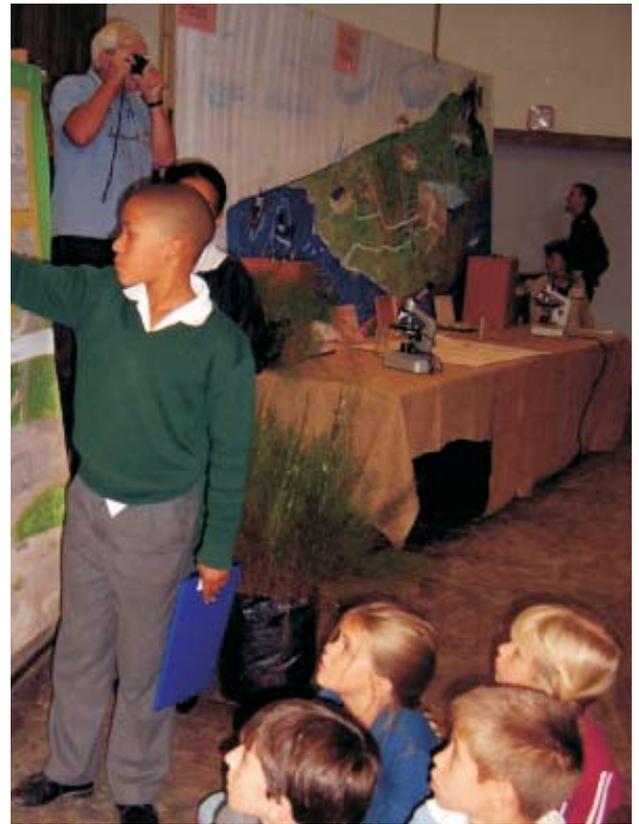
The Schools Environmental Expo

The Schools Environmental Expo has come a long way since 2001. It was initiated in response to concerns expressed by local schools that could not afford the cost of transport to attend the annual Wild Flower Show at the George Museum. So that year, the Southern Cape Herbarium took their display of southern Cape biomes to the Conville Community Centre and organised presentations and activities for visiting classes. In 2001, only four school projects were displayed; three years later the 14 schools from George and Mossel Bay that participated had to limit their displays to four metres of wall space and two metal tables each so that everyone could fit into the hall. Each year teachers decide on a theme for the Expo and Lorraine invites suitable environmental organisations to exhibit. The Expo provides teachers with a focus for setting environmental projects, and planning starts early in the year with a teachers' workshop in February to help teachers develop and schedule projects that learners will present at the Expo.

The quality of projects and presentations has improved noticeably over the years. This is due in part to schools learning from one another, but support from GREEN cannot be underestimated. Lorraine pays special attention to helping

teachers and learners prepare their projects. She visits the schools, provides information, helps to organise outings and guest speakers, and ensures that project planning is on track. Schools book to visit the exhibitions and the learners who prepared the displays present their projects to small groups of visitors during their hour-long tours.

The annual Expo is an excellent opportunity for local schools to network with one another and with environmental organisations, and to share their ideas and achievements. It has helped to raise environmental awareness amongst teachers and learners, encouraged schools to learn more about the southern Cape environment and to investigate local issues, and strengthened environmental learning in the new curriculum. Visitors are amazed by the quality of environmental learning reflected in the learners' projects.



Each year, Southern Cape learners participate in an environmental expo held at the Conville Community Hall.

What have we learned?

- *Having a dedicated environmental education networking position in the southern Cape has strengthened communication and co-operation between schools, the education department and environmental organisations.*
- *GREEN has contributed greatly to the professional development of teachers and the quality of environmental project work because of the developmental approach taken by the coordinator.*
- *The value to teachers and learners of a regular gathering like the Environmental Expo cannot be underestimated: it has a positive impact on many levels, from helping teachers to plan meaningful*





This team from the Baviaanskloof used theatre to convey their message about the importance of the Baviaanskloof mega-reserve, one way to catch and hold attention.



Trevor Farr, CapeNature's Youth Development manager, appreciates the fresh perspectives and enthusiasm of students who attend the Youth Development Programme. He considers that their involvement has led to constructive transformation in attitudes of both managers within CapeNature and the broader community. He is seen here with Hettie Gets who anchors WWF-SA's Environmental Education Programme.

projects, to improving environmental learning, enhancing the quality of projects, and developing the confidence of learners. Having a dedicated environmental education networking position in the southern Cape has strengthened communication and co-operation between schools, the education department and environmental organisations.

- GREEN has contributed greatly to the professional development of teachers and the quality of environmental project work because of the developmental approach taken by the coordinator.
- The value to teachers and learners of a regular gathering like the environmental expo cannot be underestimated: it has a positive impact on many levels, from helping teachers to plan meaningful projects to improving environmental learning, enhancing the quality of projects, and developing the confidence of learners.

