



CREW News

Volume 3 • March 2007

News from the CREW

This Newsletter focuses on the achievements of CREW volunteers over the past six months, from September 2006 to February 2007. We are very proud to be reporting on a six-month period rather than an annual one for the first time.

We had an incredible spring season in the CFR—you will see from the article from the office of the CFR team and from the contributions from all our volunteer groups just how many field trips were conducted and which special plants were found. Over the past six months we also started working in the Succulent Karoo and are currently setting up a CREW office in Kamieskroon to work under Annelise le Roux of the Succulent Karoo Knowledge Centre and have submitted a proposal to the Critical Ecosystem Partnership Fund to support this CREW node. Last year the Cape Town team conducted two visits to encourage groups to join CREW. We are very excited about working in this diverse hotspot and about becoming familiar with all the strange, tiny succulents and bizarre bulbs.

We have made good progress with setting up a CREW node in KZN, to be based at the headquarters of Ezemvelo KZN Wildlife in Pietermaritzburg (see KZN update for

more details). This means that from this year CREW will be working out of four offices: Cape Town (working with all Fynbos groups), Pretoria (working with groups in Mpumalanga, Limpopo and Gauteng as well as training the KZN node), Pietermaritzburg (working in the Maputo-Pondoland Hotspot with a strong focus on the highly threatened coastal and midlands systems of KZN), and Kamieskroon (working with four groups in the Succulent Karoo Hotspot, from the Kamiesberg to the coast at Hondeklipbaai as well as a group around Springbok).

Also featured in this newsletter is our first Plant Monitoring Day, an activity by which we involve school learners and our volunteers in monitoring a permanent plot in which a threatened species occurs (see Caitlin's article for more details).

The Red Data List for plants has been significantly reworked over the past year and the status of many species has been updated based on findings of CREW volunteers over the past three years. The status of plant species in our country is not looking good. There has been a 150% increase in the number of threatened plants since the last list was published 1997—where there used to be 600 plants



threatened with extinction, we now have 1 650. This means that there are many more plants in serious trouble and requiring close monitoring, something for which we will depend heavily on the help of all our CREW volunteers. I hope you enjoy this newsletter and look forward to a great year of fieldwork and active conservation with you all.

Domitilla Raimondo
(CREW National Manager)



News from the CREW CFR Office

We had an extremely successful spring season and managed to conduct 26 C-team field trips and visited some of the most amazing sites in the CFR. 2006 was a particularly good year, with good rains and many key lowland sites burnt the year before, so it was a most exciting spring. Included in some of the interesting finds was the re-discovery of *Babiana blanda* by Rupert Koopman on the farm Schoongesicht between Philadelphia and Atlantis. We also completed sampling at Fairfield and Porcupine Hills, two critically important farms in the Overberg region.

We conducted an interesting Cyperaceae course in October with Muthama Muasya. Donovan Kirkwood, regional ecologist at Cape Nature and amateur photographer extraordinaire, presented a digital photography course. In November, the CREW team headed for Nieuwoudtville to hold our annual strategic planning meeting. Our planning session consisted of a SWOT (Strengths, Weakness, Opportunities and Threats) analysis, team-building exercises, visioning for CREW (which included a hair-raising vision of CREW invading all the hotspots of the world) and action planning for 2007. We will present feedback to all the groups



A new species of *Aristeia* found by Rupert Koopman.

at the Annual Workshop at Genadendal.

We also had to say a sad farewell to Edward Weiss (a volunteer from the USA who assisted us in the office and in the field for almost three months). Edward was fantastic and he assisted us by making ID guides for our field trips, updating flowering times for the threatened species in the Riverlands Nature Reserve and assisting Caitlin with processing our specimens. Another volunteer who has left, is Albert Malol, a volunteer from Spain. He was great at assisting us in the office and more so in the field. We hope that Albert will return to South Africa this year to assist us in spring.

Finally, the team is going ahead full steam with planning and organising the CREW Annual Workshop at Genadendal. We are looking forward to seeing all of you there and I'm sure we will have a very productive and fun workshop this year. Thanks to everybody for the hard work and looking forward to taking CREW through 2007 and beyond!

An update on CREW in KZN

CREW is setting up an office at the headquarters of Ezemvelo KZN Wildlife (EKZNW) in Pietermaritzburg. After signing a number of agreements with the Maloti Drakensberg Transfrontier Project and EKZNW's Stewardship Programme in November last year, we advertised two positions. Sadly, we did not manage to find a CREW KZN Manager after our first round of interviews and had to re-advertise the position in January 2007.

After a second round of interviews in Pietermaritzburg in February, we offered the positions to two excellent individuals. The CREW KZN Manager position was offered to Isabel Johnson who has worked at SANBI's KwaZulu-Natal National Botanical Garden in Pietermaritzburg for the last six years, running the Threatened Plants Programme for the Garden.

