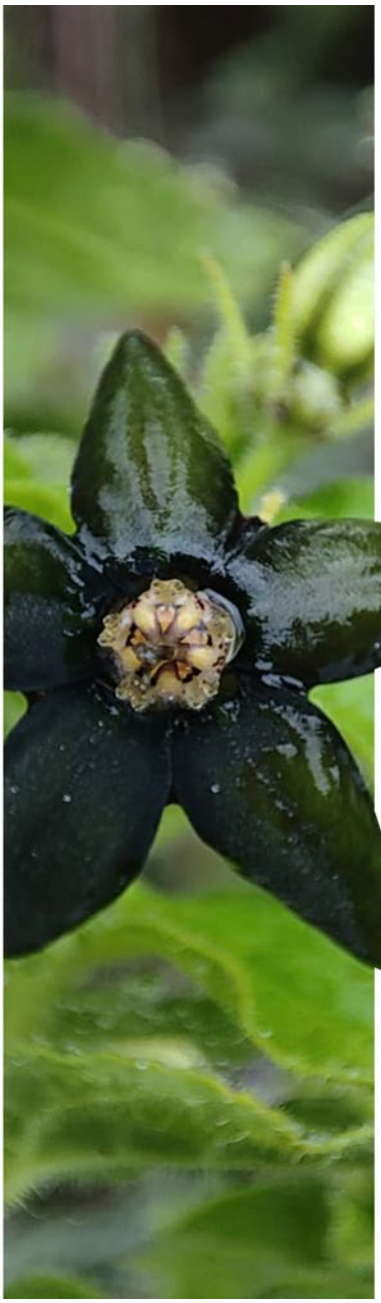
CREW

Custodians of Rare and Endangered Wildflowers

Newsletter

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SANBI
Biodiversity for Life
South African National Biodiversity Institute

Botanical Society of South Africa

Mapula Trust

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Editorial

Suvarna Parbhoo Mohan

There is a moment on every field trip when everything else falls away – the drive, the admin, the deadlines – and all that remains is a plant, a landscape and the simple pleasures of looking closely. That moment is what brings people back, year after year. It is a reminder that while the world moves fast, conservation works at its own pace – built on sites revisited, citizen scientists who grow more skilled each season, collaborations that deepen and discoveries that keep surprising us.

This year marks my 20th year with the CREW Programme. It has been one of the most challenging yet. Resource constraints forced some tough decisions, including cancelling the annual Summer Rainfall Region (SRR) Node workshop. That gathering is very important to our community, and we felt its absence. Despite this, the programme remains strong, and I am truly proud of what our CREW community achieved. Nationally, we carried out 550 targeted field surveys, many in under-sampled biodiversity stewardship sites. We recorded nine plant species new to science and rediscovered six species not seen for a long time. Over the past five years, we have documented data for 423 of the 557 known range-restricted species, with 18 cryptic species recorded for the first time this year.

One of the highlights for me was facilitating iNaturalist training workshops in Pondoland for the N2 Wild Coast Biodiversity Offset Project, in partnership with the Eastern Cape Parks and Tourism Agency. We reached out to about 80 participants – reserve staff, eco-rangers and community members from the Chaguba, Mkambati, Mthentu and Mnyameni communities – and created dedicated projects for each offset site. We are not only supporting the



Joint fieldwork with the SANBI NBA team in the southern Drakensberg, exploring iNaturalist approaches for Ecosystem Condition Assessment. Photograph: Suvarna Parbhoo Mohan.

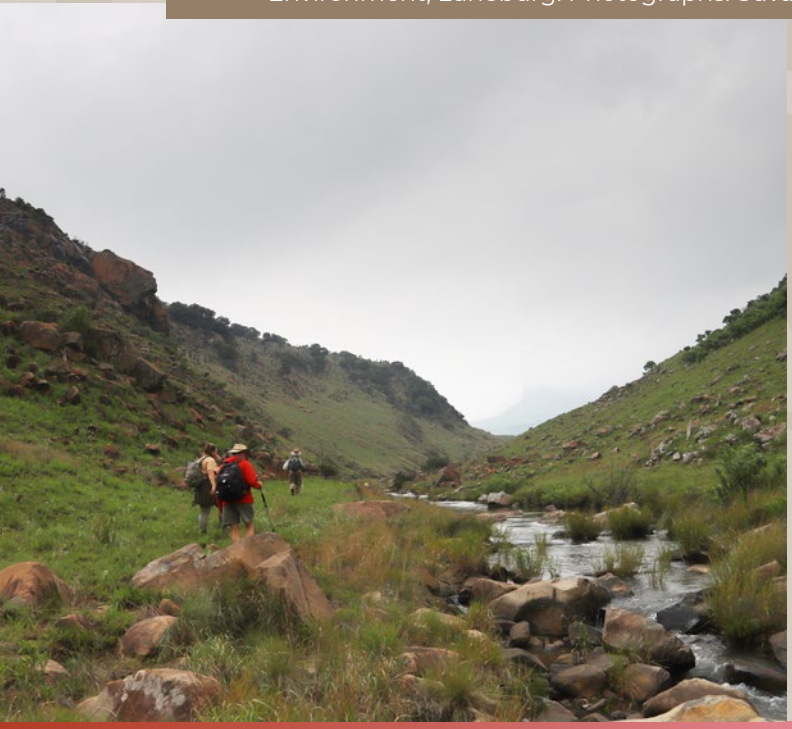
offset project but hopefully, slowly growing our CREW network in the Eastern Cape portion of the Pondoland Centre of Plant Endemism.

In November, the Mpumalanga Plant Specialist Group organised a field trip to the KwaMandlangampisi Protected Environment in Lüneburg on the Mpumalanga/KwaZulu-Natal border. This site is South Africa's first declared protected environment, under the National Biodiversity Stewardship Programme. The Durban and Midlands CREWites joined what turned out to be a memorable weekend across high-altitude grasslands, wetlands and mistbelt forest. Marinda Koekemoer writes about the rediscovery of *Senecio eminens*, last collected in 1961 (page 28), while Muhammad Adamjee shares his exciting finds (page 34). The Durban CREW arranged another visit later in the season. Over four rewarding days, 18 participants recorded 1 719 observations, representing 529 species (10 of the 387 plant species were of conservation concern). KwaMandlangampisi clearly has much more to reveal.

I also spent valuable time in stewardship sites in the KwaZulu-Natal Midlands, including an overnight trip to the complex of community-owned sites in Impendle that WWF-SA is championing. The sites were more degraded than expected, but there is always value in exploring unfamiliar ground – and having the Midlands CREW group along made it a worthwhile addition to our collective knowledge of the region.

An invitation from the Wildlands Trust to conduct iNaturalist training at a communal site alongside Lake Sibaya (one of South Africa's largest freshwater lakes) in Maputaland was not one to decline. The Trust is collaborating with iSimangaliso to forge a biodiversity stewardship agreement for the area. Having focused on this region a decade ago surveying for Maputaland endemics and threatened species, it was exciting to have new sites to explore. We began with an iNaturalist training session and bioblitz, and returned a month later for the City Nature Challenge. That return visit brought its own reward – the Wildlands Trust interns and some of the community members from the first bioblitz were there and seeing them confidently pointing out special trees and searching for smaller plants and organisms was one of those moments that stays with me. The long drives and humid conditions were more than worthwhile. Anyone who has spent time in Maputaland in summer will know exactly what I mean.

Field trip with the Mpumalanga Plant Specialist Group at KwaMandlangampisi Protected Environment, Lüneburg. Photographs: Suvarna Parbhoo Mohan and Delia Oosthuizen.





A particularly energising experience was organising joint field trips with the SANBI National Biodiversity Assessment (NBA) team, where we explored approaches to capturing iNaturalist observations suited to Ecosystem Condition Assessment and the VegMap projects. The exchange was as rewarding as the collaboration itself, and I hope this becomes something we return to each year.

Reaching the next generation of plant custodians remains a priority for the CREW Programme. This year, despite budget constraints, we reached students at 14 higher education institutions, sharing the world of plant conservation, Red Listing, iNaturalist and the many ways SANBI's resources can open doors in the biodiversity sector. We set up dedicated iNaturalist projects to keep the connection going beyond the lecture room, and it is always rewarding to watch participation grow through the year. This year, Carel Fourie from the University of Pretoria stood out with a remarkable 1 683 observations of 850 species – well done, Carel!



Carel Fourie, from the University of Pretoria, whose 1 683 observations of 850 species made him CREW's standout student contributor this year. Photograph: Carel Fourie.



iNaturalist training session in Pondoland, part of the N2 Wild Coast Biodiversity Offset Project partnership with the Eastern Cape Parks and Tourism Agency. Photograph: Suvarna Parbhoo Mohan.

iNaturalist remains central to how CREW documents and shares biodiversity data. South Africa has now contributed over 7.38 million observations of almost 45 000 species, while the southern African region has passed 8.23 million observations of over 50 800 species. The new monthly IDFocus initiative is helping to drive data quality further, improving plant records for research and conservation. It is worth noting that while iNaturalist has transformed the scale of data collection, the targeted population-level data that underpins Red List assessments comes from CREW's dedicated redlist (s Afr) iNaturalist project. Here, volunteers respond to specific survey questions – replicating the structured site forms of previous years within the platform – producing data that remains irreplaceable for species assessments. We encourage all our citizen scientists to continue contributing observations through this project.

The City Nature Challenge (CNC) and Great Southern BioBlitz (GSB) remain two of the most powerful drivers of community





iNaturalist training and bioblitz with the Wildlands Trust at Upper uThukela and Lake Sibaya, supporting biodiversity stewardship agreements with communities in the Northern Berg and Maputaland. Photographs: Suvarna Parbhoo Mohan and Gareth Roberts.

participation in our calendar. Running since 2016, the annual CNC brings cities across the world into four days of competitive biodiversity recording during the northern hemisphere spring, while the GSB, running since 2020, takes place during the southern hemisphere spring.

African participation in CNC dipped from 64 cities across eight countries in 2025 to 49 cities across five countries in 2026, though we remain committed to maintaining and growing the CNC's reach on the continent. In South Africa, 558 taxa of conservation concern (480 of which were plants) and 256 invasive species were recorded during CNC 2026. These numbers are proof that surveying outside our typical field season is rewarding, catching plant taxa that flower in late summer and autumn that would otherwise go unrecorded.

The GSB, held in October 2025, showed strong growth: participation grew from 45 regions representing 16 southern and central African countries in 2024, to 64 regions across 15 countries in 2025. KwaZulu-Natal had the highest observer count in South Africa with over 470 participants, and the Overstrand topped 15 000 observations – the highest of any region globally. Over 528 plant taxa of conservation concern and more than 400 invasive species were recorded nationally.

What has also shifted this year is how far iNaturalist's reach has extended beyond our usual conservation networks. We supported the Expanded Freshwater and Terrestrial Environmental Observation Network (EFTEON), based in KwaZulu-Natal, in identifying iNaturalist as a suitable platform for their field data. EFTEON forms part of the South African Environmental Observation Network (SAEON), a national infrastructure network monitoring long-term environmental change across key South African landscapes.

We also provided training to Mondi and SAPPI, two of South Africa's major forestry companies, helping them set up dedicated projects to catalogue biodiversity across thousands of hectares of Forest Stewardship Council (FSC)-certified land, drawing on both employees and citizen scientists. The Underberg CREW group joined the SAPPI team during the GSB, while the Mpumalanga Plant Specialist Group also spent their GSB at a SAPPI site – a reminder that these corporate partnerships open up new terrain for CREW volunteers too.

The year also saw CREW's long-standing partnership with Eskom extended from Koeberg Nature Reserve in the Western Cape (surveyed by the Friends of Tygerberg Hills CREW group for several years) into Ingula Nature Reserve in KwaZulu-Natal, where the Battlefields CREW group have begun regular field trips. Straddling the KwaZulu-Natal and Free State border, Ingula protects high-altitude grasslands and near-pristine wetlands of significant conservation value. For CREW volunteers, these partnerships have quietly opened up new ground to explore.

This edition also marks some moments worth celebrating. Bart Logie turns 90 this year – still walking the veld, still contributing to CREW as he has since its earliest days (page 69). And congratulations to Ismail Ebrahim, our Cape Floristic Region (CFR) Node Manager, who received the Lita Beukes Cole Award at the 2025 Arid Zone Ecosystem Forum (AZEF), recognising his contributions to the conservation of the Succulent Karoo Biome.

Conservation moves slowly. It asks for patience, for returning to the same site season after season, for noticing what most people walk past. And none of it happens alone – not the field trips, not the rediscoveries, not the data. It is built together – familiar sites, returning seasons, and people who keep showing up. That is what CREW has always been, *citizens monitoring and conserving our plants*. This has not been an easy year, in more ways than one. But the field has a way of reminding you what matters. The stories in this newsletter are the reason we do this work. Thank you to every CREW citizen scientist, partner and student who contributed to what has been, budget constraints and all, a remarkable year. Keep going.

Cape Floristic Region CREW highlights: a season of growth and renewed purpose

Ismail Ebrahim

The 2025/2026 field season has been one of growth, innovation and renewed energy for the CREW Programme. Over the past year, we have continued to strengthen and expand our network of passionate volunteers, while also engaging new groups and exploring previously underrepresented areas. As the conservation landscape evolves, so too does our work. Increasingly, our focus is shifting toward species recovery and ecological restoration – ensuring that the data we collect translates into meaningful conservation action. This strategic direction aligns closely with Target 4 of the Kunming-Montreal Global Biodiversity Framework, which calls for active interventions to halt extinctions and support species recovery. None of this would be possible without the dedication and enthusiasm of our volunteers and partners, who remain at the heart of everything we do.

One of the standout achievements this season was the development of the CREW promotional video. In collaboration with professional videographer Nick Chevallier, we set out to capture the essence and impact of the CREW Programme through the voices of those who know it best – our volunteers. The process involved travelling across regions to document a truly national perspective, featuring interviews with long-standing volunteers, newer recruits, CREW staff and young professionals who have gained valuable experience through the programme. These stories brought to life the personal connections, sense of purpose and collective impact that define CREW.



NLC youth about to hike in Silvermine Nature Reserve. Photograph: Ismail Ebrahim.



NLC youth showing their excitement after a field trip with the Blaauwberg Conservation Area CREW group. Photograph: Ismail Ebrahim.

The video has become a powerful tool for raising awareness about the programme, offering an engaging and accessible window into the work we do and the difference it makes. Importantly, the process of creating the video also gave us an opportunity to reflect on the remarkable journey of CREW over the past 22 years. It deepened our appreciation for the countless hours of volunteer effort that have contributed to building a programme that is nationally recognised and globally relevant. We extend our sincere gratitude to every volunteer who has contributed to this legacy – your passion and commitment continue to inspire us all.

Another exciting development this season was our involvement in the Botanical Society of South Africa's youth development programme, funded by the National Lotteries Commission (NLC). As one of our key implementing partners, BotSoc launched this initiative to equip young people with practical skills in horticulture, plant identification,



Erica ixanthera found with the Outramps and new recruits from the Stilbaai area. Photograph: Ismail Ebrahim.

invasive species clearing and the development of indigenous community gardens. The programme operated across several regions, including the West Coast, Overberg and Cape Peninsula, and brought together a wide network of conservation partners.

The objectives of the programme were multifaceted. A key focus was strengthening citizen science by training participants in the use of iNaturalist and facilitating bioblitzes in priority conservation areas. Participants also supported on-the-ground conservation efforts, including invasive plant clearing and plant monitoring in important plant areas. In collaboration with SANBI's national botanical gardens, the programme further contributed to the establishment of community gardens aimed at education, conservation and local empowerment.

CREW was proud to support this initiative through a series of targeted training sessions. These included introductions to iNaturalist, basic plant identification skills and an overview of the conservation landscape in South Africa, including the roles of various institutions. We also introduced participants to the IUCN Red List process, highlighting how species assessments inform conservation decision-making and the critical role that consistent monitoring plays in this process. To reinforce these learnings, we organised several field trips and bioblitzes where participants worked alongside CREW volunteers, gaining hands-on experience and building confidence in their skills. The enthusiasm and engagement shown by the youth participants were truly inspiring and give us great hope for the future of conservation.

We were also delighted to reignite CREW activities in the Stilbaai area. A motivated group of local volunteers, already active in managing a herbarium and engaging in conservation work, reached out to explore how they could become more involved in CREW. In response, we organised an iNaturalist training session and provided guidance on priority threatened species in the area that require monitoring. This renewed collaboration has already begun to yield positive results.

A particular highlight was a joint field trip with the Outramps CREW group in November to monitor the highly restricted *Erica ixanthera* in the Garcia State Forest. This species occurs in a specialised and challenging



Bulbine bruynsii, a very weird plant. Photograph: Ismail Ebrahim.



The spectacular West Coast is under huge threat from mining and other developments. Photograph: Ismail Ebrahim.

habitat, making access to populations both difficult and rewarding. The expedition required determination and teamwork, but ultimately we were successful in locating the population. Encouragingly, the plants were found to be in good health. We were also able to collect seed, which will be shared with the Millennium Seed Bank as part of ongoing ex situ conservation efforts. Importantly, this engagement also allowed us to strengthen relationships with the local management authority and establish a regular monitoring programme for the Garcia area.

Throughout the season, CREW volunteers continued to provide invaluable support to a range of conservation initiatives. In partnership with the Conservation Outcomes team, the Cape Leopard Trust and the Table Mountain Fund, we contributed to plant surveys within identified leopard conservation corridors. These surveys added an important botanical dimension to corridor planning, demonstrating that these landscapes are not only critical for the conservation of the elusive Cape leopard, but also support a rich diversity of plant species, many of which are of conservation concern. This collaboration is a powerful example of how integrated approaches can strengthen the case for protecting biodiversity at multiple levels.

Similarly, we supported The Nature Conservancy in their work with landowners in the Groenlandberg area to establish a protected environment. Through targeted bioblitzes, CREW volunteers helped to generate valuable biodiversity data that feeds directly into stewardship assessments and management planning. Our conservation partners have expressed deep appreciation for this support, recognising the important role that CREW plays in providing high-quality data to inform conservation decisions.

Another memorable experience this season was engaging with the Wupperthal community around sustainable rooibos tea production. I had the privilege of joining a colleague working closely with the community to explore the relationship between biodiversity and agricultural practices. Our focus was on *Serruria flava*, a Critically Endangered species endemic to the Wupperthal area and threatened, in part, by the expansion of rooibos cultivation.

What stood out during this engagement was the community's strong sense of stewardship. Rather than viewing conservation

as a constraint, they have embraced *Serruria flava* as a flagship species and recognise their responsibility in ensuring its survival. We conducted site visits to assess populations and discussed potential conservation measures to safeguard the species into the future. It was deeply inspiring to witness a community taking ownership of their natural heritage and actively seeking solutions that balance livelihoods with conservation.

Our work responding to the illegal succulent trade also continued to evolve this season. As demand shifts beyond *Conophytum* species, we have expanded our monitoring efforts to include a broader range of geophytes and caudiciform plants. We undertook a targeted survey along the West Coast, covering areas from Strandfontein through Nuwerus and into the coastal zone west of Kotzesrus. This was a new and exciting area for the CREW team, offering both challenges and opportunities.