6.4 Youth development in CapeNature

CapeNature has a vision of establishing a "conservation economy" in the Western Cape, which entails making biodiversity conservation a key component of local economic development in the province. One of the ways in which the organisation is striving to achieve this is through youth development.

The first major initiative within CapeNature's Youth Development Programme took place during 2004/5 and was funded by the Umsobomvu Youth Fund to the tune of nearly R5.5 million. During that year, 72 young people were selected from an overwhelming 2 500 applicants to participate in an accredited National Resource Guardianship Certificate course.

Based at Driftsands, George or Vrolijkheid, the full-time students received accommodation, transport, clothing, food and a stipend. In addition to learning environmental and life skills, the students visited and had practical work experience at a number of Cap-

Successful graduates

Of the 72 students who enrolled in CapeNature's course, 65 graduated. 60% were later employed, 2% enrolled in learnerships, 5% started their own businesses and 8% took up volunteer positions.

eNature reserves. The in-service training approach enabled them to apply what they were learning practically, and to develop experience and confidence.

The course was run by a project management team of ten people, comprising educators, managers and peer councillors recruited by Umsobomvu. CapeNature provided logistical support and the team reported to Trevor Farr, CapeNature's Youth Development manager. Although the project management team had limited conservation background, Trevor explains that they brought with them "people skills", which were essential to the developmental nature of the course.

Because the course was fully sponsored, CapeNature was able to attract people who might otherwise never have considered a career in conservation. The youth proved to be great ambassadors for CapeNature in their communities, sharing their knowledge and experiences of the organisation and biodiversity conservation with their families and friends.

The students brought energy and enthusiasm to CapeNature, as well as new perspectives. Their constant questions required staff members to look afresh at old assumptions and ways of doing things. "The programme was the start of real, constructive transformation; slowly and gradually we started to see a change in attitude and significant changes in management style," recalls Trevor. "What started as a training course and job creation opportunity stretched us far beyond what we had expected." The programme served to place youth development firmly on the agenda of CapeNature, elevating it to one of the organisation's key focus areas, which all staff members must report on.

Unfortunately, despite the success of the pilot project, funding has not yet been

forthcoming to continue the project, so CapeNature has been unable to implement the improvements recommended in the detailed evaluation of the pilot course. The organisation is involved in ongoing negotiations with Umsobomvu and other funders in an effort to secure the funding necessary for the next cycle of implementation. In the interim, CapeNature has been planning for the strategic roll-out of the programme in rural areas. They have identified possible learning centres for youth development and have drawn up a schedule of renovations that will commence as soon as funding becomes available.

What have we learned?

- *The youth brought new energy, enthusiasm and passion into CapeNature and had a definite positive impact on the organisation.*
- *Implementing a youth development programme, especially for the first time, requires high levels of commitment, co-ordination and co-operation between the different staff members and service providers involved. For such a programme to succeed, it must have the full backing of management.*
- *It is very difficult to implement a programme demanding this level of commitment within a large and under-resourced organisation.*
- *In addition to providing job-related training, youth development programmes also need to take account of the social needs of students and provide general life-skills training to address the negative impacts of social problems in the students' communities.*
- *Full-time youth development programmes often require that students be paid a stipend. Administrative arrangements must be made well in advance to ensure that the organisation is able to pay students on time, particularly if such arrangements require changes to normal organisational policies.*
- *A lack of funding to continue the YSP after its pilot year resulted in*



Proud graduates of the first Youth Service Programme run by CapeNature.

a loss of momentum; to repeat the course at a later date will require much greater effort than if the course could simply have kept going. Externally funded development projects that provide only short-term funding are problematic, as development is essentially a long-term process.

- *Fundraising for major projects like the YSP requires a great deal of experience and project administration time (e.g. compiling proposals, monitoring and evaluating, reporting, ensuring publicity for funders, etc). Staff members who were appointed as nature conservationists are not always trained or skilled in these areas.*
- *The involvement of a cadre of youth in CapeNature had a profound effect on the staff, many of whom had not previously had to interact with youth and youth-related issues.*
- *CapeNature cannot employ all the graduates of their Youth Service Programme; the challenge is to work with other C.A.P.E. Partners to identify employment opportunities in advance, and to develop future courses accordingly.*



Photo: Lambert Smith

Vrolijkheid student involved in partnership project



Reginald Jantjies, nominated by the project management team as top student in CapeNature's Youth Service Programme in 2003/4, is now involved in an exciting project on Paarl Mountain. Partners in the project include CapeNature, the Table Mountain Fund, LandCare, the Department of Water Affairs and Forestry, the Drakenstein Municipality and local land owners. The project involves fine-scale biodiversity planning of this core lowland area, and Reginald is responsible for taking fixed point photographs and mapping invasive alien plants. He is also helping to educate land owners about the need to conserve biodiversity. The Table Mountain Fund is funding incentives to encourage landowners to commit to Stewardship agreements, while LandCare is helping land owners with alien clearing projects.