Isabel is highly committed to the conservation of threatened plants in KZN and we are very excited to have her on board. The CREW KZN Co-ordinator post was offered to Desiree Marimuthoo who has been working at SANBI's KwaZulu-Natal Herbarium on the African Plants Initiative Project for the last two years, and is completely crazy about field-work and learning about plants.



Now that we have our staff in place, the CREW Programme will be expanding in KZN. This year we will focus on working in the midlands areas around Greytown and Pietermaritzburg, in the coastal grasslands and scarp forests around Durban via David Style's group and in Pondoland with Tony Abbott's Thursday group.

Domitilla Raimondo

Gerbera aurantiaca, an endangered species from KZN on which Isabel Johnson, new CREW KZN Manager, is currently completing a Ph.D.



Mpumalanga Plant Specialist Group

The Mpumalanga Plant Specialist Group (PSG) was started by John and Sandie Burrows over 10 years ago and now consists of a group of more than 20 amateur botanists from all over Mpumalanga. Most members have developed an incredible knowledge of their local flora through regular field visits and monthly lectures by various members of the group. Each member has to give a lecture on a plant group of their choice, no matter what their experience or knowledge level.

The Threatened Species Programme tried to get the PSG to start doing CREW work in 2004 but as the CREW project was managed only in the Cape at that stage, there was not enough support for this group. But now that CREW is a national programme, we started working closely with the PSG and in February we had our first field trip to the Lydenburg area to plan the targets for the rest of the year and to find the Criti-



Mervyn Lotter, a key champion of the Plant Specialist Group, showing other members of the Mpumalanga PSG and the CREW team what to look for.



Adenia wilmsii found only on rocky ridges in the vicinity of Lydenburg.

ally Endangered muthi plant *Adenia wilmsii*, member of the Passion Flower Family. The PSG have decided to focus on atlasing species about which we do not know enough, mostly Data Deficient taxa. A second aim is to closely monitor highly threatened (Critically Endangered and Endangered) plants. A suggestion that will be explored is that each member adopts a species to monitor on an annual basis. A third aim is to focus on highly endemic and threatened habitats such as the Serpentine of Barbeton.

On our first field trip we visited two sites, one from where *Adenia wilmsii* is known and the second a similar habitat that might contain a new population. The site where the plant had been found before had never been thoroughly surveyed, so the group spread out and combed the rocky ridge to find as many plants as possible. Altogether 27 plants were counted but owing to the cryptic nature of the species, we estimate that we could have missed at least another 30 plants. The second site did not have this species, so we now have to search one or two other ridges in the area as possible localities. At the moment, *Adenia wilmsii* remains known from only one locality and has less than 100 plants, making it a highly restricted and threatened species.

The Hogsback CREW Conservation Group

The Hogsback CREW Conservation Group was started in 2006 after a visit by CREW Programme Manager, Tilla Raimondo, in April. The group has, independently of the CREW Programme, decided upon a goal of conserving all natural vegetation around the town of Hogsback and producing a photographic flora that can be used by tourists to get to know the plants of Hogsback. Since November, after the CREW staff had trained the Hogsback volunteers to fill in their field forms, the group have been very actively sampling their surrounding areas and have filled in 31 CREW forms from 12 sites. At the same time they photographed all the plants they encountered and these photos are currently being identified. A big challenge for the Hogsback group is to manage all these images and have them well linked with the data they are collecting via the CREW forms. We are currently exploring ways in which the CREW database can be adapted to best suit the group's needs.

Domitilla Raimondo



Dierama pulcherrimum, a rare endemic from the Amato-la Mountains found at Hogsback (photograph by Irka of Hogsback).



Gaika's Kop, a mountain on Hogsback's doorstep that is a hotspot for plants (photograph by Ken Harvey).



Disa lugens. The biggest known population of this species grows on a farm in the Hogsback vicinity and was sampled by the group in December 2006 (photograph by Ken Harvey).

Cape Floristic Region's 1st Plant Monitoring Day concluded successfully



The 7th September 2006 signified the day of the very first run of Plant Monitoring Day, conducted in the Cape Floristic Region, South Africa.

Plant Monitoring Day (PMD) is an innovative annual educational exercise aimed at making students and their teachers aware of the rich diversity of plants in their local surroundings. Participants employ different sampling techniques using simple plant identification kits and monitoring equipment to identify and record core plant species at selected sites.

Some 160 students and their teachers representing five primary schools and Green Futures College were involved in the first Cape Floristic Region PMD conducted on 7 September 2006. Important sites of natural vegetation were monitored across the Cape Floristic Region, from Nieuwoudtville in the Northern Cape to Mamre and Darling on the West Coast, Harmony Flats on the Cape Peninsula, Gansbaai in the southern Cape and St Francis Bay in the Eastern Cape. The widespread distribution of sites furnished a range of key vegetation types of critical importance to conservation, namely Nieuwoudtville-Roggeveld Dolerite Bulb Veld, Atlantis Sand Fynbos, Swartland Granite Bulb Veld, Lourensford Alluvium Fynbos, Agulhas Limestone Fynbos and Algoa Dune Strandveld, respectively. The sites were carefully chosen, not only for their value

to conservation, but also for their proximity to local schools as well as their reserve status or equivalent, the latter being an important factor to ensure their sustainability in the future.