Among the species monitored were *Euphorbia schoenlandii*, which has recently come under pressure from poaching, and the unusual *Bulbine bruynsii*. While we were relieved not to observe signs of harvesting in *B. bruynsii* populations, we remain vigilant and are working to include viable material in ex situ conservation collections. The journey also provided a stark reminder of the threats facing these landscapes. While the West Coast's untouched beauty is breathtaking, it is under increasing pressure from mining and prospecting activities. Witnessing these areas at first hand reinforces the urgency of our work and the importance of supporting efforts to protect these fragile ecosystems.

On a personal note, I was deeply honoured to receive the Lita Beukes Cole Award at the 2025 AZEF conference. This award recognises contributions to the conservation of the Succulent Karoo Biome and is administered by the Wilderness Foundation Africa in honour of Lita Beukes Cole, whose conservation legacy continues to inspire. I accept this recognition on behalf of the entire CREW community, whose collective efforts make achievements like this possible.

As we reflect on a busy and impactful field season, we are reminded that the strength of CREW lies in its people. To our volunteers: your dedication, curiosity and passion are the driving force behind everything we achieve. To our partners: your collaboration and support enable us to expand our reach and deepen our impact. Together, we are making meaningful strides toward securing South Africa's extraordinary plant diversity for future generations. Thank you for being part of this journey.

Eastern Cape CREW: the universe conspired

Vathiswa Zikishe

Let me start with the profound words of Ralph Waldo Emerson: 'Once you make a decision, the universe conspires to make it happen.'

In last year's newsletter, I concluded with my ambitious plans for the 2025 field season. I even presented these at the Cape CREW annual workshop, along with many other brilliant plans. However, the financial situation took a very different turn and did not favour our great plans. But it all worked together in the end, the universe conspired, although the master plans were not realised, field trips were carried out, and we continued making Species of Conservation Concern (SOCC) discoveries. So, in this case, a positive decision was made and the universe aligned to make it happen, despite budgetary constraints. This year, the Eastern Cape CREW Node is proud to contribute six articles to this issue, each reflecting the unique ways our citizen scientists advance the programme's broad conservation mandate.



Bergeranthus albomarginatus growing on flat sandstone outcrops. Photograph: Vathiswa Zikishe.

Field season highlights: SOCC and their stories

While I was busy with the field season preparations, conducting iNaturalist and basic plant identification training sessions for our Hogsback partners, I was notified that the DNA Bank SA team from SANBI Pretoria was coming to the Eastern Cape to collect DNA material for SOCC. We started in Hogsback, as I was already there. Two species were targeted for the area, *Bergeranthus albomarginatus* (VU) and *Euphorbia bupleurifolia* (CR). We had previously monitored *B. albomarginatus*, because it is one of our critical habitat species. Sadly, the threats surrounding this population have significantly changed for the worse, possibly to the detriment of this population, but not all hope is lost. The species is still extant regardless of these circumstances, but its future survival is uncertain, given the ongoing degradation of its type locality habitat.

Euphorbia bupleurifolia, however, has a different story to tell. This species went from Least Concern to Critically Endangered in 2022's Red List assessment update, mostly due to the illegal plant trade, both for the local traditional medicinal markets and mostly for the international ornamental succulent trade. Although it has great ornamental value, it is mostly harvested



Euphorbia bupleurifolia growing between rocks. Photograph: Vathiswa Zikishe.



The Adelaide form of *Tulbaghia cominsii*, with more robust florets borne on a thick flower stalk as compared to the typical form. Photograph: Vathiswa Zikishe.

for traditional medicine in our part of the country. We met someone with an intrinsic attachment to the species and calls it his family's defence against evil spirits. Details aside, this illustrates that the species' medicinal uses are not just assumptions based on data from other sources, we heard this from someone who uses it. He took us to a population near the valley, and we recorded its size and made a quick assessment of its habitat conditions. He assured us that this was the 'safest' population because it is not easily accessible.

For us, the good news is that this population was not included in the recent Red List assessment of the species. We were aware of its existence between Dikeni (Alice) and Hogsback, but we had never had access to these records. This will contribute to the assessment by increasing its range and the area it occupies, even though its current threatened category may not change. This also provided us with an opportunity to meet the plant users and hear their views on the uses. This will help us to make informed decisions on the necessary conservation interventions for the species.

We then moved to the Adelaide division, where we collected a *Tulbaghia cominsii* (CR) specimen from a different location. It's a long story, but I'll keep it brief: given that we previously knew of only one population of this species near Qonce (King William's Town) that was under immense threat, it is comforting to know that there is a protected and thriving population elsewhere. James Deacon was the first person to discover this population in 2018 and lodged a specimen



Dolerite koppies near Mthatha and Libode villages where *Nerine masoniorum* is found. Photograph: Vathiswa Zikishe.

in the Compton Herbarium where Dr John Manning identified it as *T. cominsii*. During our field trip in 2025, we located a new subpopulation on a nearby farm where James had originally found it. We took a specimen to Tony Dold of the Schönland Herbarium, and he confirmed that it matches the features of *T. cominsii*, and he called it the Adelaide form of *T. cominsii*. However, we believe that a formal taxonomic study, as well as publication of this species' discovery, is needed before we can celebrate!

The third species encountered on this trip was *Achyranthemum recurvatum* (EN). This bontveld chaff has faced many threats, including recent claims that it is harvested by snake poachers. Apparently, snakes and other reptiles use it as a nesting site, which are then poached. These claims caused us great concern, so we took it upon ourselves to assess the size of the natural population and check for any decline in numbers or locations. I am pleased to say that the species is thriving, with many mature and young individuals. The only population that seemed to be struggling was near a road where heavy vehicles travel to and from a sand quarry. During our rapid field visit, we could not conclude that dust was causing dieback of these individuals because there is a thriving population to the west on the same route, despite the dust from passing trucks. Perhaps the population was reduced when a game reserve fence was erected, and there were very few individuals exposed to traffic and dust particles.

At the beginning of the year, Pikolomzi Kapa, an MSc Joan Wrench Scholar from Compton Herbarium, joined me. His research focuses on disentangling *Gnidia*, with particular emphasis on the species of the newly reinstated genus *Epichroxantha*, and together we joined the Ground Truth team in Mpondoland. There, we recorded several Mpondoland endemics and SOCC, including *Leucospermum innovans* (EN) and the beautiful *Struthiola pondoensis* (LC). Although not threatened, the latter species is certainly special, as it is restricted to a specific habitat and has a narrow distribution range. On our way back from Mpondoland, we took a detour to some villages between Mthatha and Libode, where we found a population of *Nerine masoniorum* (CR), a highly localised Eastern Cape endemic, which is losing its natural habitat due to informal settlements and mining near Mthatha. The population we monitored was close to houses on dolerite koppies and was very rare. We recorded fewer than ten plants, but it was early in the flowering season and we were in a rush to drive back to Makhanda.

In closing, there have been so many activities taking place in the Eastern Cape that I cannot feature them all in this article. However, I strongly believe that the Eastern Cape is flourishing with plant conservation

Nerine masoniorum, depicting strongly recurved flower segments. Photograph: Pikolomzi Kapa.





activities. This is evident in the articles featuring our citizen scientists. Our collaborative and unique efforts to make the CREW Eastern Cape Node a success continue to strengthen. As we continue to host research students, our territory and network are expanding. I look forward to seeing how the 2026 field season shapes up, despite the ongoing threat of financial constraints to our targeted outcomes.

This issue also celebrates a special milestone – the 90th birthday of CREW Eastern Cape pioneer Bart Logie. Alongside his wife, Caryl, this remarkable duo represented the Eastern Cape long before the node was formally established. Over two decades later, Bart and Caryl continue to inspire and support the programme with the same passion and rigour they always have.

My favourite moments are when I visit the Fourcade Botanical Group (FBG) in St Francis for a planning meeting and find myself sitting with them – Bart and Caryl asking sharp, detailed questions about specimens, interrogating the target list and holding me accountable in the best possible way. It is in these moments that I am reminded why this work matters. They are the roots of what we do, and as long as they are asking questions, the rest of us have no excuse not to keep searching for answers.

Turning plans into progress: species recovery in the CFR

Tristan Kruger

Species recovery is quickly becoming a common term among conservation practitioners, owing to the fact that we have just run past the halfway mark for the decade of ecosystem restoration and species recovery. However, I now understand why a whole decade has been allocated for this work – it is lengthy and requires meticulous strategic planning, and never mind the fact that the entire practical process of putting plants back into the field is a long process of bulking up material through propagation, putting them onto site, waiting and hoping that some plants survive, and that evidence of recruitment is observed. This all takes time.

Much of the strategic work concerning species recovery has been centred on the production of priority lists and determining the interventions required for each species, while identifying those that are ready for a full-scale recovery effort. This, of course, has been intertwined with opportunistic recovery efforts for priority species that are encountered in the field, a direct result of the nature of CREW's monitoring fieldwork. Through this approach we have managed to secure high-quality ex-situ conservation collections for *Strumaria leipoldtii*, *Moraea loubseri*, *M. aristata*, *M. regalis* and *Babiana radiata*, all of which have been identified as high priority species for recovery.

The more strategic work in 2025 was concentrated on developing clear and concise recovery plans for species that we considered ready for recovery. Initially, plans were quite lengthy, with content concerning things like species taxonomy, habitat and propagation protocols, but this was quickly whittled down to a series of links and appendices for a more simplified write-up that placed more emphasis on the interventions required, with any additional information reduced to a series of appendices that a reader may access should they require extra reading. Additionally, with knowledge and experience acquired through work conducted on *Marasmodes undulata*, CREW and its partners thought it necessary to produce a monitoring and post-planting document to



Strumaria leipoldtii (CR) found at a single location near Lamberts Bay. Photograph: Tristan Kruger.

accompany all recovery plans. Its necessity is drawn from the fact that post-planting monitoring is crucial in measuring the rate of success through survival and eventual recruitment, which is ultimately the end goal for species recovery – something that was not often done in other recovery efforts in the past. Additionally, the need to document how plants are reintroduced means that different methodologies can be tried and tested and, accompanied by long-term monitoring, this will help us refine our reintroduction methodologies and techniques.

A large part of our recovery efforts for 2025 was partnering with the Stellenbosch University Botanical Garden (SUBG) to recover *Disa barbata*, a highly localised terrestrial orchid from Riverlands, about 50 km north of Cape Town. Here, the species clings to life despite pressures from highly invasive Port Jackson weed (*Acacia saligna*), which alters soil chemistry and outcompetes the local vegetation. Mature plants are estimated to number fewer than 50 individuals. In the 2024, the CREW team hand-pollinated flowers in late October 2024, and seed capsules were collected by Donovan Kirkwood (late curator of SUBG) about a month later to be used for tissue culture at the garden's lab facilities. Surplus seed was processed for eventual banking with the Millennium Seed Bank Partnership at Kirstenbosch.

Keeping in mind that orchid seeds cannot germinate naturally without the assistance of specific fungal mycorrhiza, it was also our aim to sample and culture the fungi from the habitat of these plants. This was done via a process called seed-baiting, whereby staff from SUBG and CREW placed seeds into permeable packages that were buried in the soil near actively growing adult *Disa barbata* plants. If the fungi are present then germination is expected to occur, and collected material can be sampled for the mycorrhizal fungi present. A follow-up still needs to be conducted to assess the success of this endeavour and will likely be done in the winter rainfall season of 2026. Additionally, the CREW team, alongside partners and volunteers, conducted an alien and invasive



SUBG staff burying *Disa barbata* (CR) seeds for seed-baiting. Photograph: Tristan Kruger.

hack to remove as many Port Jackson trees from the area with the greatest density of *D. barbata* so that pressure on the plants can be alleviated.

Also in partnership with SUBG, the CREW team conducted another planting of *Marasmodes undulata* at New Orleans Caravan Park in Paarl. Previous plantings in 2023 and 2024 have helped us understand the soil hydrology and plant communities where plants have the highest chance of survival. Using this information we planted 148 plants into suitable areas. Time will tell if we will see high survival rates and eventual recruitment in the years to come.

Some momentum felt lost after losing Donovan Kirkwood to the Jonkershoek mountains, a great mentor and partner to the CREW CFR community. His absence is deeply felt across our work. Yet, if anything, that loss has strengthened our resolve. The passion within the plant conservation community runs deep, and continuing this work feels like the most fitting way to honour the ideas and energy Don brought to it. If even a fraction of his fantastical ideas come to life in the years ahead, I will consider it all a success.



Ismail Ebrahim (CREW CFR Node Manager) showing his gusto as he laid waste to many Port Jackson weeds. Photograph: Tristan Kruger.

iNaturalist update: CREW Contributors, Red List projects and IDFocus

Suvarna Parbhoo Mohan and Tony Rebelo

Almost a decade ago, the CREW Programme shifted its data collection from manually completing field forms and capturing data onto the CREW database, to uploading all observations directly onto iNaturalist. Today, iNaturalist is central to how CREW citizen scientists collect, share and contribute biodiversity data – not just plants, but animals, pollinators, vegetation mapping, invasive species and more. This article covers three things every CREW citizen scientist on iNaturalist should know: how to register as a verified CREW citizen scientist, how to ensure your plant taxa of conservation concern (TOCC) observations reach the Red List scientists who need them, and how to get involved in identifying observations – our new monthly initiative to improve identification quality across southern Africa.

1. Join the CREW Contributors Project

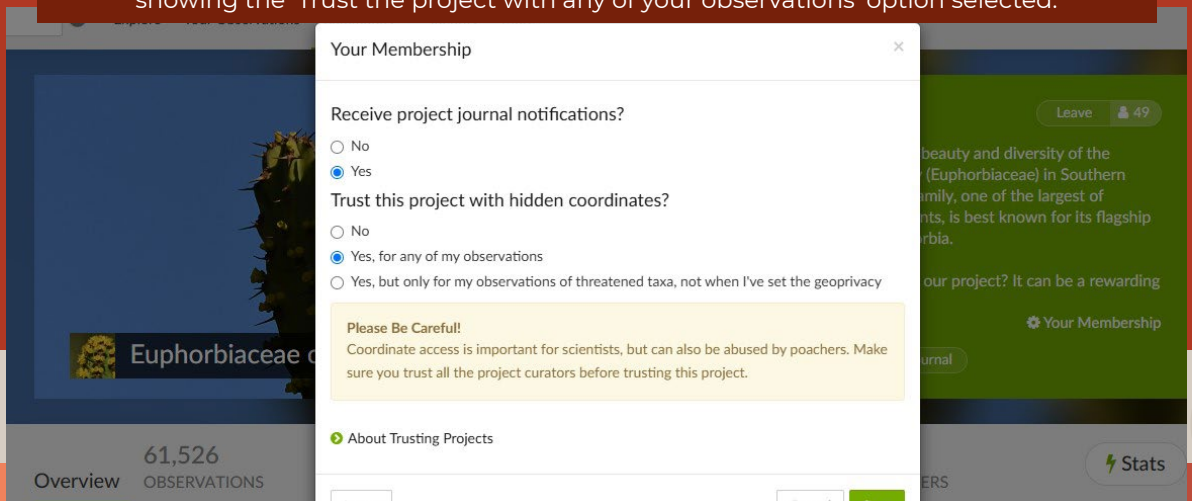
The CREW Contributors Project is how we verify that you are an active CREW citizen scientist on iNaturalist, rather than a general iNat user. Membership confirms that you've been trained through CREW and are contributing data under the programme's protocols. It also ensures that when you join the Red List projects, CREW and SANBI staff can identify your records as programme data.

Joining is required for anyone attending CREW outings. As a CREW participant, you gain access to sensitive locality data for rare and threatened plants on the condition that you keep this information confidential and do not share it with others, while allowing CREW/SANBI staff access for conservation purposes.

To join and set up your membership correctly:

- Go to the CREW Contributors project page and check that your name appears as a member. If not, contact your node manager – project admins add members to this project on your behalf.
- Once you are a member of the project, click the cog icon next to 'Your Membership', select 'Trust the project with any of your observations' and save. You only need to do this once – iNaturalist saves the setting permanently.

The 'Your Membership' cog setting on the CREW Contributors project page, showing the 'Trust the project with any of your observations' option selected.



2. Recording TOCCs on iNaturalist

Collecting data on taxa of conservation concern (TOCCs) is the core purpose of the CREW Programme and iNaturalist is now how we do it. There are two iNat projects central to this work.

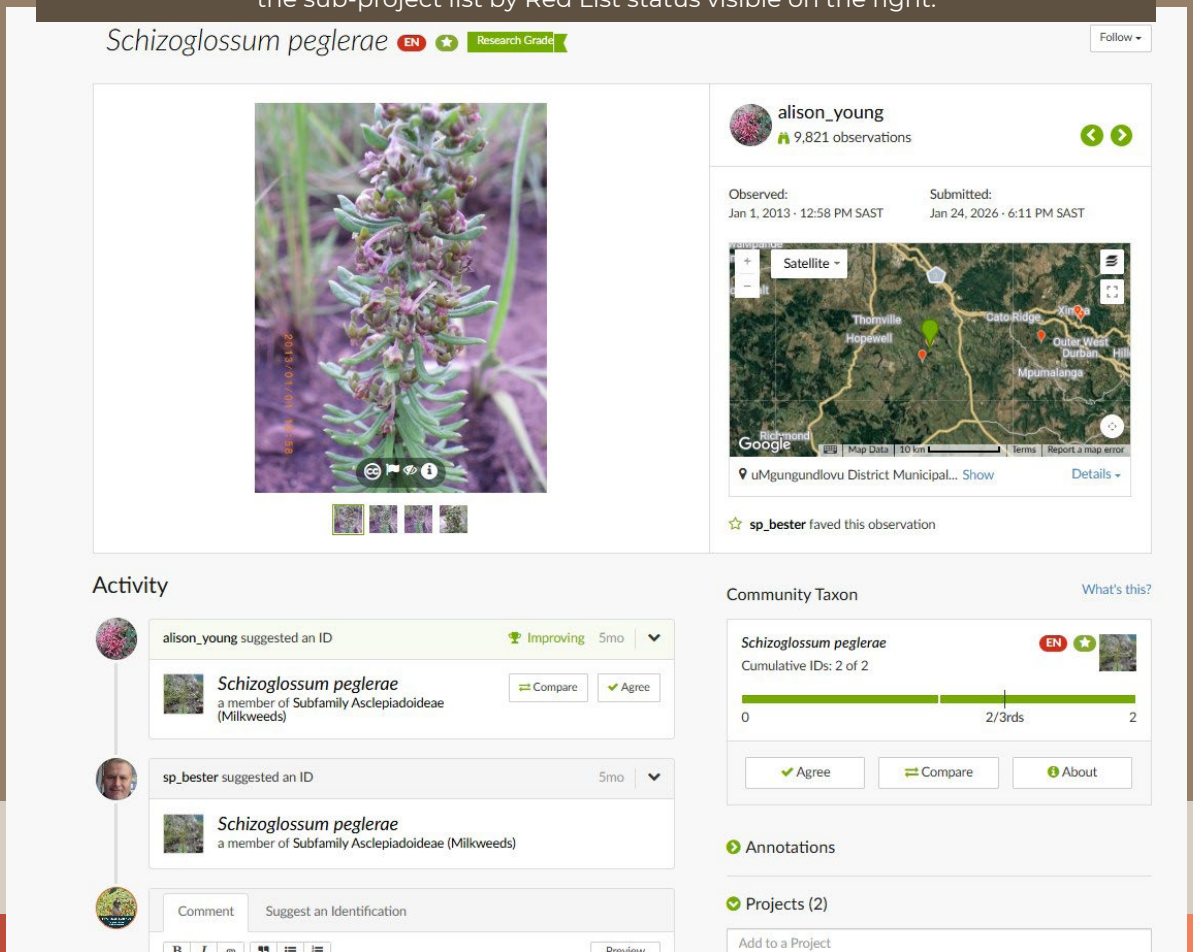
Project 1: South African Red List Plants and Animals

Once you join this project, any TOCC observation you upload is added automatically. When you review your observations after a field trip, this project confirms which of your uploads were TOCCs. It also links to sub-projects organised by Red List status:

- Critically Endangered
- Endangered
- Vulnerable
- Near Threatened
- Data Deficient
- Rare
- Critically Rare
- Extinct and Extinct in the Wild

These sub-projects are updated after each annual Red List assessment to keep iNat aligned with the official Red List website. Due to the painstaking nature of updating species manually, there can sometimes be a lag – but the team works to keep them as current as possible.