At each site, students were accompanied by their teachers and CREW representatives. The age groups of students varied somewhat, with most schoolchildren being between Grades 7 and 9, while Green Futures College students were between the ages of 18 and 35. Before commencing the monitoring activity, students were briefed on the context and aims of the conservation educational exercise, the importance of the scientific method as well as the types of plants to be monitored. After the briefing, the students were provided with a monitoring kit which included: a plant ID booklet and instruction manual especially

prepared for the site; 50 m tapes, string, pegs and flags to mark out the plot; quadrats, environmental monitoring instruments (GPS, thermometer) and data collection forms and pencils. Once on site, with the help of teachers and CREW representatives, students set up 50 × 50 m plots and then smaller 10 × 10 m plots within these. Before starting the exercise, they took environmental measurements such as air and soil surface temperatures and recorded GPS readings for the site. Students were then divided into groups, with each group working in one of the smaller plots. Here they monitored dominant species in 10 randomly selected quadrats using random numbers provided in the booklet. Following this, they performed a 'chicken parade' which involved walking through the site in rows and systematically counting the special (rare and/or endan-



Students of Green Futures College in Gansbaai receiving instructions on setting up a plot.

gered) species. At the end of the activity a question-and-answer session as well as a brief recap of the whole exercise was carried out before students returned to their classes.

Feedback from participants was very encouraging. The activity was well received by students of Green Futures College in Gansbaai, with Sean Privett reporting 'It all went off well—a most enjoyable educational activity for our staff and students.' Comments from participants in the Eastern Cape included 'we loved learning about the plants and enjoyed the setup of the plots and learning how to use a GPS'. Unlike many of the students from the other sites, a few students from Mamre had explored their



Students of Umnqophiso Primary School at Harmony Flats Nature Reserve preparing to count dominant species after randomly placing their quadrat.



Students of Mamre Primary School using their manual to identify plants found inside the quadrat.

local veld prior to the activity and even recognised a couple of the more charismatic species at their Nature Garden. They were particularly interested to know the names of the plants—both common and scientific!

The exercise has already had follow-up activities in Darling, where the class of children involved in PMD attended the Darling Wildflower Show. They were split into groups and taken on a conducted tour of the exhibit. A few of the teachers and volunteers have also said how fulfilling the exercise had been and what a good supplement it would be for their science classes. Some have already made plans to incorporate the activity into the curriculum next year.

In future we intend to incorporate more environmental monitoring into the exercise, including soil moisture, pH and depth. In addition, for the 2nd Plant Monitoring Day 2007, we endeavour (pending favourable outcome of funding bids) to develop it at provincial level. Keep your diary open!

Acknowledgements

Plant Monitoring Day was made possible through the generous funding of the British Ecological Society (Educational Innovation Grant 741/861) in collaboration with CREW Kirstenbosch Branch. Thanks are also due to Dr Yoseph Araya (The Open University, UK) for all the help and support in initiating and planning the project and to Dr Tony Rebelo (SANBI) for helping to design sampling methods and plan core species selection. All the project co-ordinators on the sites and Green Futures College are thanked for their collaboration.

CREW field trip for SAAB

The Custodians of Rare and Endangered Wildflowers (CREW) conducted a field trip for the SAAB conference on 18 January 2007 and some 25 delegates from the conference signed up. The trip involved discussions on the threatened vegetation types and species of the Overberg region, with a focus on the sites we visited— these included Shaw's Pass (10 km south of Caledon) and Betty's Bay.

The Critically Endangered *Erica jasminiflora*, *Leucadendron cryptocephalum* and *Otholobium lanceolatum* are known only from Shaw's Pass. *Tritoniopsis flexuosa*, listed as Endangered, also occurs there. We were fortunate to find *T. flexuosa* in full flower and a monitoring exercise of the plants ensued. Conference attendees assisted in an animated count of the total population number. Unlike *T. flexuosa*, *Otholobium lanceolatum* was not flowering, so we counted the total number of plants by spotting their distinct leaves. Charles Stirton, who revised the genus *Otholobium*, was present and remarked that we had found many more plants than he was aware occurred at the site. After surveying the top of the site, we drove down to the area where *Erica jasminiflora* occurs, in the hope of finding the six remaining plants in flower. The flowers were only in bud, but fortunately CREW

volunteer/nursery owner, Adriaan Hanekom from Caledon, saved the day by bringing one of the plants from his nursery along for the trip so that we could see it in flower. The fate of *E. jasminiflora* in the wild is, sadly, a dismal one. In 1977 Chris Burgers counted over 150 individuals, but in five years this had dropped to only 15. After a fire in the late 1980s, the numbers increased again and 70–80 plants were counted in 1994. The plants died rapidly thereafter and only 17 individuals were counted in 1998 (and 12 dead plants); since then numbers have dwindled to between two and six plants. It is hoped that the numbers will increase again but until they do, it appears that the species is on the verge of extinction in the wild.