The South African Red List Plants and Animals project page, showing an observer's TOCC observation automatically added, and the sub-project list by Red List status visible on the right.



Project 2: redlist (s Afr)

This is where the real data collection happens. You need to add your TOCC observations manually, and when you do, you're asked to complete five fields:

- Population size estimate
- Population size and extent
- Population threats
- Habitat (optional)
- Specimen number (optional)

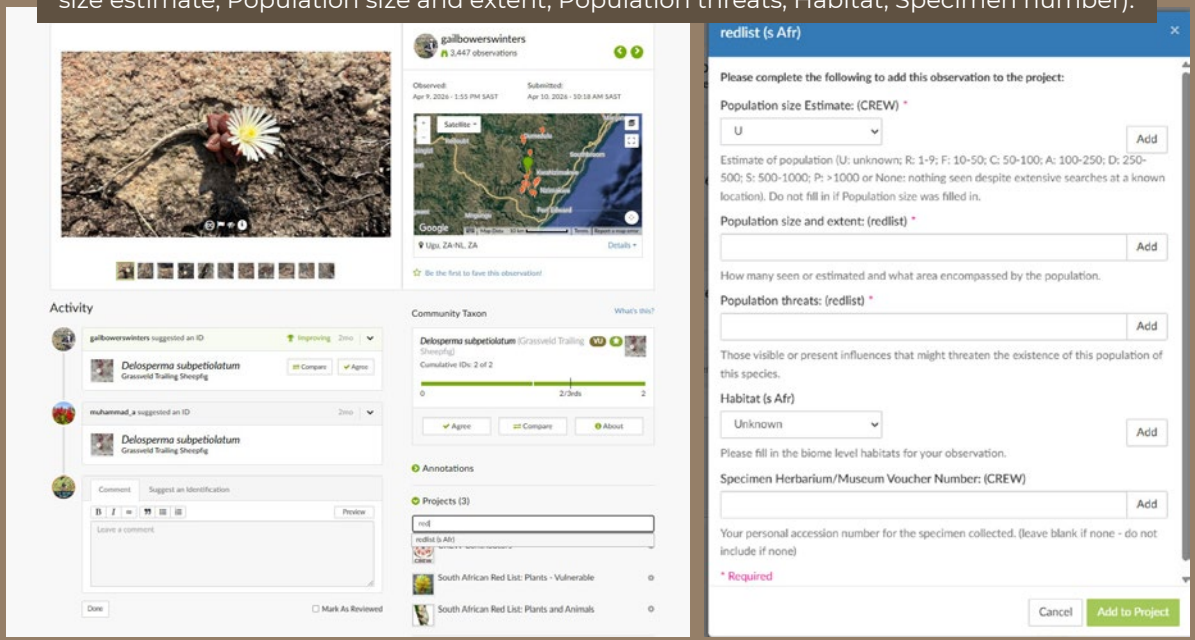
These are the digital equivalent of the CREW data collection sheets we used before moving to iNaturalist, condensed into five fields. This is the information Red List scientists need to assess species status, and it only reaches them if your observations are added to this project with these questions answered.

A few practical tips:

- Upload your observations and add the TOCC observations to the redlist S.Afr project as soon as possible after a field trip – details are much easier to recall while they're fresh.
- Complete as much as you can – something is always better than nothing.
- Adding your TOCC observations to redlist S.Afr is not just a recommended step – it is the reason CREW exists.

For both projects – on the membership page, click the cog icon next to 'Your Membership', select 'Trust the project with any of your observations' and save. You only need to do this once per project – iNaturalist saves the setting permanently. This gives SANBI Red List scientists and CREW staff access to your location data. Please check your membership for both projects and ensure the trust option is set.

The redlist (s Afr) project observation entry screen showing the five data fields (Population size estimate, Population size and extent, Population threats, Habitat, Specimen number).



3. IDFocus – supporting better plant records together

The month-long iNaturalist ID-a-thon over December and January made a real difference. Thanks to thousands of contributors worldwide, hundreds of thousands of 'Unknown' observations were identified, cutting the global backlog by over a third. In southern Africa alone, the number of observations still needing identification fell from around 23 000 in mid-December to just 13 000 by February 2026. The total number of observations in the region also jumped from 7.2 million to 7.6 million in just two months – showing both how much there is to do and how much the community is contributing. That's a meaningful step towards turning casual biodiversity sightings into usable, research-grade records.

Building on that momentum, the CREW Programme is launching something new: IDFocus. This is our monthly spotlight initiative where we collectively concentrate on one group at a time – a plant family, a tricky genus, or even a set of lookalike species that regularly cause confusion. For now, we're starting with plants (the queue is … substantial!), but we'd love animal groups in the mix too. If you have suggestions, please send them our way. From time to time, we'll also revisit those persistent 'Unknowns' to help move them along. Think of IDFocus as a more manageable, ongoing companion to the ID-a-thon – same impact, spread across the year in monthly, easy-to-tackle themes. At its core, IDFocus aims to help observations progress from 'What is this?' to research-grade records, while creating a space to learn together.

Why join in?

- Reduce the backlog: many observations sit at broad categories like 'Plant' or 'Insect', or remain fully 'Unknown'. A monthly focus helps clear these efficiently.
- Open to all: whether you're new to identifying or have years of experience, this is a supportive environment to practise and grow.
- Improved data quality: more accurate and complete identifications strengthen the value of these records for researchers and conservation planning.
- Learn more: we'll share tips, guides, key ID features and small challenges to help you gain confidence.
- Community connection: engage with experts and fellow observers, ask questions and connect with others who share your interest.

A quick but important note: agreeing helps! If an expert you know and trust adds an identification and the ID looks correct – and the photo, location and details all seem right – a simple click on 'Agree' can make a big difference. Many observations identified by specialists never reach Research Grade simply because no one else confirms them. Your agreement can unlock valuable data for science and conservation.

Become a shadow volunteer

You can assist our taxon experts and help observations reach Research Grade by following along with their identifications. It's straightforward, and you don't need to be an expert – just attentive and willing to learn. Here's how you can help:

- Choose a group you are interested in and check if there's a related iNaturalist project; join the project.
- Get to know the experts and specialists in that group and support their identifications.
- Help post information that assists with identifications.
- Add annotations, especially for flowering or fruiting where relevant.

- Help plan field visits to areas where more data is needed.
- Set up a filter to track identifications made by the experts in your group.
- When you see an identification you can support, click ‘Agree’. Often that second identification is all that’s needed for an observation to reach Research Grade.

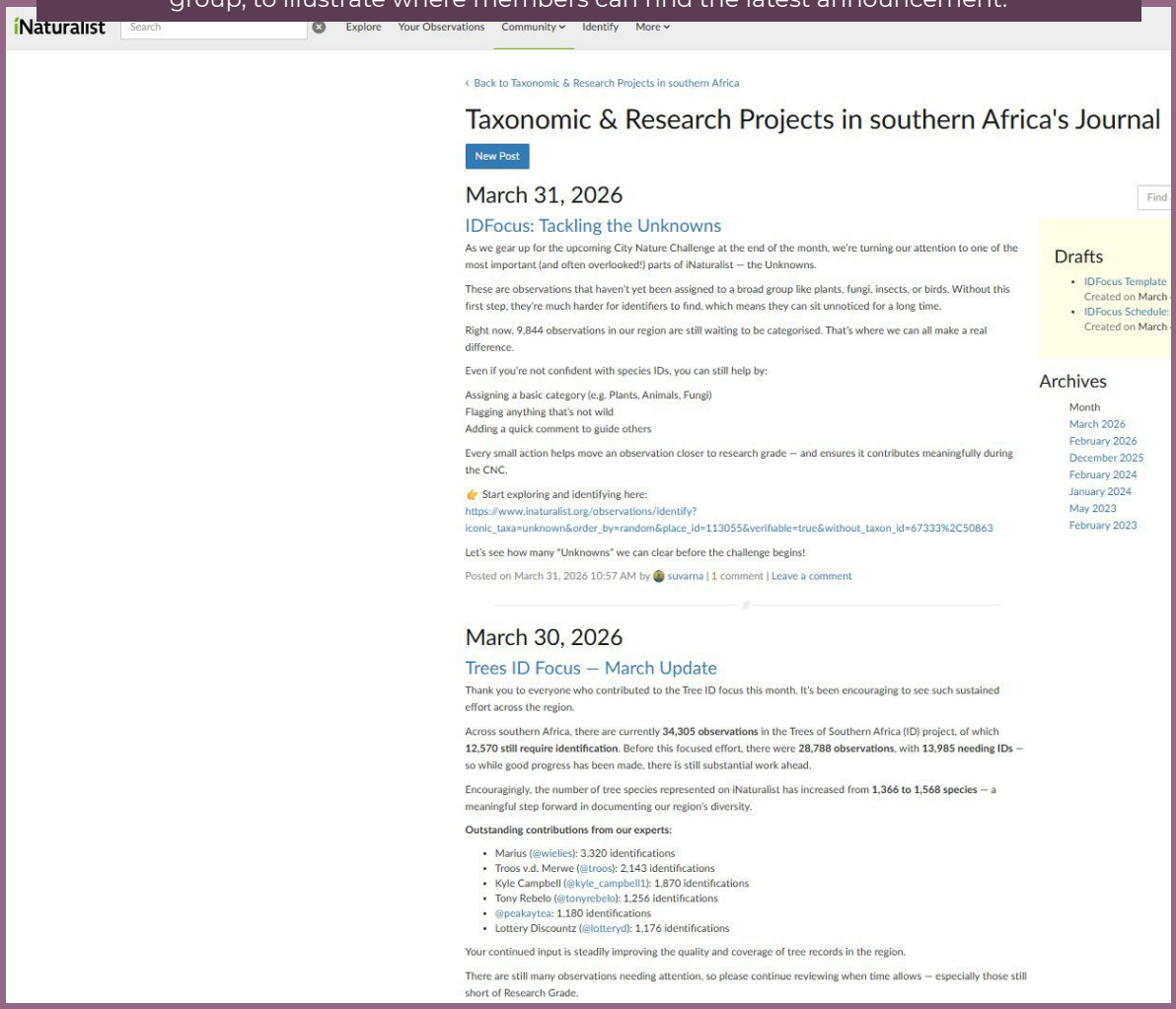
If you’re interested, contact the authors of this article – we’ll guide you through the current focus group, share tips and gladly welcome you on board.

Ready to begin?

- Head to iNaturalist and check the latest IDFocus announcement on the ‘Taxonomic & Research Projects in southern Africa’ project journal. Join the project.
- Either reach out to an expert in a group you like, or jump on board a new group each month to learn a little about everything.

For a walkthrough or more information on any of the above, contact your CREW Node — we’re happy to guide you through it.

The IDFocus journal post on iNaturalist showing the current month’s focus group, to illustrate where members can find the latest announcement.



A season of discovery in Limpopo

Prince Sello Molokomme



Using iNaturalist during *Euphorbia groenewaldii* monitoring.
Photograph: Prince Sello Molokomme.

Spring in Limpopo brought more than just flowers. It ushered in rediscoveries, new plant populations, student engagement and hands-on conservation across the province. From the quartz koppies of Mamabolo in the Capricorn District to the University of Limpopo campus and the rugged slopes of the Soutpansberg in Mopani, the Limpopo Branch has been steadily demonstrating what committed citizen scientists can achieve.

One of the season's most encouraging moments came with renewed hope for the Critically Endangered *Euphorbia groenewaldii*. First spotted during the 2025 City Nature Challenge, the sighting sparked a focused search in August across the quartz koppies around Polokwane. The outcome exceeded expectations: more than 250 plants were recorded, including a new population in the Mamabolo Mountain Bushveld. Each



Adenia fruticosa subsp. *fruticosa*.
Photograph: Prince Sello Molokomme.

additional record helps sharpen our understanding of this species' distribution.

Yet the picture remains fragile. Trampling, habitat transformation and plant harvesting continue to place pressure on the species, reminding us that monitoring and habitat protection must keep pace with discovery.

The quartz surveys also yielded other notable species, including *Elaeodendron transvaalense* (Near Threatened) and *Ledebouria crispa* (Endangered), further reinforcing the conservation importance of these specialised ecosystems.

Surprises were not limited to Mamabolo. In Moletjie Nature Reserve, the discovery of *Adenia fruticosa* subsp. *fruticosa* (Near Threatened) extended the known range of this Sekhukhune greenstem. Finding it within a protected area offered some reassurance – and a timely reminder that there are still many knowledge gaps in Limpopo's flora.

Fieldwork in the Sekhukhune District brought another memorable moment. During a three-day camp and survey trip, undertaken with the Limpopo Economic Development, Environment & Tourism Department (LEDET) and youth participants from Polokwane and Haenertsburg, the team relocated *Drimiopsis gasekhukhunei* at Schuinsdraai Nature Reserve. Once thought lost from the area, this rare hyacinth revealed itself only after a demanding hike into the surrounding mountains – a powerful affirmation of the value of persistence in the field.



Drimiopsis gasekhukhunei.
Photograph: Troos van der Merwe.

Building the next generation of custodians remained a strong thread throughout the year. In September, the branch joined Arbor Day celebrations at the University of Limpopo, where engagement went well

Limpopo CREW members during the camping trip. Photograph: Prince Sello Molokomme.





Students planting indigenous trees during Arbor Week. Photograph: Prince Sello Molokomme.

beyond the ceremonial tree planting. Students participated in discussions on citizen science, GIS applications in biodiversity and the role of community outreach in conservation – practical tools aimed at nurturing long-term stewardship.

With generous support from Westfalia Merensky Nursery, several indigenous trees – including *Rauvolfia afra*, *Kigelia africana* and *Olea europaea* subsp. *cuspidata* – were planted in the campus botanical garden, creating living symbols of partnership between conservation practitioners and future professionals.

Hands-on learning continued at Zvakanaka Farm, where branch members gathered for a one-night training camp focused on plant identification and effective use of iNaturalist. The combination of peer learning and field practice allowed members to sharpen their skills while adding valuable records from an underdocumented area. These contributions feed directly into broader initiatives such as the Great Southern Bioblitz.

The outing also highlighted a familiar but urgent challenge: invasive alien plants. Species such as *Solanum mauritianum*, *Acacia mearnsii* and *Lantana camara* remain persistent threats, underscoring how field data collection supports not only knowledge generation but also on-the-ground management decisions.

Taken together, the past months tell a story of steady, collaborative progress. Rediscoveries are deepening scientific knowledge, student engagement is nurturing future custodians and ongoing fieldwork continues to strengthen Limpopo's citizen science footprint.

For the Limpopo Branch, the message remains simple and encouraging: consistent local action truly does make a measurable difference.

In the field with Mpumalanga's Plant Specialist Group: a season of botanical discoveries

Delia Oosthuizen and Kevin Balkwill

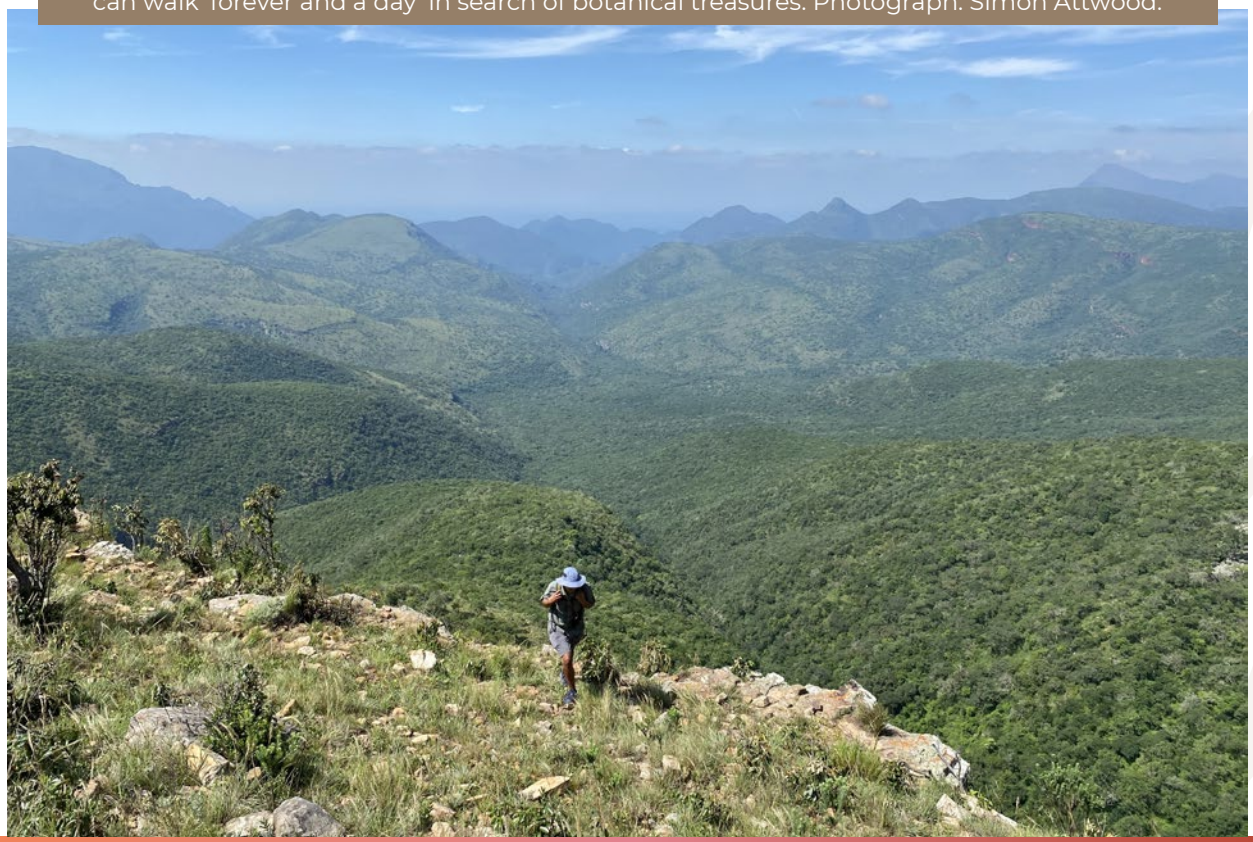
The Mpumalanga Plant Specialist Group (PSG) continually seeks out underexplored areas to contribute valuable data to iNaturalist and enrich the provincial plant list maintained by the Mpumalanga Tourism and Parks Agency. Through these targeted surveys, PSG's efforts complement CREW's monitoring by providing baseline data for threatened taxa and stewardship sites.

In April, our team visited the Blue Wildebeest Hiking Trail near Emanzana (Badplaas), an area known for its populations of *Gerbera aurantiaca*. Although the species was not in bloom and the season had already passed for most flowering plants, we compiled a preliminary plant list. This record will serve as a foundation to be expanded during a planned return visit later in the summer, when more species are expected to be in flower.



Jan Graf framing the perfect shot while Simon Attwood and Paul Khweyane (Maorabjang CPA) look on at Kaspersnek. Photograph: Trystan Nadasen.

Kgotlopong escarpment: Katuchka Spahn hiking against the backdrop of Sehlakale Peak (left) and Skilderkrans (right) with the Olifantspoort between them. A vast expanse where you can walk 'forever and a day' in search of botanical treasures. Photograph: Simon Attwood.





Witnessing Kevin Balkwill find the perfect angle for the wild jasmine (*Schrebera alata*) in the heart of the Makgabeng. Photograph: Delia Oosthuizen.

July brought our annual Plant Talk Weekend, hosted at ZZ2's picturesque Keerom Camp in Limpopo. For convenience, we alternate between Limpopo and Mpumalanga as venues. The weekend featured presentations where members shared research findings, explored topics of interest, and engaged in lively discussions aimed at educating fellow PSGers. Topics included the flora of the Waterberg Mountain Complex and the Soutpansberg; the rare *Thorncroftia media* and *T. coddii*; the diverse *Cyphia* species of Mpumalanga; the high-altitude flora of the Maloti-Drakensberg; newly described *Ledebouria* species; and even the fundamental question: what is botany? We also had an informative Zoom session with Tony Rebelo on iNaturalist.

October saw PSG's participation in the Great Southern Bioblitz on Sappi property near Ngodwana and Sudwala. The turnout was excellent, and the mountainous terrain yielded unexpected discoveries. A species checklist was compiled for Sappi, with one standout record: the observation of *Ceropegia chlorozona* (=*Brachystelma chlorozonum*), marking the first documented occurrence of this species in the wild for Mpumalanga on iNaturalist. We also found magnificent populations of two shrubby species of *Xerophyta*, and what is likely a new species of *Ocimum*, related to *O. serratum*.

At the start of November, we returned to the Blue Wildebeest Hiking Trail together with



Zinhle Madonsela (front) and Sibahle Gumede gather the rich fruits of *Royena lycioides* subsp. *guerkei* (=*Diospyros lycioides* subsp. *guerkei*) during February's outing to the Emvelo area. Photograph: Delia Oosthuizen.

members of BotSoc Lowveld to see *Gerbera aurantiaca* in bloom and to expand the property's checklist. We photographed flowers of a *Moraea* that is a very good match with the type of *M. elliotii*. One of our members tried to make leaf cuttings of *Gerbera aurantiaca*, and one has taken. With further refinement, it seems he may have found a way to vegetatively propagate the species. We also collaborated with CREW members from KwaZulu-Natal during a visit to the KwaMandlangampisi Protected Environment, strengthening regional conservation ties and significantly expanding the protected area's species checklist.

In December, our focus shifted to the Makgabeng Plateau, where we followed up on a unique *Schrebera alata* with unusually small flowers. We were also able to photograph two species of *Ruellia*, one of them undescribed. Later that month, heavy rains carried into January, and we explored grasslands along the boundary between Sappi's Taurus plantations and the northwestern edge of Songimvelo Nature Reserve. Here we noted a *Cyrtanthus* species new to science and saw undescribed species of *Anacampseros* and *Xerophyta* as well. Toward the end of January, we visited Kaspersnek – the northernmost tip of Morgenzon Nature Reserve – in search of *Xerophyta* species. This excursion yielded an undescribed *Habenaria* species and a new *Crassula*. We also scouted in Kgotlopong, Limpopo, adding further depth to our records and collecting what may be an undescribed shrubby species of *Ocimum*, related to *O. coddii*. Another significant find was *Protea laetans* – the first record of this species occurring outside of the Blyde River catchment.

February took us to the Skurwerant area south of Emvelo (Amsterdam), where we searched for an intriguing form of *Streptocarpus galpinii*. We found it, though not in bloom. In addition, we found the beautiful *Syncolostemon gerrardii* in full flower, the third collection after the type. This underexplored region holds great promise, and we plan to return for further study, continuing PSG's contribution to CREW's growing knowledge base.



The flower of *Protea laetans* at Kgotlopong – the first record of this species occurring outside of the Blyde River catchment. Photograph: Simon Attwood.



A *Drimiopsis* species, most likely new to science, discovered by Katuchka Spahn and Simon Attwood near the Ohrigstad River on dolomite substrate in the Kgotlopong area. Photograph: Simon Attwood.

Re-collection of *Senecio eminens* at KwaMandlangampisi

Marinda Koekemoer

Senecio eminens is one of those enigmatic species that I thought I would never see in its natural habitat during my research on the genus. Although it is a very distinctive species, only a handful of specimens from four collections exist in the SANBI herbaria. The last collection was made in 1961, the year of my birth, and now re-discovered in 2026, the year of my retirement. Apart from the scan of the type specimen, no other illustrations or images have ever been published.

The species was listed as undescribed by Compton (1966) in his checklist of Swaziland and formally described by him in 1967. The specific epithet '*eminens*' is the Latin for 'standing out, projecting' and probably refers to the uniqueness of the species that stands out from the rest of the species in the genus.

Three of the known localities are in Eswatini and one in Mpumalanga, South Africa. The Eswatini localities are given as 'Mbabane Distr.', 'Mbuluzi Valley', and 'Mankayane Distr., 10 mi. W of Mankayane', while the Mpumalanga locality is in 'Iswepe in the Piet Retief Distr.' Due to urban development and forestry, many of these original localities may no longer exist but one can still search for the species in remaining pockets of montane grassland in unexplored areas.

The newly discovered locality in the KwaMandlangampisi Protected Environment is well protected. Here it occurs on the slopes and in dry valleys of the mountains. Plants generally grow solitary and not in large clumps like many other *Senecio* species, but, in the two populations that were observed, there were between 20 and 50

The whole plant showing the leaves that are mainly at the base, the sturdy and almost bare stems, and an open inflorescence of 3–6 capitula. Photograph: Marinda Koekemoer.



Leaves are smooth on both sides, with a strong midrib and attenuated bases. Photograph: Marinda Koekemoer.



plants in each population. The area should be explored to evaluate the extent of the species' occurrence.

Fresh specimens with precise localities, images and DNA material are now available to better understand this species. The large discoid capitula of *Senecio eminens* is distinctive in the genus and cannot be confused with any other *Senecio* species. The figures illustrating this article depict the species in its natural habitat. More images can be seen on iNaturalist. Please keep an eye open for this late-flowering species if you are doing fieldwork within its distribution area.

I would like to express my appreciation and thanks to Jeff and Lettie Morris for welcoming me into their piece of paradise, which made this discovery possible. Also to the great work the Mpumalanga Plant Specialist Group (PSG) do by introducing like-minded people to the magic of Kwa-Mandlangampisi and many other special places. Such rediscoveries highlight the value of CREW-PSG collaborations in uncovering and documenting our rare flora.

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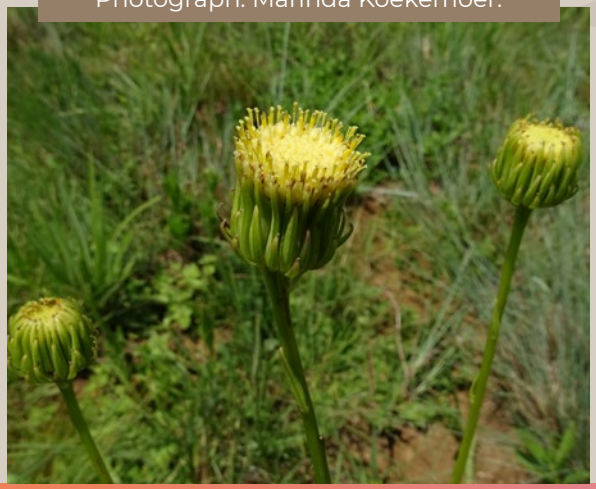


Leaf margins are finely denticulate. Photograph: Marinda Koekemoer.



Capitula buds in the foreground with the backdrop of surrounding mountains. Note the robust capitula and very long calyculus bracts. Photograph: Marinda Koekemoer.

A young discoid capitulum showing the yellowish florets. Photograph: Marinda Koekemoer.



An older capitulum with florets turning brown after anthesis, also showing the relative length of the calyculus bracts at this mature stage. Photograph: Marinda Koekemoer.



Tracking the elusive *Bonatea lamprophylla*

Kevin Jolliffe

Bonatea lamprophylla is a terrestrial orchid with tall, leafy stems often exceeding 1 m in height. It bears glossy green leaves with crispate margins, and a dense terminal inflorescence of strikingly large, green-and-white tasselled flowers – almost resembling an assemblage of white butterflies perched on a branch. Each flower has an impressive spur up to 130 mm long, is sweetly scented in the evening, and is pollinated by hawk-moths.

I had longed to see this species for many years, ever since seeing the illustration by Esmé Hennessey in Joyce Stewart's *Orchids of Africa* and the photograph in Joyce Stewart's *Wild Orchids of Southern Africa*. At the time, these were the only examples of the plant I could admire. It took another 20 years before I finally saw my first spectacular specimen – a sight I will never forget.

Listed as Vulnerable, this remarkable terrestrial orchid has eluded many plant hunters. It was long thought to occur only in the dune forests of northern KwaZulu-Natal, from as far south as Richards Bay northwards to Kosi Bay and possibly into Mozambique.

The species was first discovered in the 1970s in coastal forest on the Maputaland coast near Mabibi, close to Lake Sibaya, where it grows under dense shade in deep sand. It has since been found at scattered localities in coastal and dune forests, where it is easily overlooked, its glossy leaves and white tasselled flowers blending into shafts of sunlight filtering through the forest canopy.

Never common and seldom encountered in numbers, many searches for this elusive



Bonatea lamprophylla.
Photograph: Francois du Randt.



Bright leaves of *Bonatea lamprophylla*.
Photograph: Francois du Randt.

species have yielded no results. Juvenile plants also produce differently shaped leaves from adult plants, further complicating detection and requiring a well-trained eye to distinguish them from the myriad saplings and understorey species with which they share their habitat.

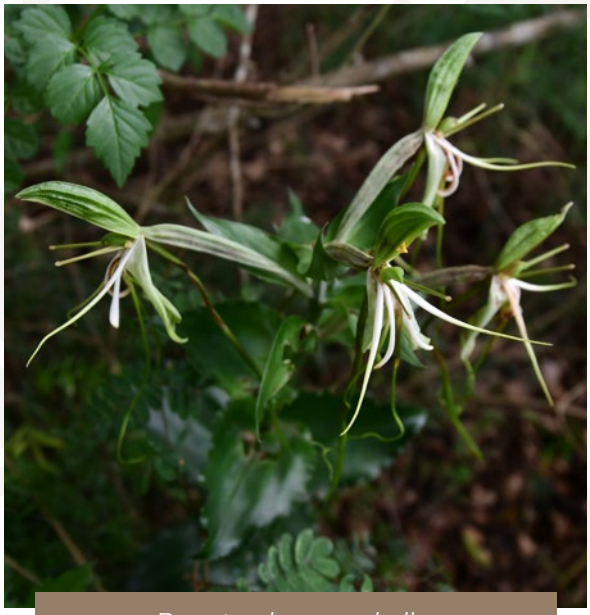
A breakthrough came in the 1990s when orchid enthusiasts made a chance stop at an unlikely forest site some 20 km inland, where they discovered good numbers of this rare orchid along with several other species. These plants were growing further inland than previously recorded, in dry forest similar to sand forest. Interestingly, all plants were found within 20 m of the gravel road.

A follow-up search in 2006 again located several plants. However, when the site was revisited 13 years later, in 2019, the original locality had been cleared for homesteads, and the remaining forest was degraded and heavily impacted by cattle paths, firewood harvesting and muthi collection. A survey of less disturbed forest further along the road yielded some plants, but only on one side of the road.

Another visit in 2024, with more time allocated to searching, resulted in at least 20 plants being recorded. It was therefore decided to conduct a CREW Zululand site visit the following year, with the hope that more observers would locate additional individuals.

In October 2025, a small group – myself, Francois du Randt, Catherine Hanekom (ecologist for Tembe Elephant Park) and Victor Heard (Wild Orchids of South Africa representative) – met at Mbazwana and set off down the dusty, bumpy gravel road until we relocated the site.

Initially, we struggled to find plants in the dense roadside vegetation. However, once the first flowering individual was spotted, our search image improved rapidly and more plants in flower were soon detected. Approximately 1 km of habitat was surveyed. Moving off-road proved difficult due to dense understorey thicket, but additional



Bonatea lamprophylla.
Photograph: Francois du Randt.

plants – including several juveniles – were located, a positive sign that some recruitment is occurring.

In total, over 50 plants were recorded during this successful survey.

This area appears to be a hotspot for *Bonatea*. Two additional species were found: *B. pulchella*, growing in large colonies, and a few *B. antennifera*. Notably, the first *B. steudneri* from this region was collected here in the 1990s. Other orchid species recorded included colonies of *Eulophia hereroensis* and a single plant of *E. speciosa*.

Of concern, however, was the presence of leaf-mining fly larvae (family Agromyzidae). These flies lay eggs in the apical parts of the plants – including the growing tip, flower buds, ovaries and even the floral spur – with the developing larvae consuming tissues from within. Up to 80% of flowering individuals observed showed signs of damage, which could pose a significant threat, particularly in populations outside protected areas.

Fortunately, orchids produce copious quantities of minute, dust-like seed. There is therefore hope that the few flowering individuals that escaped heavy infestation will

still contribute sufficient seed to maintain the population.

These flies have also been observed damaging inflorescences of *Eulophia speciosa*, *E. petersii*, *E. hereroensis*, *E. hians* var. *inaequalis* (=*E. inaequalis*), *Bonatea antennifera*, and *Vanilla roscheri* in Maputaland.

Encouragingly, much of *Bonatea lamprophylla*'s range falls within the iSimangaliso Wetland Park, where the species is widespread but typically occurs at low densities. However, the two known inland populations remain vulnerable to ongoing human impacts on their forest habitats.

Perhaps the next expedition will return in May to the same area to search for *Bonatea steudneri*, last recorded in KwaZulu-Natal in the 1990s, with historical records from Jozini, Tembe Elephant Park and Ntchongwe.

Mondia whitei (gingerbeer-root) monitoring

Sharon Louw

I cannot believe that the Endangered *Mondia whitei* (gingerbeer-root) eluded me for so many years.

This robust, woody climber in the family Apocynaceae had long been familiar to me in its vegetative state – a vigorous creeper with large, opposite leaves – yet I had never encountered it in flower or fruit. Plants growing in KwaZulu-Natal's Zululand region within Amatikulu and Umlalazi nature reserves, as well as individuals observed at Twinstreams (Mtunzini), were always without reproductive structures.

Then, in May 2025, while driving along the Twinstreams road to assess water quality in the Manzamnyama Stream, I noticed several large, paired, semi-woody fruits high in the forest canopy. At last! After uploading photographs to iNaturalist, my suspicions were confirmed. For additional certainty, I contacted Troos van der Merwe, who verified the identification. Soon thereafter, the





Mondia whitei flowers and stipule. Photographs: Sharon Louw.



Mondia whitei fruits, seed and seedlings. Photographs: Sharon Louw.

observation achieved 'Research Grade' status – a satisfying milestone for *Mondia whitei*.

Closer inspection revealed the prominent false, fimbriaceous stipules – a key diagnostic feature that allows this species to be identified even when sterile. Sharing these insights with Ezemvelo KZN Wildlife staff at Amatikulu and Umlalazi nature reserves prompted immediate recognition. They knew the plant well as *umondi*, the isiZulu name from which the genus *Mondia* is derived. Staff spoke of its many traditional medicinal uses, recalling how, as children, their parents encouraged them to chew the aromatic roots to stimulate appetite. The roots are initially bitter, developing a ginger- or liquorice-like taste, with a distinctive vanilla-like aroma.

Over the following nine months, I tracked the development of the fruits. The first pods began releasing seeds in July. Numerous *Caenocoris nerii* (oleander seedbugs) were observed on splitting pods. Their nymphs feed almost exclusively on milky latex, while adults target fruits and seeds. By December and January, striking clusters of reddish

purple flowers adorned the climbers, though heavy rain and strong winds in early January negatively affected peak flowering.

The notable density of *Mondia whitei* along the road to Twinstreams is attributable to the extensive plantings undertaken by the late Ian Garland. In August, during peak seed production, seeds were collected and successfully propagated. These young plants have since been incorporated into the Wildtrust Forest Restoration Programme, contributing to forest restoration north of Umlalazi Nature Reserve.

A field season packed with exploration and discovery

Muhammad Adamjee

Our field season kicked off in spring with a visit to Umtamvuna Nature Reserve. Although the first day was rainy, we were undeterred and rewarded with masses of *Clivia miniata* in flower, as well as other forest specials. We started the second day with incredible views over the gorge to the Eastern Cape and then explored the plentiful grasslands and rocky outcrops of the reserve. A successful trip with 13 orchid species and a few other standouts, including some Pondoland endemics, were recorded – *Cyrtanthus brachyscyphus*, *Drosera nidiformis*, *Senecio natalicola* (EN), *Leucadendron spissifolium* (VU), *Watsonia mtamvunae* (VU), *Chironia albiflora*, *Apodytes abbottii* (NT), *Syzygium pondoense* and *Eriosema umtamvunense* (EN).

The next field trip took us down to the KwaZulu-Natal South Coast again, to a Cape Vulture nesting site. This location has spectacular views and we had amazing sightings of the vultures. We also had incredible plant sightings with masses of flowering *Streptocarpus trabeculatus* and other interesting plants, including *Agelanthus gracilis*, *Cadaba natalensis*, *Caputia medleywoodii*, *Crassula obovata* var. *dregeana*



Durban CREW at Lüneburg. Photograph: Wiam Haddad.

(VU), *Anacampseros rufescens*, *Maerua afra*, *Commiphora woodii*, *Colpoon compressum*, *Indigofera pondoensis* and *Seemannaralia gerrardii*.

The following weekend we joined the Mpumalanga Plant Specialist Group on a field trip to the Lüneburg region on the border of Mpumalanga and KwaZulu-Natal. It was an incredible weekend of exploration, amazing landscape and with many exciting finds. Some highlights for me were the beautiful pink form of *Gerbera ambigua*, *Aloe hlangapies*, *Aloe kniphofioides* (NT), *Zantedeschia rehmannii*, *Anisotoma pedunculata* and *Gladiolus woodii*. On a return trip to this site in February, we were treated to masses of *Watsonia watsonioides*, delicate *Brownleea coerulea*, *Aloe modesta* and *Habenaria barbertoni* – a first record for KwaZulu-Natal!

The next field trip was a short trip to Highflats in the KwaZulu-Natal Midlands to see the striking *Satyrium rhodanthum* (EN), where we were rewarded with some stunning plants in flower. We were also lucky to find some beautiful specimens of *Cyrtanthus obliquus* in flower.

Two weeks later we travelled down to the KwaZulu-Natal South Coast again and visited Vernon Crookes Nature Reserve. Another rewarding visit with lots of plants in flower, where some of the standouts were *Gloriosa modesta*, *Riocreuxia torulosa*, *Ceropegia gerrardii* (=*Brachystelma gerrardii*) and *C. meyeri*.