After a thorough investigation of Shaw's Pass, we headed for the coast where we stopped at the base of the Kogelberg near Betty's Bay to visit UCT student Tim Aston's study site. The site was an aquifer-fed seep of *Erica-Os-*

mitopsis Seepage Fynbos. Tim told us a bit about his study, which involves the assessment of the impact of potential groundwater drainage on biodiversity. *Mimetes hirtus*, an Endangered member of the Proteaceae, is dominant at the seep and is threatened mainly by development in the lowland coastal regions where it is known to occur. An application for development of the site in question had even been submitted, but was not approved. After exploring the site, monitoring the threatened plants, including what

is possibly *Xiphotheca guthriei*, and helping the sedge expert from UCT Dr Muthama Muasya to collect interesting sedges, we returned to the bus for the scenic drive back to Cape Town. We travelled along the coastal road from Betty's Bay to Gordon's Bay and were blessed with some spectacular sea views. However, not everyone on the bus, particularly those too exhausted from a hard day's work, was awake to witness the spectacle!

Caitlin von Witt & Suvarna Parbhoo



Looking at *Erica jasminiflora* in the wild.



The search for *Othlobium lanceolatum* is on!

News from Bredasdorp/Napier

The extensive fires early in 2006 provided an opportunity to see some of the rarer flowers in the southern Overberg, but there just wasn't enough time to cover all the burnt hotspots. CREW had several outings, notably a two-day visit to the Elim and southern region, with an overnight stay on Sandberg farm. Rarities found here included: *Tritoniopsis bicolor*, *Erica riparia*, *Erica melanacme*, *Berkheya herbacea* and *Lachenalia* cf. *salteri*.

The September visit to Fairfield farm had us swarming like ants all over the burnt areas, there was just so much to record, such as *Aristea teretifolia*, *Moraea elegans*, *Sparaxis fragrans*, *Satyrium pumilum*, *Moraea melanops*, *Aspalathus rosea*, a yellow-flowered *Hesperantha falcata* and *Cotula cenifolia*.

A second visit in late October was very eventful. John Manning's dog, Gretel, was bitten by a Berg Adder, luckily only a superficial bite from which she fortunately recovered after much care. This incident made us realise how careful we should be in the warmer months—always wear longs and closed shoes



Aristea teretifolia.

to minimise the chance of snakebite. The highlight of this trip was the discovery of a large population of *Lachenalia sargeantii*. We now know it occurs along the whole mountain chain from Bredasdorp to Fairfield but can be seen flowering only shortly after fire.

The orchids on Napier Mountain flowered in profusion, for example *Bartholina burmaniana*, *Ceratandra atrata*, *Pterygodium acutifolium*, *Disa purpurascens* (in the same vicinity where *D. graminifolia* flowers later in January), *D. atricapilla* and *D. bivalvata* in close proximity to each other, and a breathtaking sight of *D. racemosa* along a seep. *Moraea lurida* flowered extensively in the Overberg over a period of three months, and in so many different patterns and colours, from white to bright yellow, orange, dark red and almost black. A notable discovery on Napier Mountain was *Tritoniopsis bicolor*—previously known from only one locality in the Bredasdorp Mountains.

Rhoda McMaster



Tritoniopsis bicolor.

Shaw's Pass voted into conservation? CREW dabbles in plant politics...

On 8 September 2006 CREW set off to Caledon with an important task at hand. This was the day we were to show the mayor and councillors of the Theewaterskloof Municipality what the Caledon commonage land (locally known as *meentgrond*) has to offer from a botanical and ecological perspective. We met Mayor Mr Chris Punt, Councillors Vashu, De Bruyn and Tsaka and Council Official Johan Viljoen in town and, together with Cape Nature representatives Don Kirkwood and Samantha Ralston and Adriaan Hanekom of the Caledon Fynbos Nursery, headed for Shaw's Pass, possibly the most important remaining renosterveld fragment of the area.

Upon arrival at the 65 hectare fragment, Don explained the ecological significance of the site and initiated discussions on its fate. He put the situation into perspective by explaining why Shaw's Pass was a poor substitute for fertile communal grazing land for use by small-scale farmers. He added that, considering the pass provides habitat for 24 Red Data species and three of these are endemic to the site, the true value of the land is in its conservation worth. He advised that the site be recognised as a conservation area and managed accordingly ... this would of course mean that a massive alien clearing operation must be

undertaken. Ismail Ebrahim then elaborated on the botanical attributes and gave details on the 'specials' that could be found at the site, of which *Erica jasminiflora*, *Leucadendron cryptocephalum* and *Otholobium lanceolatum* occur only there. A brief tour of the pass rewarded us with a spectacular floral display of *Acrodon parvifolius*, an Endangered mat-forming mesemb that grows at only two other sites.



Aristea biflora on the supermarket erf.