Two days later, we made another trip to the KwaZulu-Natal South Coast, this time to Port Edward to look for flowering orchids. The highlights were the giant *Eulophia angolensis* specimens and the miniscule *Orthochilus milnei*.

In January, we joined the Midlands CREW group at Priscilla Vale farm in Eston, KwaZulu-Natal. It was another amazing day of exploring with many species in flower in the grasslands, including orchids and *Crocosmia pottsii* along the streams. The find of the day was a population of *Scadoxus multiflorus* subsp. *katharinae* in full bloom!



Streptocarpus trabeculatus. Photograph: Muhammad Adamjee.



Ceropegia gerrardii (=*Brachystelma gerrardii*). Photograph: Muhammad Adamjee.



Habenaria barbertoni. Photograph: Muhammad Adamjee.



Aloe kniphofioides. Photograph: Muhammad Adamjee.

Later in January, I attended the Wild Orchids Southern Africa (WOSA) conference in Dullstroom. It was a great success, from the interesting talks to the wonderful field trips where we recorded close to 50 different orchid species and many other wildflowers.

Our final field trip for January was to the Southern Drakensberg, where we assisted WWF-SA and other conservation partners to document biodiversity across some of their stewardship sites. Unfortunately, many of the areas are overgrazed but we still managed to record some special plant species on the steeper slopes that are generally inaccessible to livestock. The highlight of this trip for me was coming across a wetland with hundreds of *Satyrium hallackii* subsp. *ocellatum* in bloom. An amazing sight to behold!

In early February we made a trip to Tugela Valley, a wonderful journey that showed us a remarkable diversity of South African landscapes: from the subtropical coast, through mistbelt grassland, down into dry valley thicket, up into mistbelt forest and back to the coast again. We were treated to beautiful specimens of *Streptocarpus cooksonii* in bloom, as well as big clumps of *Euphorbia grandicornis*, thickets of *Croton menyharthii* and colonies of *Stenoglottis longifolia*. We were also lucky enough to come



Emplectanthus gerrardii. Photograph: Alison Young.

across a massive *Ficus sycomorus*, which we later discovered is a Champion Tree of South Africa.

Later in February we visited Ngele Nature Reserve near Kokstad, another rewarding weekend of exploring with interesting plant finds. From the incredible orchids – especially the colony of *Calanthe sylvatica* and interesting *Huttonaea pulchra* – to striking *Brunsvigia grandiflora*, *Gladiolus oppositiflorus* and *Kniphofia laxiflora*, mass-flowering colonies of *Streptocarpus johannis* and the beautiful *Begonia geranioides*. Some rare and threatened plants included *Euphorbia flanaganii* (VU), *Emplectanthus gerrardii* (VU) and *Dioscorea brownii* (EN).

It has been a great field season with many exciting finds, where we visited new places and got to meet new people. We look forward to the season ahead, doing what we love best – being out in the field!

A CREW newbie's reflection

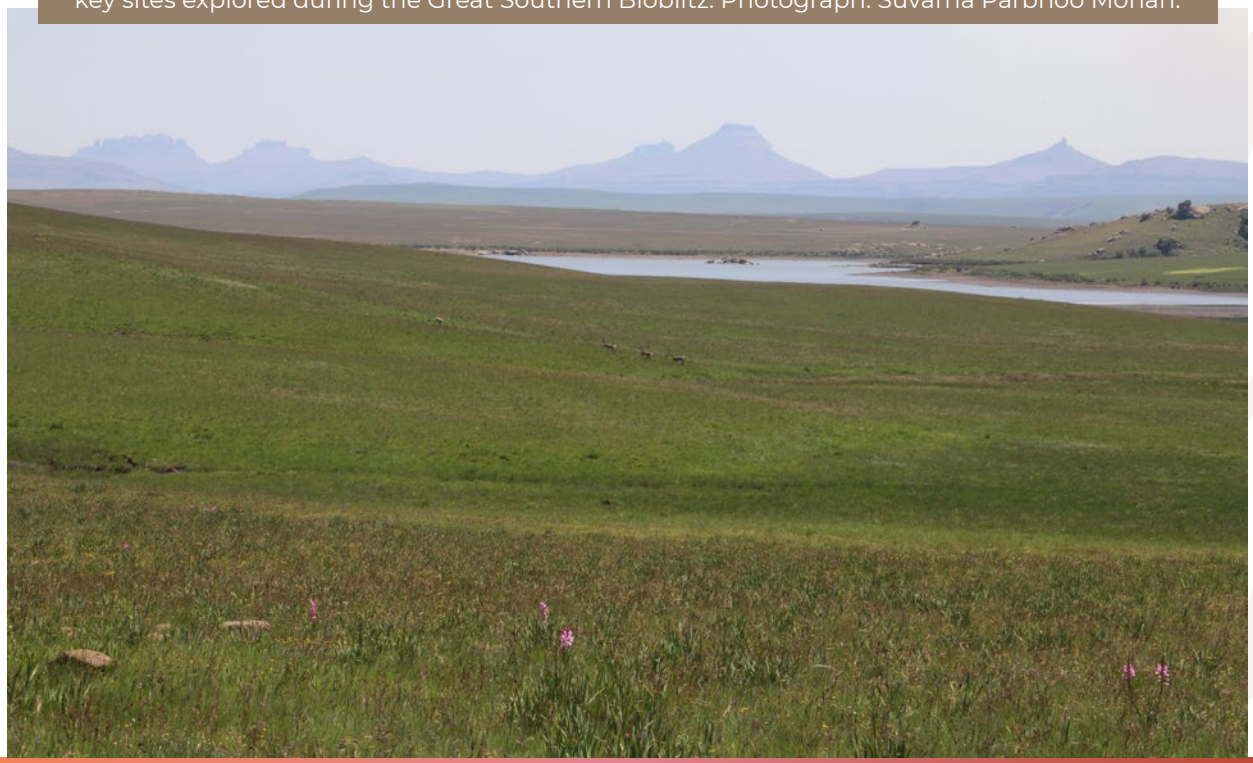
Jolett Pieterse

I joined BotSoc in late 2023 and the CREW Programme in 2024, so calling myself a newbie is getting a bit outdated, but I am sure most of you can relate to the feeling one experiences when the heart outpaces the craft...

I still remember when Suvarna announced, at my first annual CREW Summer Rainfall Region workshop, that I would be getting the KwaZulu-Natal Battlefields as an area to start 'CREWing'. Goodness, the way my mind raced – Who would go with me? Where would I start? I don't even know the scientific names of plants!

I have made slow progress and have so much more to learn, but it's been wonderful diving into the world of citizen science. By joining outings with the CREW KwaZulu-Natal Coastal and Midlands groups, the Mpumalanga Plant Specialist Group, participating

Ingula Nature Reserve wetland, where high-altitude grasslands and wetlands meet – one of the key sites explored during the Great Southern Bioblitz. Photograph: Suvarna Parbhoo Mohan.





A dry riverbed at the proposed Buffalo Hills Stewardship Site (our second Bioblitz location), still revealing resilient and interesting plant life despite the conditions. Photograph: Suvarna Parbhoo Mohan.



An expansive and under-documented community landscape in the Impendle District, explored in partnership with the WWF-SA team. Photograph: Suvarna Parbhoo Mohan.

in workshops here and there at protected areas, and even organising the Great Southern Bioblitz for my area, I have met people in my own town whom I had seen driving up and down the road for 10 years without knowing we shared a common interest – a passion for conservation. This is what makes citizen science great.

For the Great Southern Bioblitz, a site was visited within the Battlefields/Northern Drakensberg area: the Eskom-owned Ingula Pumped Storage Scheme Nature Reserve. Straddling the border of KwaZulu-Natal and the Free State, roughly 55 km north of Ladysmith, this nearly 8 000-hectare reserve is recognised as a Ramsar Wetland of International Importance. A variety of habitats were assessed, including high-altitude wetlands and grasslands. A highlight was finding a beautiful colour variation of *Ledebouria* – a rare white form instead of the usual pink-purple. Some site staff were also trained on iNaturalist to support ongoing monitoring.

The bioblitz also continued to a second site, the Buffalo Hills Conservancy. The landowners are in the process of proclaiming the property as a protected area/nature conservation site. While progress has been slow, with support from Suvarna and my family, we were able to record observations from the area. Access remains limited and more strictly controlled due to foot-and-mouth disease restrictions.

I joined an outing to Lüneburg with the Mpumalanga Plant Specialist Group and met Delia Oosthuizen, who manages a private herbarium near Mbombela. I learned a great deal from Delia – especially how she uses macrophotography to capture key diagnostic plant features, how she preserves delicate reproductive structures (for example in *Dierama* species) using a name sticker, and her approach to specimen preparation and record-keeping for documenting species found in different areas.

Unfortunately, due to the illness of a close family member, I had to cancel many CREW outings, which was discouraging. However, I'm planning and preparing for the season ahead.

I want to encourage everyone, especially the newbies, to keep on 'CREWing'. Even if you join the birders in your town or force your family to spend five hours on a 5 km hike, keep at it. We are contributing to the collection of valuable data and to the conservation of our precious South African flora.

A year of discoveries: CREW Midlands 2025

Alison Young

From misty mountains to hidden wetlands, 2025 took us on a journey through the Midlands' rich and fragile flora. Each trip brought its own challenges: steep climbs, unpredictable weather and even tractors. But there were also many rewards: rare orchids spotted, threatened aloes ticked off the list and new discoveries that will help guide conservation in the region.

Little Noodsberg – February: a cliff-dweller in pink

Our target species was *Hesperantha gracilis* (VU), a pale pink, cliff-dwelling flower. We found a single small clump, though identification remains unconfirmed. Despite the weather, we climbed one of the inselbergs and botanised along the top, adding more records for the area, including: *Gladiolus cruentus* (CR), huge stands of *Centella graminifolia* (LC) and *Cassipourea malosana*, a tree that is listed as Declining due to its medicinal value. We even found a single plant of *Oedera pungens* subsp. *angustifolia*, which is rarely seen in this northernmost part of its distribution range. By the time we had got back to the vehicle we were pretty well soaked, and a tractor was needed to tow us off the, by now, very muddy road.

Babanango – March: protecting *Aloe nicholsii*

Babanango hosts the Critically Endangered *Aloe nicholsii*, which last year showed signs



Unusual *Drimiopsis* found in Bergville. Photograph: Andrew Hankey.



Kniphofia sp. nov. in habit and flower close up. Photographs: Andrew Pool.

of harvesting by muthi and plant collectors. We collected seeds, assessed damage and planned a possible translocation if poaching becomes severe. While translocation is never ideal, it may be necessary if a species is under serious threat. Currently, we lack year-on-year comparisons to make a definitive call. Plans include replanting seedlings into nearby suitable mistbelt grasslands within the Babanango protected area.

New Hanover – April: extending known ranges

Landowners interested in applying for biodiversity stewardship require an inventory of species occurring on their land, and this is where CREW assists. On the York Commonage near Pietermaritzburg, we recorded a small population of Vulnerable *Aloe neilcrouchii*, slightly extending its known range. This small discovery demonstrates the importance of engaging landowners in conservation and contributes to expanding protected habitats for threatened species.

Ingula – October: high-altitude grasslands

We decided to support the newly established CREW Battlefields Group for the Great Southern Bioblitz by joining the trip to Ingula. The high-altitude mistbelt grasslands around the Ingula Pump Storage area were impressive. As the land is owned by



The tiny fern, *Ophioglossum lusoafricanum* Photographs: Lindy Beckerman.

Eskom, strict entry requirements meant we were escorted by some rather bored ecological officers. During the visit, we documented several species in both grassland and wetland habitats, contributing valuable records to the Great Southern Bioblitz projects for both KwaZulu-Natal Battlefields and the Free State, as the site sits on the provincial boundary.

Highflats – November: another range extension

A trip back to Highflats to get some photos of *Satyrium rhodanthum* turned out to be very productive. *Cyrtanthus obliquus* is rare in KwaZulu-Natal, so it was exciting to yet again find another (a fifth) population. We were late for the orchids, which was just as well, otherwise we would never have seen the *Cyrtanthus* flowers, which were just starting to open. We also spotted an *Aloe parviflora*, which also extends the southern range of this species that we used to believe only grew on the inselbergs around Durban. However, more and more, there are sightings much further afield, even as far as northern KwaZulu-Natal. Last year it was picked up near Greytown. This Highflats population is the furthest south yet. It pays to repeatedly return to previously visited sites.

KwaZulu-Natal Midlands – November: *Ledebouria* and lost plants

On a trip with Andrew Hankey, SANBI horticulturist from the Walter Sisulu National Botanical Gardens, and his colleague, we revisited some sites for *Ledebouria* collections – a genus that Andrew is focusing on. This included an unusual *Drimiopsis* from Bergville. We also recorded a rare sighting of *Craterocapsa insizwae* in a wetland near Creighton. Following our observation, Hugo de Waal recommended on iNaturalist to change its status from Least Concern to Vulnerable, as plants at known localities had disappeared. These observations underscore the importance of revisiting known sites and monitoring plant populations over time.

Howick – November: a new *Kniphofia* discovery

An ecologist and his colleague working for Sappi near Howick brought to our attention an unfamiliar *Kniphofia* in a wetland in the Karkloof area. The inflorescence resembled the Critically Endangered *K. umbrina* from Eswatini. Previous sightings were assumed to be *K. brachystachya*, but this new plant differs in having a small, neat habit without runners adjoining plants. For now we are calling it *Kniphofia* sp. nov. Discoveries like this highlight how much there still is to learn about our region's flora, and the need for careful field observations to identify potentially new species.

Kwawula, Howick – December: summer flowers and rare ferns

During a second visit to the stewardship site, Kwawula Game Estate, we focused on summer-flowering plants to add to the species list for this property. A highlight was the little fern *Ophioglossum lusoafricanum*. We plan to return in May 2026 to search for the little, rarely seen, orchid *Disperis woodii* (VU), known from only two localities in the grasslands of the uMngeni Valley Nature Reserve just a few hundred metres away.

Eston – January: a repeat visit in another season

We visited an area not covered on any previous trips. We searched for and found a *Kniphofia northiae* last seen 15 years ago. *Kniphofia northiae* is usually seen at much higher altitudes near the Drakensberg but, so far, there are two small anomalous populations here and in Exhobo (Ixopo). On the way we stumbled on an incredible population of *Scadoxus multiflorus* subsp. *katharinae* in some riparian forest. Sights like these make our day all worthwhile.

It was a rewarding year, full of interesting finds, seed collections and meeting keen biodiversity stewardship landowners. We look forward to an exciting and successful year ahead.



CREWites and BotSoc KwaZulu-Natal Inland Branch members at the Kwawula outing in Howick. Photograph: Alison Young.

Protecting KwaZulu-Natal's flora: the KZN BotSoc Ex-situ Threatened Plant Project

Roy Caister

The BotSoc KwaZulu-Natal (KZN) Inland Branch is leading an important conservation initiative through its Ex-situ Threatened Plant Project, which aims to protect priority plant species facing high threats in KwaZulu-Natal. The project is a collaborative effort involving partners, including the CREW Summer Rainfall Region Node, the University of KwaZulu-Natal (UKZN) School of Agriculture and Science, Ezemvelo KZN Wildlife, the Millennium Seed Bank Partnership (MSBP) Programme and SANBI's national botanical gardens.

The initiative involves collecting seeds and plant cuttings from threatened species to ensure their long-term preservation. Seeds are sent to the Millennium Seed Bank for secure storage, while others are propagated at botanical gardens and specialist nurseries. In the longer term, plants grown through this project may be reintroduced into suitable habitats. Another possibility we are exploring is making some species available through nurseries – similar to successes with plants such as *Kniphofia pauciflora* and *Aloe peglerae*. This may help reduce pressure from illegal plant collecting, although the initiative is still in the planning stages.

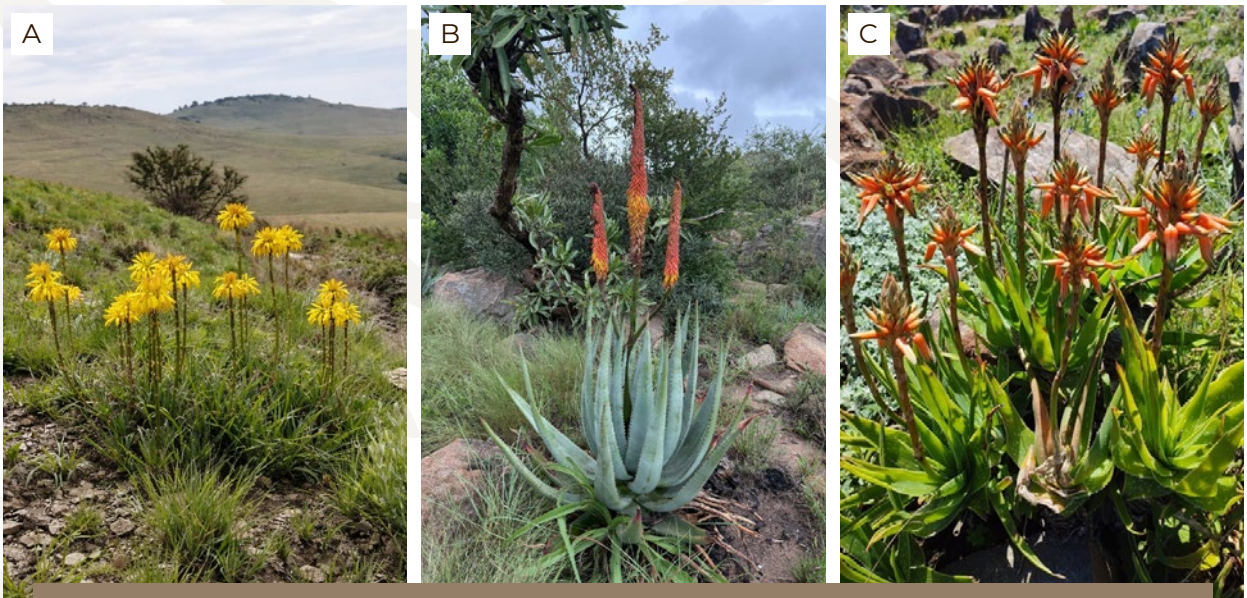
One of the most threatened species the project is working with is *Aloe nicholsii*, a Critically Endangered, endemic grass aloe with fewer than 100 individuals believed to remain in the wild. In 1999, Geoff Nichols