The next stop was the commonage previously earmarked for development of a supermarket. Should this development be approved, it would be a calamity since the site supports many endangered plants, including the magnificent *Aristea biflora* and the not-so-showy *Erica maritima*. Fortunately, both of these were flowering for our visit and the Mayor was overwhelmed by the beautiful lilac spatulate tepals of the *Aristea*.

Discussions continued over lunch at the Caledon Flower Show and all parties involved ended the day feeling satisfied. The Mayor stated that the small-scale farmers currently located at Shaw's Pass would be moved to a different piece of land that had already been purchased for this purpose and that they would attempt to conserve the other *meentgrond* we visited; at least development would only be allowed on disturbed areas of the site. Should these promises be fulfilled, the Theewaterskloof Municipality will definitely be on the receiving end of CREW's vote!

Caitlin von Witt



The Mayor of Caledon and a Councillor with the spectacular *Aristea biflora* in the foreground.



Mayor Mr Chris Punt listens attentively as Don Kirkwood explains the ecological importance of Shaw's Pass.

CREW News from the Darling Flora Group

After all the rains in August we were hard pressed to get to all our sites during the flowering time. First we had to get through Plant Monitoring Day, which proved to be a wonderful exercise for all of us. We liaised with Mr Johan Hattingh about participation of the Grade 7's of Darling Primary School.

The day started with a short talk in the classroom

about the veld type we were going to be sampling and why. We had marked out the areas in advance as we had the students for only two hours during a science class and were pressed for time. We divided them into five groups of seven and also into language groups. We headed off with our groups to do the necessary and this proved to be most

interesting, from finding a scorpion (and having a lecture on that) to not finding one specimen at all as the species had already finished flowering!

We arranged for this class to visit the Wildflower Show later that month so that they could see how and where their exercise fitted in. They were most interested to see those plants we had sampled again. Most important were their photographs of course!

As part of the Wildflower Show we exhibited some



Maggie and her group inside the 50 × 50 m plot.



Preparing to count dominant species in the quadrat.

information about CREW, the Flora Project and samples of our work. This led to quite some discussion with visitors, and even landowners of the district were surprised at what we were doing. As a result we were asked to do a permanent exhibit in our museum for visitors to see what they can expect to find in the area.

Some new finds were *Romulea triflora* which was found on the farm Waylands after it had not been seen for years, and a new site for *Erica ferrea* on the farm Baarhuis. We spent days looking for *Aspalathus glabrata*, but when the description started with 'sometimes hairy' we gave up and tried to sort out all the late flowering Fabaceae.

As part of the Biodiversity and Wine Initiative we did a recce for them on the farm Papkuilsfontein where we became caught up in very thick vegetation! There were stunning views from the top of the mountain. Three farms in the area are now part of the BWI and we (i.e. the Flora Group) have free access to their land to monitor or sample there. In mid-November we were surprised by the most spectacular display of *Gethyllis* flowers in the area, from single flowers to clumps of up to 15 flowers. A most beautiful sight, these white stars in the dry grass—a truly wonderful Christmas present.

Helene Preston

Friends of Tygerberg Report for July–December 2006

Our CREW group had a rather quiet spring season. No new 'specials' were found, but we nevertheless had a few good field trips. The *Lachenalia liliflora* population at De Grendel was revisited and looked healthy, although we had some difficulty in counting them as they flowered a bit earlier this season and were already in seed by the time we visited.

The field trips might have been uneventful but to make up for it, we had three wonderful botanical talks! In July Dr Ted Oliver gave a talk on 'Fynbos' of Western Australia. He pointed out similarities and differences and gave a spectacular slide presentation of the Western Australian flora. Then in September, Dr Matt Buys of the Compton Herbarium gave a most informative talk on the genus *Lobostemon*, highlighting the identification features of the species found in our area without boring those in the audience with little botanical knowledge. Our last speaker for the year was 'botany boy' David Gwynne-Evans. He gave a brilliant slide presentation on ... well, I would do it an injustice trying to describe his talk. It was a huge success and several of our members have already asked when we are inviting him again!

Our monthly evening meetings, sharing photos and anything interesting we have learnt or picked up, have been a pleasure and we will certainly continue this year. In addition, we are now also meeting on a weekly basis (in the morning) and hope to get much more field work done this year!



Friends of Tygerberg at De Grendel.



Friends of Tygerberg collecting data in the field.

A Fynbos Diary from the southern Cape

23-10-2006—*Satyrium princeps*

On Friday morning early, FOTO set off to Goukamma to look for *Satyrium princeps* after a recent burn. We did the boat thing across the river and had to slightly change course because stretches of the path had fallen into the river in the floods in August. And then on a series of southeast-facing slopes, we saw sheets of the carmine red *Satyrium princeps*. I have been walking that reserve for the last 30 years and have never seen them before. What an exciting find! Two whales out in the bay were the cherry on the top.

14-12-2006—*Nivenia argentea* from the Langeberg

A note from Jan Vlok came with a request from Peter Goldblatt to hunt for *Nivenia argentea* in the Langeberg to establish whether it is the same as the Rooiberg plant. Thanks, Jan, for involving us in such an exciting project. Congratulations to Ingrid who was the first to spot it when we fanned out across the slope. Because the temperature was over 40 degrees, we carried the plant material in a coolbox and sent it by courier to John Manning at Kirstenbosch. John Manning and Peter Goldblatt used this information to describe a new species from the Rooiberg that was previously included in *Nivenia argentea*.

15-12-2006 A note to Jan Vlok—*Disa schlechteriana*

We went to check on *Disa racemosa* in Campherskloof today and, lo and behold, just after we crossed the stream, we saw this *Disa*—only one. It must be the same *Disa schlechteriana* that Jan Vlok had seen the previous day. We spent a long time walking up and down the north-facing

slope hunting for more, but had no luck.

25-01-2007—*Gladiolus sempervirens*

We cooked yesterday. The promise of a strong south-easter was an empty one. Fortunately, we started at 06.45 up to Tierkop and then along the lower slopes of George Peak to Tonnelbos and the Botanical Gardens. The usual little streams along the way had mostly gone underground although we did manage to find little bits of water. It is as dry as I've seen it. Some *Cyrтанthus elatus* growing in the shade must have been taller than 1 m. They're the tallest I've ever seen. Also Marge in the lead had a very close encounter with a large and angry Cape cobra which was cooling itself in a small stagnant pool. Nasty thing!

We found two *Gladiolus sempervirens* plants. One plant was in the middle of the path and was in bud. Whether or not the group is prepared to slog up to Tonnelbos in the searing heat to see it in full flower is a moot point. We shall see.



Disa racemosa.

27-01-2007—*Erica ingeana*, *Leucospermum glabrum*, *Lobelia cuneifolia*, *Indigofera*—one undescribed species (Bond and Goldblatt)

The conditions were awful yesterday. We walked slowly up the road leading to Geloofskop at the crack of dawn, looking for *Erica ingeana* (a bit early) and *Leucospermum glabrum*. We could not find any sign of the *Erica* but there must have been over 100 *L. glabrum* plants. The bottom half of the slope is terribly degraded by aliens and we will suggest a 'Working for Water' team to the landowner. There is now no possibility of our getting through the fynbos to the nek and then on to the Geloofskop track proper unless by helicopter.

Di Turner



George CREW group.

The Harmony Flats Working Group— taking biodiversity to the people of Casablanca

The Harmony Flats Working Group has pulled off another successful Arbor Week in 2006. With the help of the student based at the Harmony Flats Nature Reserve, they invited six schools in the vicinity of the Reserve. A total of 430 children visited the Reserve over a period of four days. The activities included a talk by the CREW team on the fascinating plants occurring on the Reserve and the importance of conserving the site. This was followed by a tour of the Reserve and each of the Harmony Flats members took a group of children into the veld to show them some of the interesting species and to share some of their knowledge and stories. On the last day of Arbor Week we were involved in Plant Monitoring Day at the Reserve. The children were tasked with making permanent plots and monitoring three dominant species and four special species, which included *Ixia versicolor*, a Critically Endangered species that occurs only on this 9 ha reserve.

The group continues to maintain a presence at the Reserve, doing litter cleanups and alien clearing. City of Cape Town Nature Conservation has approved a Conservator post for the Harmony Flats Nature Reserve. The Conservator will be a permanent employee of the City and will manage three small reserves in the Strand/ Gordon's Bay area. This will ensure that the Reserve is managed in a more effective way and that the HFWG continues to make amazing contributions to the conservation of their Reserve.

Ismail Ebrahim & Jan Geldenhuys



Ixia versicolor.

News from the Kenilworth Racecourse Interest Group (KRIG)

Since the last newsletter, the 'Happy Hackers' have been hard at work and made huge inroads in the Port Jackson, stinkbean and poplar infestations as well as the clearing of rubbish. It is always a wonderful feeling at the end of a hot and sweaty morning to stand, arms akimbo, and admire our huge piles of uprooted weeds. Already a significant area is now almost alien free. Although last winter was lovely and wet, fortunately we were rained out only once. The beautiful rains created the added advantage of making it so much easier to pull



KRIG with sedge specialist Muthama Muasya.

out the unwanted saplings and dig into the ground to cut off the more mature plants at their roots. But the heat of the summer has not deterred our intrepid 'crew', and indeed impressive stands are now no more.

In November, Ismail, Caitlin and Wendy surprised us with an end-of-year treat—muffins, mince pies, cake and juice. Thank you, we really appreciated this. We were also joined by Dr Muthama Muasya, the Cyperaceae expert from UCT. He introduced us to the obscure (for us!) world of sedges and led us on a search for some specials. Unfortunately we could not locate any, but maybe better luck in a different season. We do, however, often come across some gems on our monthly visits. In February, Jean spotted a superb *Erica verticillata* in full bloom and nearby, the beautiful little *E. margaritacea*.