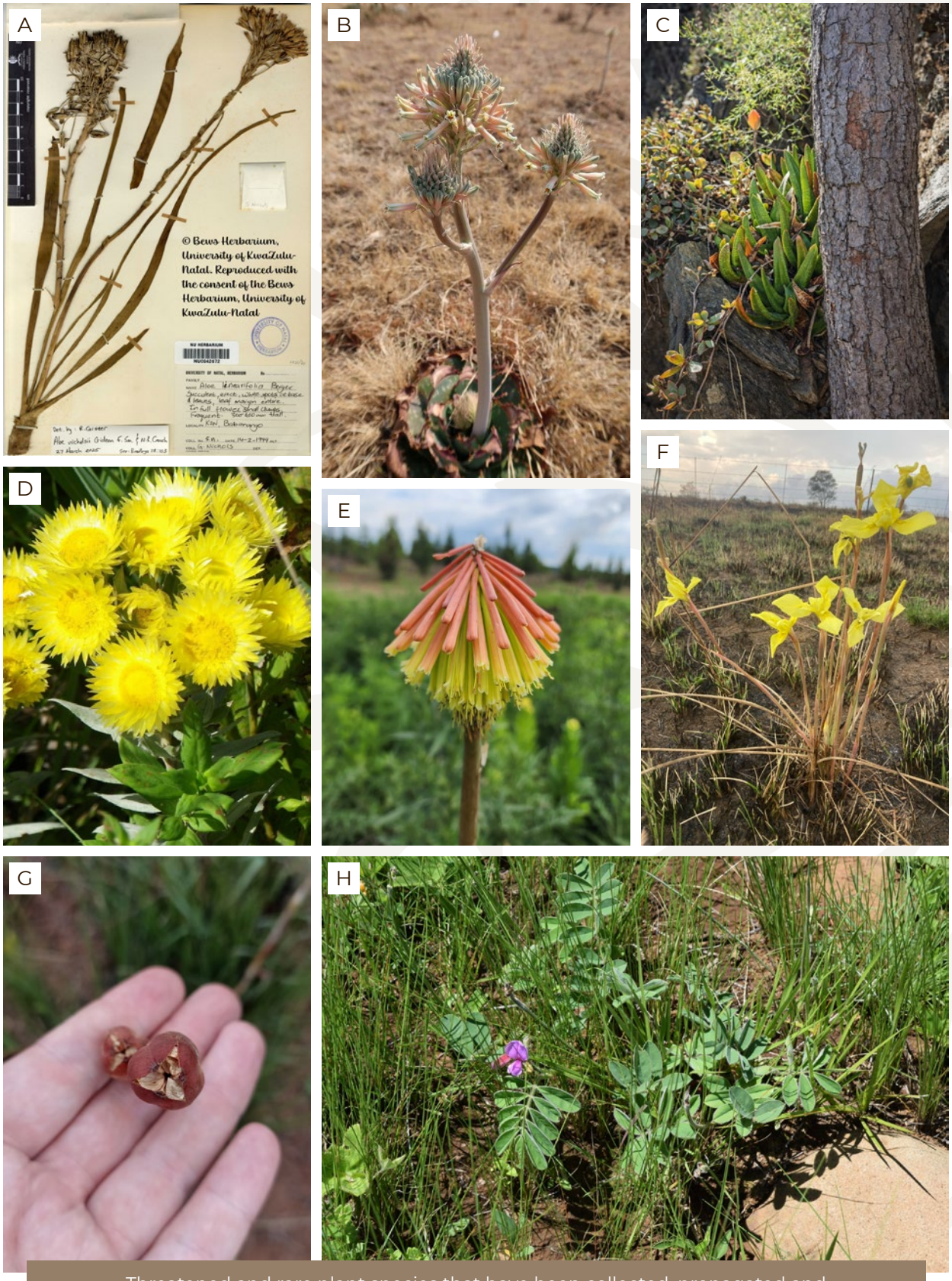
Midlands and Durban CREW and BotSoc KZN joint field trip to collect seed of *Aloe nicholsii*. Photograph: James Hallé.

Threatened and rare plant species that have been collected, propagated and distributed to conservation partners

Species	Conservation status	Material collected	Year	Notes
Kniphofia latifolia	Endangered	Seeds	2025	Seeds sent to MSBP.
Aloe neilcrouchii	Endangered	Seeds	2025	Seeds sent to MSBP.
Moraea hiemalis	Vulnerable	Seeds	2024	Seeds sent to MSBP.
Aloe gerstneri	Endangered; restricted distribution	Seeds	2023	Seeds sent to MSBP, SANBI's KwaZulu-Natal National Botanical Garden (KZN NBG) and UKZN Botanical Garden (UKZN BG). Seedlings later sent to Walter Sisulu NBG. Plants at UKZN BG are thriving, some will be sent back to Babanango Game Reserve.
Gasteria tukhelensis	Rare	Cuttings	2023	Cultivated at KZN NBG and UKZN BG.
Helichrysum citricephalum	Critically Endangered	Seeds and cuttings	2023	Propagated at KZN NBG and UKZN BG.
Aloe dominella	Near Threatened	Seeds	2022	Seeds grown at UKZN BG.
Tephrosia natalensis subsp. *pseudocapitata*	Endangered	Seeds	2022	Seeds distributed to KZN NBG and UKZN BG.
Aloe prinslooi	Endangered; only 2 known populations	Seeds	2022/ 2025	Grown at the UKZN BG (since 2022); seeds sent to MSBP (2025).



Threatened and rare plant species that have been collected, propagated and distributed to conservation partners: A, *Aloe dominella*; B, *Aloe gerstneri*; C, *Aloe neilcrouchii*. Photographs: A, Kathy Milford; B, James Halle; C, Muhammad Adamjee.



Threatened and rare plant species that have been collected, propagated and distributed to conservation partners: A, *Aloe nicholsii*; B, *Aloe prinslooi*; C, *Gasteria tukhelensis*; D, *Helichrysum citricephalum*; E, *Kniphofia latifolia*; F, *Moraea hiemalis*; G, *Moraea hiemalis* fruit with seeds; H, *Tephrosia natalensis* subsp. *pseudocapitata*. Photographs: A, B, C, G, Roy Caister; D, E, H, Alison Young; F, Janet Taylor.

described its occurrence as 'frequent' along the roadside, but its numbers have declined significantly due to habitat loss associated with the forestry industry. In 2025, seeds were collected and sent to the MSBP, with additional seeds propagated at the UKZN Botanical Gardens and a specialist aloe nursery. Some seedlings have also been shared with the Walter Sisulu National Botanical Garden. We are returning to the aloe population in March 2026, to collect more seeds for cultivation.

The accompanying table lists threatened and rare plant species that have been collected, propagated and distributed to conservation partners as part of the KZN Bot-Soc Ex-situ Threatened Plant Project.

Through collaboration and careful propagation, the project is helping to secure a future for KwaZulu-Natal's threatened plants and contribute to the growing global effort to 'Reverse the Red' – halting and reversing species extinctions.

Orchids, invasives and elusive endemics: Underberg CREW's year in the field

Julie Braby

Although Underberg CREW has fewer active members these days, we continue to collaborate closely with Midlands CREW, ensuring our region remains connected to the broader conservation network.



Underberg CREWites, Julie Braby and Cindy Khanyile, taking in the beauty of the Berg grasslands. Photograph: Julie Braby.

A major focus for us this season has been invasive alien clearing along the Drakensberg Gardens Road, especially in watercourses impacted by silver wattle, crack willow and numerous other invasive species. Each month seems to bring a new challenge – the latest being the Formosa lily – though we are pleased that, so far, there has been no sign of the pompom weed.

We were thrilled that we were tasked to compile a new booklet on invasive species of the Southern Drakensberg, requested and sponsored by Ezemvelo KZN Wildlife Honorary Officers. This resource will support local management efforts and help raise awareness across the region.

Beyond clearing invasive species, we have also enjoyed public engagement activities, offering guided walks at Garden Castle Nature Reserve to showcase the spectacular orchids and wildflowers during January and February. A particular highlight was hosting Pieter Bester, a taxonomist at SANBI's National Herbarium specialising in Apocynaceae (and focusing on *Nemesia* during this trip). Spending time in the field together was both inspiring and a valuable learning opportunity for the CREW Underberg group. Pieter challenged us to locate the endemic



The misty grasslands en route to Pillar Cave, where the team searched for the elusive *Nemesia glabriuscula*. Photograph: Pieter Bester.



The delicate blue flowers of *Nemesia caerulea.* Photograph: Pieter Bester.



Eyes on the orchids! The Summer Rainfall Region Node team and VEGMAP colleagues document multiple orchid species in a single patch, linking local observations to national data. Photograph: Julie Braby.

Nemesia glabriuscula, last collected in 1986 by Hilliard and Burtt – a mission we hope to succeed in next year. As Pieter later reflected, it was 'a dreadfully wet but botanically fantastic trip', even though we unfortunately did not find *N. glabriuscula* on the walk up to Pillar Cave and just beyond.

Another exciting opportunity was spending a day in the field with the Summer Rainfall Region Node team (Suvarna) and her colleagues from the VEGMAP Project and Ecosystem Condition team. It was fascinating to learn how to capture landscape images that provide valuable data to the broader team – a perfect example of how local CREW efforts connect to national projects.

Underberg CREW may be small in numbers, but our dedication to preserving and celebrating the unique flora of the Southern Drakensberg remains as strong as ever. Through continued conservation work, collaboration and community engagement, we are proud to contribute to protecting this remarkable region.



Infographic illustrating how to capture landscape photographs for the VEGMAP project on iNaturalist. Created by: Anisha Dayaram.

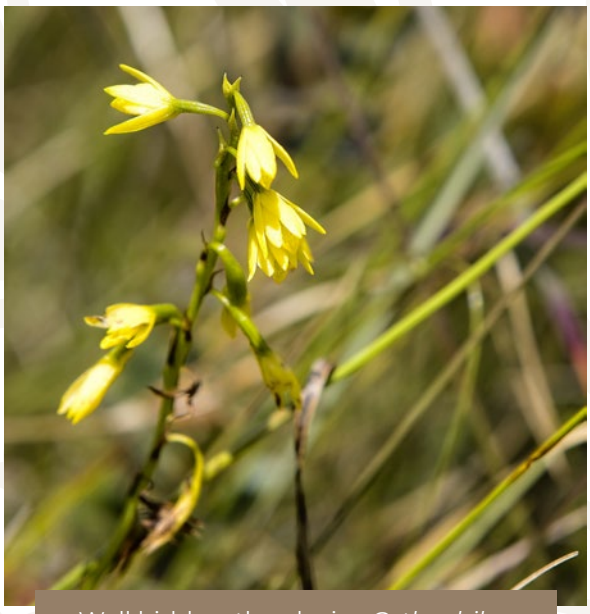
Passing the baton

Kate Grieve, Graham Grieve and the A-Team

As long-standing CREW members, we believe it is important to pass on our knowledge of the special plants of our area – as well as some of the more obscure localities – to the next generation. So when Muhammad Adamjee (CREW member and curator of the orchid collection at the Durban Botanical Garden) expressed a wish to see some of the lesser-known and range-restricted orchids of the Pondoland Centre, we welcomed the opportunity to mentor him.

Earlier this season, we began our search in the vicinity of Port Edward. On the way, we were stopped in our tracks by the bold yellow inflorescences of *Eulophia angolensis* in a swampy area near the Mpenjati River.

Umtamvuna Nature Reserve revealed a sumptuous display of orchids, including *Disa afra*, *D. tripetaloides*, *D. similis*, *D. sagittalis*, *Disperis oxyglossa*, *Schizochilus zeyheri* and *Acrolophia cochlearis*, in addition to more common species.



Well hidden: the elusive *Orthochilus milnei* at Red Desert Nature Reserve. Photograph: Graham Grieve.

At nearby Red Desert Nature Reserve, we located one of the target species – the diminutive and rarely seen *Orthochilus milnei* – hidden in long grass in a damp seep.

Persistence pays off: a rare open flower of *Corymborkis corymbis* on the forested slopes of the Mzimkulu River. Photograph: Graham Grieve.





Kate Grieve and Muhammad Adamjee photograph and examine *Polystachya pubescens*, while Graham Grieve focusses on another interesting species at Umtamvuna Nature Reserve. Photograph: James Hallé.

Unfortunately, there were no signs of two other expected species, *Brachycorythis inhambanensis* (very rare) and *Disa polygonoides*, probably due to the lack of rain. Orchid numbers were also low in the coastal grassland section of the reserve just south of Port Edward village, although we did locate another rarely seen species, *Eulophia coeloglossa*.

As the season progressed, the effects of the dry conditions became increasingly evident. At Vernon Crookes Nature Reserve, where we had expected to see *Disa polygonoides* among others, none were found. However, there was some compensation in the discovery of *Ceropegia gerrardii* (=*Brachystelma gerrardii*) (Endangered) in the higher-lying areas.

The search for *Corymborkis corymbis*, localised to parts of the KwaZulu-Natal South Coast, proved more challenging. A good subpopulation occurs on the forested northern slope of the Mzimkulu River in a relatively inaccessible area, and reaching it required hacking through dense alien vegetation in intense heat. Most plants were still in bud, but our efforts were rewarded with one open flower.

A return visit to Ngele was probably the highlight of the orchid hunt. In forest near the source of the Mtamvuna River, swathes of *Calanthe sylvatica* grow on fallen tree trunks, reliably producing masses of delicate pink flowers. Nearby, *Emplectanthus gerrardii* (Vulnerable) twines through the understorey.

This outing also produced *Disa nervosa*, *Disperis fanniniae*, *Eulophia parvilabris*, *Habenaria clavata*, *H. cornuta*, *H. filicornis*, *H. malacophylla*, *H. pseudociliosa*, *Huttonaea fimbriata*, *H. pulchra*, *Schizochilus bulbinella*, and several epiphytic orchids that were not in flower and could not be identified to species level.

Although the lack of orchids in some areas was a little disappointing, the knowledge of these localities is now in safe hands, and there were plenty of other special plants to make the trips worthwhile.

Treasures and threats in Umtamvuna Nature Reserve

Tracy Taylor

The Pondoland CREW has had a wonderful year, coming together almost every Thursday to explore the beautiful Umtamvuna Nature Reserve. These regular outings have given us the privilege of encountering some truly special plants in their natural habitat.

One highlight was the rare endemic, *Pachycarpus linearis* – a slender, perennial geophytic herb with narrow, linear leaves and delicate yellowish green, bell-shaped flowers, often borne in small nodding umbels.

We have also been closely monitoring a colony of *Fusifilum depressum* (=*Drimia depressa*), commonly known as *bergslangkop*. This deciduous, bulbous perennial produces clusters of striking white to pale pink flowers that add a quiet elegance to grassland plants emerging after fire. Known for its toxicity to livestock, it is always encouraging to see this species thriving within the reserve.

Another delightful find was the rare *Emplectanthus dalzellii*, observed twining through understorey shrubs in the shaded, moist forest along a stream. This cryptic member of the Apocynaceae (milkweed) family bears small, star-shaped flowers and can easily be overlooked without careful searching.

On a more serious note, the Pondoland CREW is increasingly concerned about a growing conservation challenge in the Western Heights area of Umtamvuna Nature Reserve. In recent years, sections of the perimeter fence have fallen into significant disrepair, allowing increasing incursions by community cattle that are now grazing extensively inside the protected area.

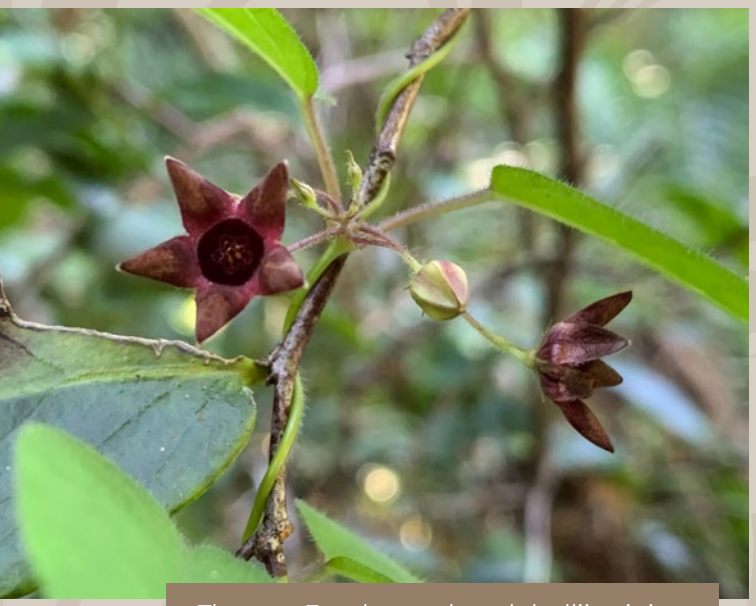
The impacts are becoming stark. Deep, braided cattle paths are scarring and fragmenting the grasslands, while soil erosion is accelerating, leading to topsoil loss and



The rare endemic, *Pachycarpus linearis* (Data Deficient). Photograph: Tracy Taylor.

Morning dew on emerging *Fusifilum depressum* (=*Drimia depressa*) in the grassland at Beacon Hill. Photograph: Tracy Taylor.





The rare *Emplectanthus dalzellii* twining through understorey shrubs in a riverine forest. Photograph: Tracy Taylor.



The ongoing crisis of cattle incursions in Umtamvuna Nature Reserve's protected grasslands needs immediate urgent action. Photograph: Tracy Taylor.

long-term habitat degradation. Waterways are also being affected through bank erosion, sedimentation, nutrient runoff, reduced infiltration and heightened flood risk.

The grassland itself is beginning to show signs of stress: palatable species are being selectively grazed down, leaving tougher, less diverse vegetation behind. This trajectory threatens the exceptional biodiversity of Umtamvuna Nature Reserve, including many rare and endemic plant species. Urgent, collaborative solutions are needed to safeguard this irreplaceable habitat. Pondoland CREW continues monitoring and urges collaboration with Ezemvelo KZN Wildlife to repair fences and manage grazing.

Pondoland CREW, from left to right: Gail Bowers-Winters, Anne Skelton, Uschi Teicher, Dorothy McIntyre, Tracy Taylor, Maggie Abbott and Hillary Henderson. Photograph: Tracy Taylor.



Sampling ancient landscapes with old friends: Pondoland reflections

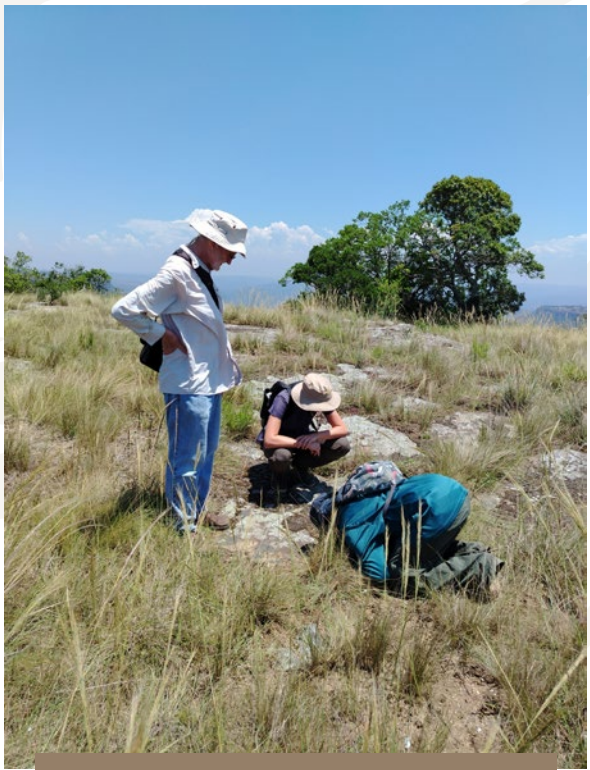
Anisha Dayaram and Stephni van der Merwe

Years ago, my studies involved unearthing a number of unfortunate suffrutescent plants in Pondoland. All I was told by my co-supervisor was to make contact with a lady named Isabel Johnson, and that she would help me find appropriate sites and plants. Knowing nothing of the landscape, like three hobbits armed with field snacks, a pick, a spade and a pitchfork I left Gauteng and headed to the edge of the wild coast with two friends as field assistants.