To our delight, Cape Nature has now supplied us with some equipment and Theo Grace of the Kirstenbosch stores has very kindly provided us with poison, enabling us to mount an attack on the poplars and stinkbean by lopping and poisoning. More impressive, however, was when Ismail arrived with his *chain saw!! Nothing* stood in his fearsome way!

Besides the tools from Cape Nature, Jaap Hendriks surprised us all with the wonderful news that his hiking club, Trails Club of SA, has very kindly donated all their hacking tools for our use. Thank you, Jaap, you are a star. All we need now, are heaps more hackers!! So, if any of you wonderful CREW members in the Cape Town vicinity would like to join our monthly hack, please contact Ismail or Caitlin—you will be most welcome.

Margaret Kahle

News from the Mamre CREW Group

The Mamre Community has managed to pull off yet another successful flower show in 2006.

The CREW team has applied for funding from CEPF to do a project in Mamre. In November we received confirmation that our proposal had been approved. The project will focus on developing livelihood opportunities by supporting the community to strengthen the existing tourism activities in the area. The group will focus on sampling all the remaining fragments of natural vegetation around Mamre and the data will be used by the City of Cape Town to prioritise areas for conservation. We have already established a management group between the partner organisations working in Mamre. We will also employ a biodiversity facilitator from the community to act as a link between the conservation organisations, scientists

and members of the community.

We plan to conduct ID courses, ecological courses and field training to assist the group to monitor threatened species in Mamre.

The Mamre Group also successfully implemented Plant Monitoring Day. The group and the kids were extremely enthusiastic and managed to make Plant Monitoring Day a huge success.

Ismail Ebrahim



Kids counting the dominant species in their plots.

The Nieuwoudtville Biodiversity Facilitators: monitoring *Bulbinella latifolia* var. *doleritica*

The fiery torches of the orange *Bulbinella latifolia* var. *doleritica* are one of the glories of Nieuwoudtville. This plant is restricted to dolerite soils around the town. Concerned about its declining numbers, we decided to join forces with CREW to monitor the plant.

We started by monitoring different populations as they seem to fluctuate in numbers over time, some populations having been reported

to drop from several hundred individuals to zero. The aim of the monitoring is to get a better understanding of the dynamics in populations over time and the factors that might impact on what at this stage appears to be a 'boom and bust' cycle.

The monitoring is done by marking populations (using a GPS) and also by physically marking individuals. Involving schoolchildren from the local Eco Club on Plant Monitor-

ing Day and thereafter has provided a great opportunity for the learners to get an insight into scientific methods and monitoring of our biodiversity.

The local Biodiversity Support Group, a multistakeholder group, is supporting the effort and community members are encouraged to report new populations of orange bulbinella for monitoring.

Mirenza Boesak



Bulbinella latifolia var. doleritica.

Summer School in Nieuwoudtville— learning and having fun!

The Nieuwoudtville Eco Club is part of a project that aims to raise awareness about biodiversity amongst all age groups. Another aim is to share knowledge with all those who are interested. The purpose of the Eco Club is to join various groups of people not only to teach others but also learn from each other. The Eco Club has come to be a resource centre in town for scholars and a place where people feel safe and happy.

Over the past years, the Eco Club has offered many learning activities, always enthusiastically attended by participants of different age groups. It is one of our goals to always provide an atmosphere where people are happy, safe and stimulated not only by learning experiences, but also creative exercise. We hold a Winter and Summer School every year and most of the children experience the activities as mentally very stimulating.

The Summer School was held from 4 to 7 December 2006 and was a great success. There was much local interest from both children and teenagers. Many activities were planned and much knowledge was exchanged between participants and those who were facilitating the activities. We also had some children from Kamieskroon visiting to learn from and be inspired by the activities in Nieuwoudtville and maybe even start an Eco Club in their home town ...

Some of the activities presented:

- Rock art painting, Papkuilsfontein
- Medicinal plants, Melkkraal
- CREW activities on Biodiversity Conservation
- Puppet show on natural resource management (Cape Nature)
- Ecology of rooibos tea
- Treasure hunt
- What is archaeology?
- Eco movie
- Art & craft workshop
- Make your own recycled Father Christmas

The Summer School was a great success and we



Excursion to Papkuilsfontein: a Summer School activity.

look forward to 2007. As an environmentally friendly project, the aim is to raise awareness. It would be of fundamental value to be able to pass our skills on to other up-and-coming Eco Clubs. Making a project such as the one in Nieuwoudtville available for others to learn from would be crucially important. This could be done by joint activities so that knowledge can be shared amongst all participants, both those facilitating and those who are part of the course, with the aim to gain knowledge of the various aspects.



Learning about medicinal plants in the veld: excursion to Melkkrakal.



Traditional *rieldans* opened the Nieuwoudtville Summer School in 2006.