It was an awkward meeting in an unknown land with unknown inhabitants. But the no-man's-land at the border between KwaZulu-Natal and the Eastern Cape turned out to be home to a welcoming crowd of CREW-ites called the Thursday Group, who led us patiently through the maze of amazingly special forest and grassland plants in their homeland while I collected my samples. During that trip, I got data for my master's degree thesis and also my first masterclass on the power of local knowledge and the vital role of local citizen scientists. Since then, I have enjoyed many interactions with CREW volunteers from various regions. Several members of the Thursday group have since passed on, but memories of interactions with them and the help they provided live on. My friends and I still talk about a memory of Tony Abbott standing over us on a hot January day, supervising the 2 × 1 m excavation of the underground network of stems of an *Eriosema* plant. He was passionate and determined when it came to learning about plants. We also broke his spade. He was somewhat passionate about that too.

Sixteen years later, Stephni van der Merwe (a SANBI/University of Cape Town postdoc), and Basetsane Malubane (a SANBI intern) contacted Kate and Graham Grieve to chaperone us through the Pondoland once more, this time on a different mission. Pondoland's mixed-use landscapes are ideal for field validation for monitoring ecosystem condition from satellite imagery. While we do visit the beautiful intact patches of ecosystems, it also means we have to visit the more demotivating and species-poor degraded areas. However, the warmth and enthusiasm for contributing to science and society remained the same. Our work focused on ecosystems and landscape patterns, and Kate and Graham patiently answered questions about historical context and took us to interesting sites based on what we needed, even the sad degraded sites – directly supporting the ecosystem condition assessments and vegetation mapping updates in the National Biodiversity Assessment 2025.

Despite being outside of the usual species-oriented scope of CREW (we three were all terrible botanists), Kate and Graham were



At Lake Eland Nature Reserve, Pondoland. Photograph: Anisha Dayaram.

gracious and engaging hosts. At one point, I had a gentle tap on my shoulder. Looking up, I saw Graham pointing at our vehicles; he said something along the lines of 'our cars are making friends, let's go have a look'. My handbrake needs a service and my car had gently rolled into the back of his bumper!

Once again, we were treated to a wealth of knowledge shared in a calm and enabling atmosphere where Stephni and Basetsane became the next generation of scientists to experience the magic of the Pondoland with two of her generous custodians.

It was sad to hear that volunteer numbers in the Pondoland group are lower than they used to be. Isabel Johnson, the Thursday Group, Kate and Graham are wonderful examples of good people who, like the plants they seek, are rare and special in general society. Fortunately, they are a good representation of the general attitude and wisdom among CREW volunteers. The contribution of CREW members to the Threatened Species Programme at SANBI is often celebrated. However, the value that CREW members add to other research should be equally valued and nurtured.

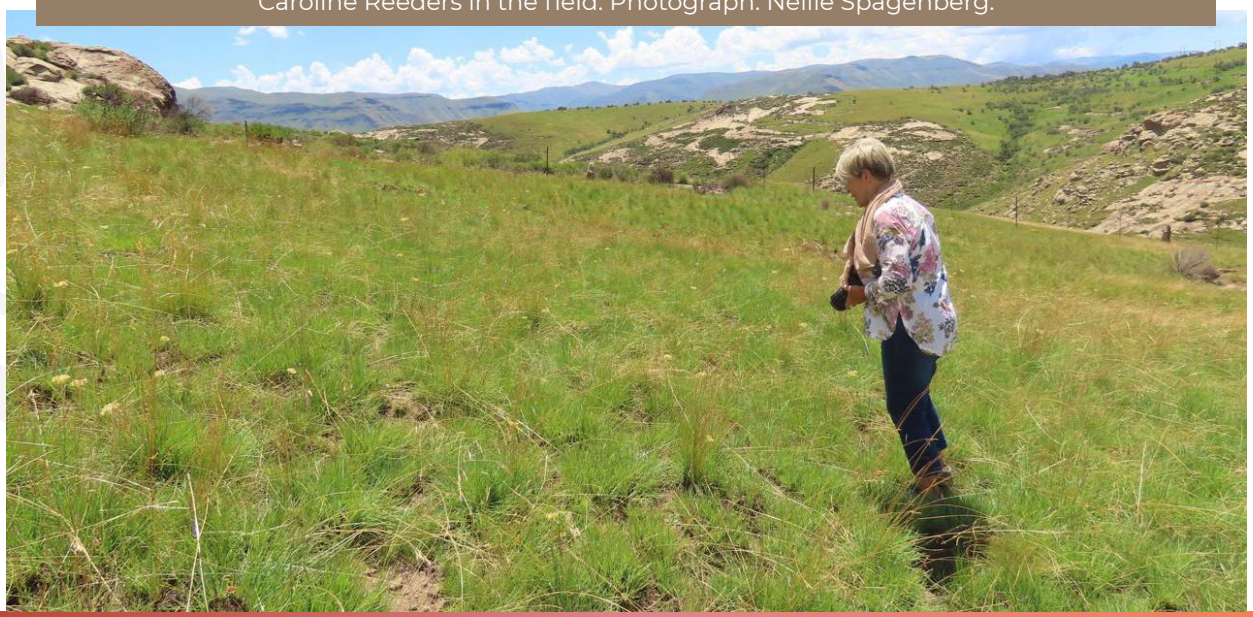
Rhodes village botanical rambles

Caroline Reeders and Nellie Spangenberg

Rhodes is well known, not only for its picturesque landscape, but also for the tremendous hidden gems beyond these mountains. The Victorian-era style and small-town charm of the village add to its natural beauty. Depending on one's pursuit of adventure and purpose, this small village offers an array of activities, especially for outdoor lovers. Some people visit to escape the city buzz, to listen to the calming sounds of our rivers, and to take a morning walk through our serene village while gazing at our beautiful landscape. One of the most popular activities (and our favourite) is wildflower watching, which allows you to see the village's hidden treasures, including its adventurous side.

Even though we are locals, we cannot get enough of our small village. We enjoy its serene nature and its unique flora. On 2 February 2026, my friend, Nellie Spangenberg, and I went on a wildflower-watching trip to Naude's Neck Pass. The next day, we stopped at some road reserves on our way from Rhodes to Barkly East. Both trips had several highlights and we share names and

Caroline Reeders in the field. Photograph: Nellie Spagenberg.



Notes on some of the species that we encountered during our wildflower-watching trip

Scientific name	Common name	Endemism and conservation status	Habitat
Berkheya cirsiifolia	Lesotho thistle	Least Concern	Mountainous areas, alt. 2 000–3 200 m, Drakensberg Grassland.
Glumicalyx nutans	Nodding drumsticks	Endemic to the Eastern Mountain Region – Drakensberg and Lesotho	Grassy mountain slopes often at the foot of cliffs, among rocks in boulder beds and along streams.
Gladiolus saundersii	Lesotho gladiolus, Lesotho lily	Least Concern	Rocky outcrops and scree slopes.
Wurmbea elatior	Pepper and salt, spike lily	Least Concern	In montane to subalpine marshes and on streambanks.
Huttonaea grandiflora	Grand mask orchid	Least Concern	Damp alpine grassland and in rock crevices.
Brownleea macroceras	Long-horn false disa	Least Concern	Associated with rock outcrops, on rock ledges and in shallow rocky soil.
Euphorbia clavarioides	Lion's spoor	Least Concern	Gentle stony slopes, usually wedged among rocks in grassland or between scattered short shrubs; Dry Highveld Grassland, Drakensberg Grassland, Sub-Escarpment Grassland, Upper Karoo.
Gladiolus oppositiflorus	Salmon gladiolus	Least Concern	Open grassland, often on rocky slopes.
Eucomis autumnalis	Autumn pineapple lily	Least Concern	Open grassland, sheltered places, even swamps.
Kniphofia caulescens	Basotho red-hot poker	Least Concern	Occurs in high-lying mountain areas at high altitudes. On peaty soil overlying rock formations, marshy places and seepage areas in mountain grassland.
Disa fragrans	Fragrant disa	Least Concern	High altitude, rocky grassland.
Erica cooperi var. *cooperi*	Grassland heath	Rare: habitat specialist, extent of occurrence 3 000 km^2. Not threatened.	
Satyrium parviflorum	Devil satyre	Least Concern	In a wide variety of habitats ranging from fynbos to marshy, moist or dry places in grassland and forest.
Pterygodium nigrescens	Coil blackface monkshood	Least Concern	In moist grassland vegetation.

Notes on some of the species that we encountered during our wildflower-watching trip (continued)

Scientific name	Common name	Endemism and conservation status	Habitat
Pterygodium leucanthum	Milk bonnet	Least Concern	In montane grassland.
Satyrium neglectum	Pink candle satyre	Least Concern	Occasional in open to sheltered places in upland grassland on usually moist slopes.
Disperis tysonii	Pixy kappie	Least Concern	Damp grassy slopes, often on sandstone or quartzite.



Road Reserve near Donkerhoek. Photograph: Caroline Reeders.

images of some of the plants we observed in the accompanying table here.

None of the species that we recorded is listed as being of conservation concern. This is the first of what we hope will be many reports on our outings, and we promise there will be more rare species in next time!

Nellie Spangenberg, in Afrikaans, summed up our experience: '*Dit was 'n wonderlike ervaring om saam met Caroline Reeders van Rhodes, 'n veldblomkenner van formaat, die berge in te vaar op soek na veldblomme, veral veldorgideë. Ons is met die Naudesnekpas op en pragtige veldblomme was oral te sien na die lieflike reëns. Gou het sy die een orgidee na die ander gekry! Hoe hoër ons egter gery het, hoe slegter het die weer geraak, 'n fyn misreëntjie het begin uitsak. Dit het nie ons*

Gladiolus saundersii. Photograph: Caroline Reeders.



Massonia wittebergensis, in its typical habitat near Naude's Neck Pass. Photograph: Vathiswa Zikishe.





Kniphofia caulescens, under orographic mist near Rhodes village. Photograph: Vathiswa Zikishe.

entoesiasme gedemp nie. Die veldblomme was volop! Later die middag het ons teruggekeer Rhodes toe … nat, vol modder, sopnat skoene, maar hoogs tevrede. Daar was baie hoogtepunte.'

In closing, a note to those who have never been to Rhodes: there's an array of activities, with something for everyone. For the flower lovers specifically, November to April is flower viewing season, with the peak time from mid-January. A highly recommended field guide, which is very useful for this area, is Elsa Pooley's (2003) *Mountain Flowers: A Field Guide to the Flora of the Drakensberg and Lesotho*.

For a list of activities, a directory and more information, please follow this link compiled by the Rhodes Information Centre: https://rhodesinfo.co.za/shop.



Close-up image of *Massonia wittebergensis*. Photograph: Vathiswa Zikishe.

Unknowingly having discovered a Critically Endangered plant during a plant rescue at Coega

Rasheed Desai

Members of the public and special interest groups, such as botanical clubs, were invited by Andrea von Holdt, environmental manager at the Coega Special Economic Zone, to participate in a plant rescue in Zone 1 at Coega, about 20 km east of Gqeberha, during August and September 2025.

I asked a fellow Dendological Society member, Abdul Lateef Ismail – someone with exceptional botanical knowledge – to help identify plants as I dug them out. We communicated via WhatsApp; I sent photographs and he responded with identifications and background on each plant.

One plant caught his attention immediately. He asked that I crush a leaf and smell it, and requested clearer photographs of plants in flower. What followed was a consultation with other experts. He then informed me that the plant was the Critically Endangered *Agathosma gonaquensis* – Gonaqua buchu.

There was a colony of them with many plants, some grown into relatively large bushes. Andrea von Holdt was notified of the exact location so that as many as possible could be saved. There were lots to dig out.

Abdul Lateef also noted that this colony was situated much further east than the plant's known distribution range, making the find even more remarkable from a botanical perspective.

I dug out and transplanted many into my garden. Members of our club were informed through our communication platforms. Some members went to rescue plants for transplanting in the Baakens Valley.

Agathosma gonaquensis carries significance in certain indigenous cultures. Knowing that adds another layer of meaning to the find. It was a privilege to have unknowingly rescued a plant of such ecological and



Agathosma gonaquensis at Coega before being dug out. Photograph: Rasheed Desai.

Close-up image of *Agathosma gonaquensis* flower and leaves. Photograph: Vathiswa Zikishe.





Healthy *Agathosma gonaquensis* growing on the outskirts of Gqeberha. Photograph: Vathiswa Zikishe.

cultural importance. I can only hope that the transplanted specimens survive and thrive in the long term.

My sincere thanks to Abdul Lateef Ismail for his expertise, enthusiasm, and generous support throughout the rescue.

Searching for *Rhinephyllum inaequale* and *Orthopterum coegana*

Luc Strydom

This year, I set myself two targets: firstly, to find and record the elusive *Rhinephyllum inaequale* (EN), and secondly, to try to locate additional subpopulations of the uber-endemic *Orthopterum coegana* (CR). This is the story so far...

Rhinephyllum inaeqaule

All along the Karoo escarpment, hillsides covered in arid grassy shrubland are skirted with flat sandstone ledges, resembling geological pagodas and providing habitat for a handful of specialised dwarf succulents. On these flat slabs, soil is a luxury and shallow at best, and water availability is but a short passing moment between long periods of aridity.

The cracks and shallow gravels provide a unique microclimate and ecosystem, and the majority of the plant species here



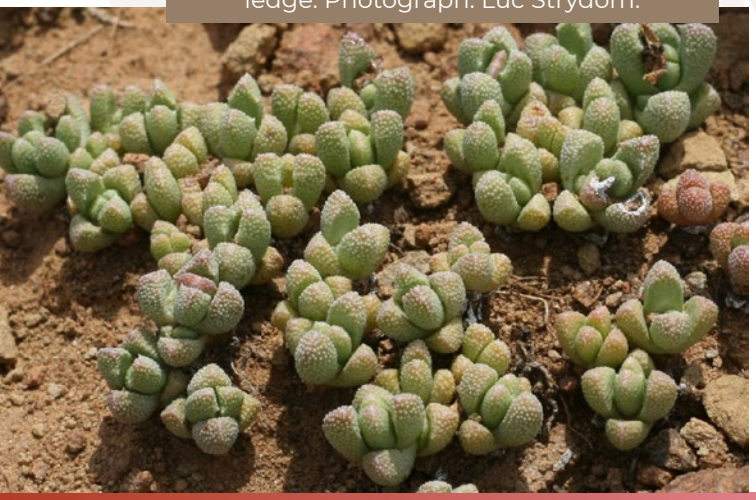
Sandstone ledges and arid Karoo grassland habitat of the Karoo Escarpment. Photograph: Luc Strydom.

remain low to the ground (less than 100 mm in height) with only a few species, such as *Monsonia camdeboensis* and *Nenax microphylla*, occasionally daring to exceed 150 mm. Taxa such as *Stomatium*, *Chasmatophyllum* and *Crassula corallina* create small scalloped domes, barely noticeable amongst the sandstone gravels.

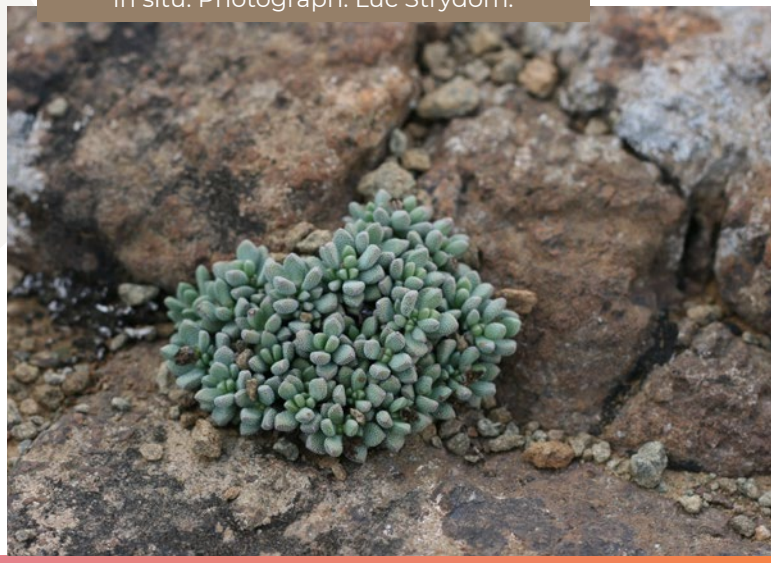
Rhinephyllum inaequale is not a particularly well-known species, but simultaneously it is a species facing the ever-terrifying risk of plant poaching for the horticultural trade. It is classified as Endangered according to the SANBI Red List and is known from only two small locations in the Robert Sobukwe Town (Graaff-Reinet) area (extent of occurrence [EOO] of 280 km^2).

While doing surveys along the Eastern Cape–Northern Cape boundary on the Karoo escarpment in February this year, I came

Rhinephyllum verdoorniae, with its diminutive, warty, Jelly Tots-leaves, growing in habitat on a sandstone ledge. Photograph: Luc Strydom.



The real makoya: *Rhinephyllum inaequale* in situ. Photograph: Luc Strydom.



across a cute, warty little thing, hiding on the sandstone ledges, and my imagination went wild. I thought I had found the mystical vygie of yore, and quite a long way from its known EOO *nogal*. Sadly, when I looked closer, read and re-read all the literature, I realised this was not the plant I was looking for, but rather *Rhinephyllum verdoorniae*. Nonetheless, I was enamoured with it. A demure little plant resembling a small, low mat of rough, Jelly Tots-leaves. The leaves develop two small teeth, one on either side of the leaf apex, which eventually grow into an apical hood without distinctive marginal teeth upon maturation.

At most of the sandstone ledges in the area, these dwarf succulents were found uprooted and left lying on the rock sheets (possibly a faunal disturbance of some kind), mostly including *Stomatium* and *Chasmatophyllum* species, but also the *Rhinephyllum*. It was not clear why they were uprooted, and the roots showed no obvious signs of damage (such as bite marks, etc.). It was noted, however, that the roots of *Rhinephyllum verdoorniae* are very shallow, but long, and slightly thickened, and extend horizontally along and under the rock sheets.

Fast-forward a few months, and I'm making my way up to Camdeboo National Park for a few spirit-fixing days of the Thicket Forum. This time, after a bit of further research, I had a plan and a target location. I was lucky enough to make contact with the landowner, who generously allowed me onto the property to check for the historical population. Apparently, it was last recorded there in 1936, almost 90 years before my jaunt in the same veld. I painstakingly surveyed the area where I suspected they might be hiding, like a police search and rescue. After almost giving up, as I descended my final slope for the day, my eyes suddenly bulged.

I wish I could have been a fly on a rock that day, watching this sulky man dragging his feet through the stones, only to stop suddenly and jump off his feet, fist-pump the air, and start whooping and hollering like he's just won the lottery.



Habitat of *Rhinephyllum inaequale*. Photograph: Luc Strydom.

I found it, the real one... There it was!

From the outset, the ledge looks like all the other Karoo ledges with limited vegetation, apart from a few succulent cushions. Except, this time, the cushions were different; they were my white whale, *Rhinephyllum inaequale*. I couldn't care less that they'd finished flowering months ago, their shimmering, warty, rough leaves and demure presence were as cute to me as a baby hedgehog or a new puppy is to others.

I am overjoyed that the population has survived the last 90 years and persists in a location that serves it relatively few threats, considering the damage of historical, unmanaged stock grazing within the general

Orthopterum coegana at type location. Photograph: Luc Strydom.





Habitat at type locality. Photograph: Luc Strydom.

region. I am also ecstatic to know that the poachers haven't found this location yet – please do not ask me, I will not tell you.