If you would like to participate in the next Nieuwoudtville Summer or Winter School, please contact Estholene Moses estholene@indigo-dc.org

Estholene Moses

News from St Francis

With Plant Monitoring Day and all that went with it, we only managed to get out twice to do CREW sampling in our unique renos-terveld. Nothing amazing flowered for us, but we did come across a few more geophytes to add to our list. As there are many people looking at the area where we have been sampling not looking at the plants, but wanting to make lots of money by developing the area with HUGE developments, we hope that our sampling records will help to guide the developers and thus save some of the rare and endangered plants and some of the biodiversity.

Plant Monitoring Day was a highlight on the calendar for the children. They LOVED it. The children entered into all the activities SO enthusiastically, but I'm not sure who were more tired at the end of the day the children or the adults! The latter were exhausted! Thanks very much to all who helped and

congratulations to Caitlin and thanks to her for all the preparation she did.

If one can have highlights, I think one can also have dark-lows. We were VERY sad to have lost Jennifer, our Eco Club leader for the past two years, to the Western Cape, but we wish her well in her new job.

Caryl Logie



Finding the spot and setting out the plot.



Happy bunch of kids involved in PMD.

Still Bay CREW spring e-news-letter

Spring sprang early in Still Bay with Asterix and Peter Bestbier and Lisa Parkin (managers of Blombos Beware) finding *Disa lugens* subsp. *lugens* amongst the *dekriet*.

The Pauline Bohnen Nature Reserve was the testing ground for a new digital camera—with a bit of beginner's luck, I managed to photograph the exquisite grey-green, furry leaved, divinely perfumed *Agathosma serpyllacea*, which is a purple-flowered buchu endemic to the area. We also managed to photograph the stunning 'painted lady' *Gladiolus floribundus* subsp. *fasciatus*.

Dave Osborne came to the rescue with a *Still Bay Top 10* poster for a spring exhibition in our public library during the month of September. Thanks to Bettina Koelle and co. for their inspiring *Nieuwoudtville Top 10* poster.

Again, amongst the thatching reed, the very special Riversdale bluebell, *Gladiolus rogersii* var. *rogersii*, was recorded at John and Joan Gear's farm

Under Milkwood on the Goukou River. We also found an unidentified fan-shaped plant which refuses to flower, even in spring!

The highlight of spring was the CREW visit with AnneLise Schutte-Vlok to the Werner Frehse Nature Reserve just outside Riversdale. It's still closed to the public, but we've collected enough ammo to get it, we hope, re-opened and cared for. Some interesting plants found at the reserve included a new *Geissorhiza* sp. mimicking *Ornithogalum maculatum*, a *Drosanthemum* sp. with flowers ranging from red, orange to yellow, and the endemic *Haworthia marginata* (found by Jan Vlok, who also



Janet with AnneLise Schutte-Vlok in the field.

thinks the Frehse NR is well worth conserving). Dave Osborne again helped to produce a Werner Frehse poster for the official opening of Skulpiesbaai Nature Reserve, where we found the veld ferraria, *Ferraria crispa*, growing prolifically on the beach!

We have managed to get many locals (and even some land-



Haworthia marginata.

owners) excited about CREW. The support and enthusiasm is ever increasing and we look forward to a prosperous 2007.

Janet Naudé

The Tulbagh Renosterveld Project—now comes all the hard work

We have completed the field surveys in Tulbagh and now it is time to ensure that all the critical sites identified by the project are conserved and protected. We have been working closely with Garth Mortimer, Stewardship Extension Officer for the Upper Breede River Valley, to complete the site assessment forms for the identified stewardship sites. The forms contain information about the landowners, the potential conservation areas and all the biodiversity information that is available for the site. After the forms have been completed, the extension staff recommend the kind of Stewardship Agreement that should be applicable to the farm in question. Thus far Garth has completed five site assessments and three of these farms qualify for the highest level stewardship contract.

Nick Helme and Rupert Koopman have also been doing some exciting fieldwork in the Tulbagh Valley and managed to find populations of *Athanasia adenantha* and *Aspalathus tulbaghensis*. Both these species are rarely sighted and the *Aspalathus* was last seen in 1996 after not being recorded for 30 years. This species seems to respond to fire and comes up in clumps in recently burnt veld.

We were involved in a landowner information day in the Slanghoek Valley, an event initiated by Cape Nature and to which we invited farmers to join us in the field to see some of the rare and threatened plants occurring in the area. On one of the farms we visited we found *Diastella parilis*, *Spatalla propinqua*, *Erica hansfordii* and *Geissorhiza geminata*. The farmers were very interested and were totally blown away by the absolutely stunning flowers.

We also had a successful season of collecting on the farm Romansrivier just outside Wolseley. This farm is one of the most well-known botanical treasures in the Cape and after a huge fire in 2005 it was the place to be. Rupert found a new species of *Aristea* (now named *Aristea nigrescens*) and orchid specialists Benny Bytebier, Bill Liltved and Prof Dirk Bellstedt recorded 26 orchid species on this farm. It is hoped that most of the natural veld remaining on the farm will be conserved through a stewardship contract.

Ismail Ebrahim



Ismail showing landowners in Slanghoek Valley some of the special plants.



Geissorhiza geminata, a Critically Endangered species from Slanghoek.