Orthopterum coegana

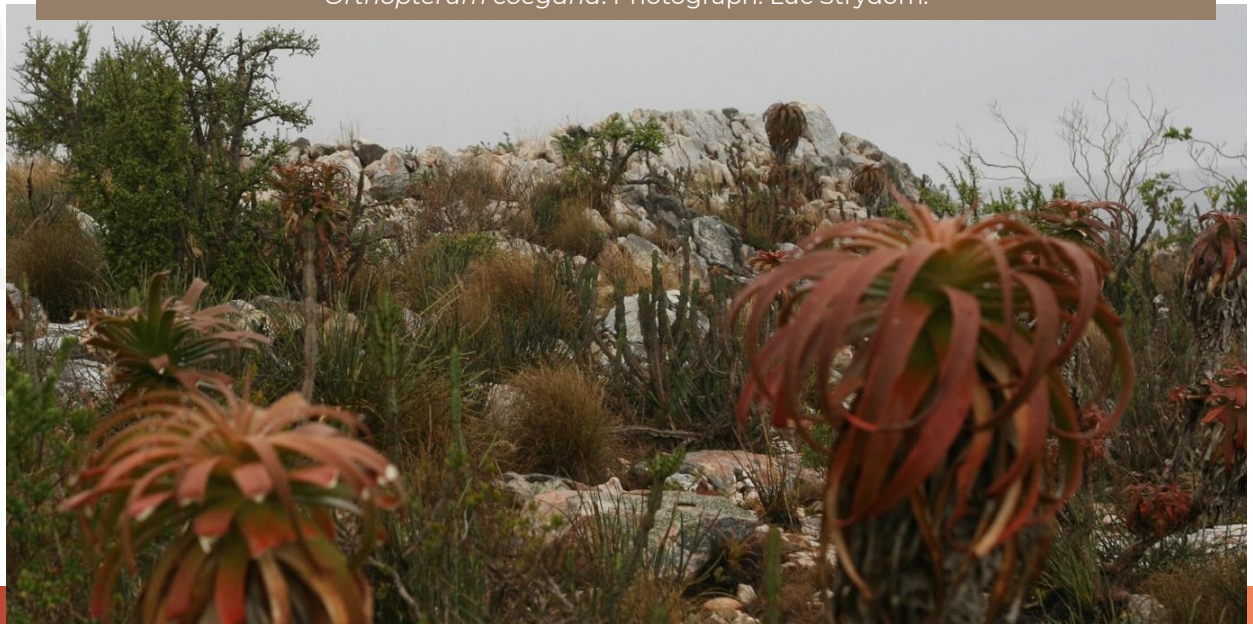
I recently took it upon myself to start exploring the quartzite outcrops of the Coega and Swartkops valleys to try to locate more populations of the extremely rare *Orthopterum coegana*. Classified as Critically Rare (CR), the species is currently known from two adjacent koppies within the Coega Strategic Economic Zone (SEZ).

I surveyed several quartz koppies within the Amanzi area, north and east of Kariega (Uitenhage), in January this year. These koppies presented the same basic geology and vegetation as the koppies where the known population occurs, and consist of a mix of Baviaanskloof Valley Thicket and Bethelsdorp Bontveld Thicket elements.

Unfortunately, no new populations have been found (yet). These surveys were not fruitless, and large populations of *Strelitzia juncea* and *Pachypodium bispinosum* were recorded among several other records of threatened and/or data-deficient species, including a rediscovery of *Asparagus spinescens* (rare) on the adjacent Karoo plains.

I will endeavour to find new subpopulations until I have exhausted all potential areas, but I fear that the species is truly restricted to a very small area, on a unique koppie, directly adjacent to a mining operation within a large-scale industrial development area. Under threat is an understatement...

Habitat at nearby quartz koppie surveyed – unsuccessful for *Orthopterum coegana*. Photograph: Luc Strydom.



Chasing the gems of Van Stadensberg: kloofs, ravines and crannies

Vathiswa Zikishe, and Ellie and Rudi Goossens

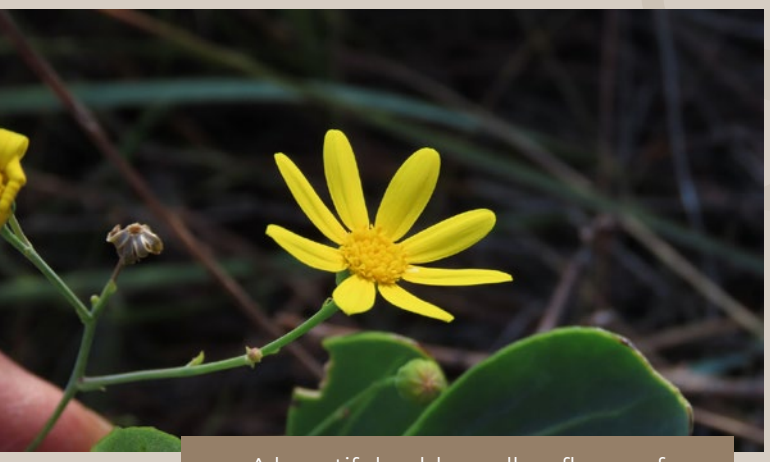
If one thinks of high-altitude, difficult-to-find species inhabiting rock crevices and sometimes requiring a canoe to get to, or species whose flowering times are hardly documented or unknown, then these are the species that Ellie and Rudi will find! Mention the word 'adventure' and they are in, not for low-hanging fruit. Their love of mountains explains the kinds of challenges they are interested in. I first met Rudi and Ellie during the COVID-19 pandemic in 2020. In that quiet era, with curfew and other restrictions in place, they were busy attending to plants grown in the Van Stadens Wild Flower Reserve for plant sale events. I was yearning to go into the field after being under strict lockdown regulations, when they notified me that *Paranomus reflexus* (EN) was in flower.

We visited the Van Stadens Wild Flower Reserve and my daughter, as well as two Rhodes University students, came along. Not only was *Paranomus reflexus* in flower, but the exquisite *Cyclopia pubescens* (CR) and many other Species of Conservation Concern (SOCC) occurring in the reserve were also flowering. This is how I met this enthusiastic pair. We had been communicating via email before this field trip, and our relationship has grown stronger ever since.

Back to their contribution to the CREW Eastern Cape Node. By the way, if you look at their extensive coverage of observations on iNaturalist, they not only contribute to the Eastern Cape but to the Western Cape as well. As I reside in Makhanda, Ellie would let me know of any flowering SOCC and would take me to them. We once visited the Longmore State Forest in search of *Leucadendron spissifolium* subsp. *phillipsii* (NT) and other rare species. What I would like to highlight is that their trips to the mountains and gorges of the Eastern Cape are unique and this is where they discover obscure species that one wouldn't ordinarily encounter.

Whatever the reason for a trip, any SOCC seen will be recorded

On a long hike to Longmore State Forest to get the flowering material of the *Otholobium* species, Charles Stirton kindly requested, they found new localities for *Erica sagittata* (EN), *Selago elsiae* (DDD), *Agathosma*



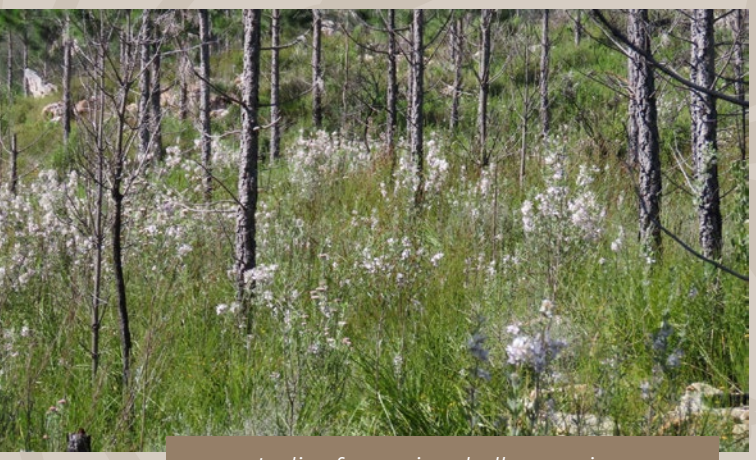
A beautiful golden yellow flower of *Othonna membranifolia*. Photograph: Rudi and Ellie Goossens.



Chlorophytm cremnophilum with flowers. Photograph: Rudi and Ellie Goossens.



Chlorophytum cremnophilum showing its cliff-hanging habit. Photograph: Rudi and Ellie Goossens.



Indigofera grisophylla growing between the pines. Photograph: Rudi and Ellie Goossens.

Close-up image showing *Indigofera grisophylla* flowers and stem. Photograph: Rudi and Ellie Goossens.



spinosa (rare) and *Cyclopia intermedia* (NT). Ellie keeps an eye on all SOCC when visiting a site; no trip is wasted and she reports to me in detail after each expedition. Ellie would say, 'We have been on the lookout for *Cyclopia longifolia*, and on this trip, it was in bud, which makes sense, as it shouldn't hybridise with *C. intermedia*.' She would also add, 'The *Otholobium* turned out to be *Psoralea polyphylla*, formerly known as *Otholobium polyphyllum*; its taxonomy is not yet updated on iNaturalist, as well as on the Red List of South African Plants.' There are currently two observations on iNaturalist, both from Ellie, from the same locality.

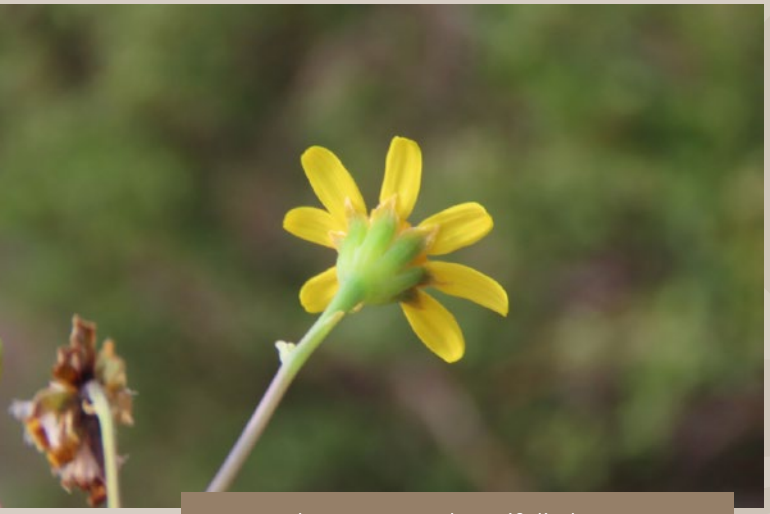
Two weeks later, *Cyclopia longifolia* (VU) was reported to be in flower! On this trip, a special *Erica* was also discovered. The experts are hard at work resolving and naming this mystery *Erica*, so stay tuned for the reveal!

Range extensions are made, new localities are discovered and habitat-restricted species are identified

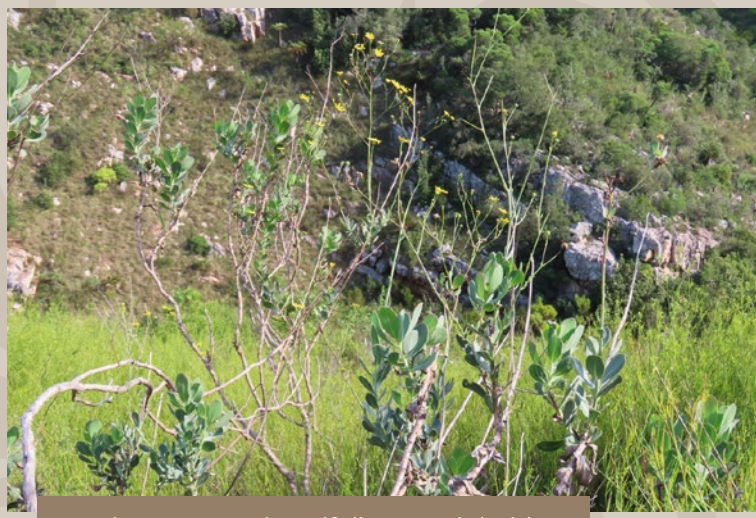
When I mentioned rare and habitat-specialist species, *Chlorophytum cremnophilum* is a typical example of the species that Ellie and Rudi would find. The specific epithet refers to its cremnophytic habitat – growing on cliffs – and that's where this special *Chlorophytum* is found: on inaccessible cliffs along the rivers. There are currently five observations on iNaturalist, three of these are Ellie's.

After many years of unsuccessful searches for *Lotononis monophylla* on the Van Stadensberg, following Jan Vlok's 1986 record, it was found in 2009 by Charles Stirton and rediscovered in 2020 by Brian du Preez. Then, in 2024, Abdul Lateef-Ismail found it and Ellie found a new population in the same vicinity in 2025.

Othonna membranifolia (DDD), a species with a recorded flowering time of April–August, has most of its observations recorded in this temporal range. There are currently seven records on iNaturalist, two are Nick



Othonna membranifolia bracts.
Photograph: Rudi and Ellie Goossens.



Othonna membranifolia growth habit.
Photograph: Rudi and Ellie Goossens.



Othonna membranifolia leaves.
Photograph: Rudi and Ellie Goossens.



Part of the adventure means that your car can get damaged by falling rocks.
Photograph: Rudi and Ellie Goossens.

Helme's from July 2023, and the rest are by Ellie and Rudi. In *O. membranifolia*'s 2018 assessment it was recorded as last collected in 1932. I do recall its rediscovery by the Nelson Mandela Bay CREW Group, as it was before I relocated to the Eastern Cape. However, since the rediscovery, it has not been seen, with a lack of fire recorded as the cause of its scarcity or dormancy. The assessment rationale further states that it is likely also threatened by crop cultivation, urban expansion and alien plant infestations between the Swartkops and Van Stadens rivers. These new records will not only confirm the species' existence but it will also inform its correct listing in the South African Red List, as DD is not a threat status but an indication that sufficient data is lacking to properly assess the species under IUCN criteria.

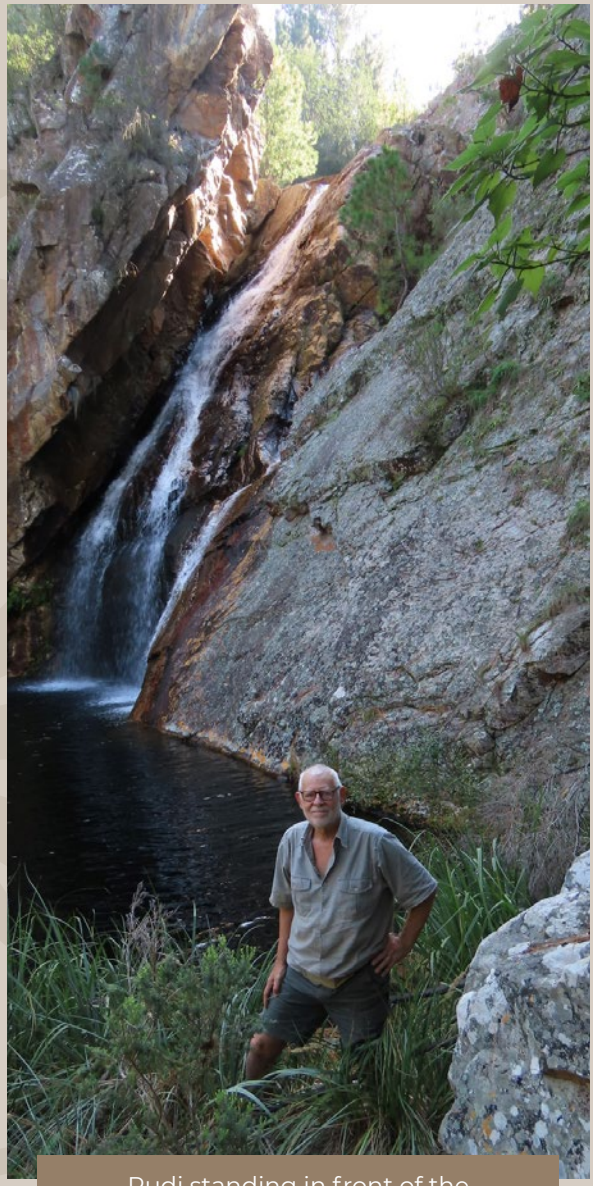
National events are fun and can also be adventurous

Rudi and Ellie prefer to contribute in their own unique way, away from the crowds. CREW has always attracted a diverse range of contributors, but the iNaturalist platform has enhanced this aspect of the programme. The national events, the City Nature Challenge (CNC) and the Great Southern Bioblitz (GSB), are part of our crowd data source portals. The extensive boundaries of Nelson

Mandela Bay allow the Goossens to contribute in their own unique way.

This is their account of how they took part in last year's Great Southern Bioblitz event: 'We were away that weekend, but I hope that our observations counted towards the Eastern Cape! We went hiking down a steep kloof and along a stream, which was rather scratchy and very overgrown and going through waist-high pools, but we reached what we wanted, which was a waterfall. On our way to the kloof, driving and hiking, we found *Paranomus reflexus* (EN), *Centella longifolia* (Rare) and *Indigofera grisophylla* (EN). Hiking into the kloof, by the waterfall, we found *Chlorophytum cremnophilum* (Rare). The best was that, climbing out on a steep side, we found *Othonna membranifolia*.'

I receive notifications about species found in fragmented urban patches, at high altitudes and in rock crevices within and beyond the Nelson Mandela Bay boundaries. This data feeds our Red List process and, given the species they find, now is the perfect time to update the Red List of the Eastern Cape flora. Though the goal to have a significant number of our species updated may tarry, it will eventually happen. We also face the challenge of misidentifications due to poor documentation of our species, but these issues will also be resolved in time. We are grateful for the data collected so far, and yes, we have a lot on our plates, but being in nature provides us with sanity and revives our energy to do more.

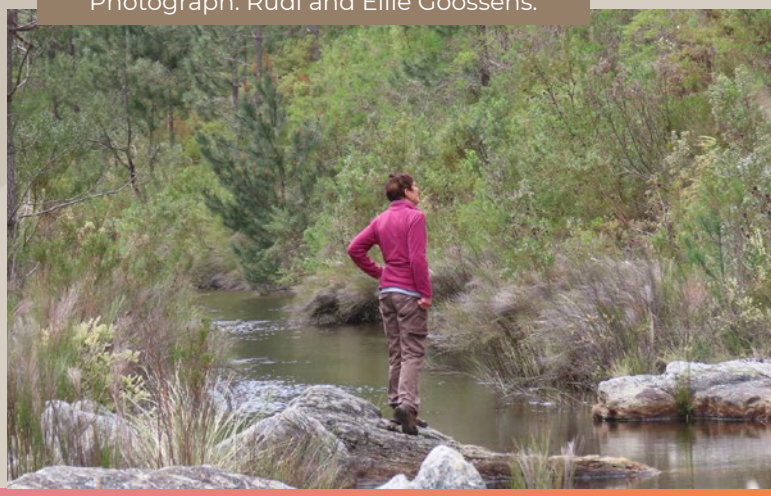


Rudi standing in front of the cliff face where *Chlorophytum cremnophilum* was found. Photograph: Rudi and Ellie Goossens.

Tammy, Rudi and Ellie's granddaughter, following in her grandparents' footsteps. Photograph: Rudi and Ellie Goossens.



Ellie checking out the route before crossing the river, safety first. Photograph: Rudi and Ellie Goossens.



Fourcade Botanical Group: plants, pollinators and a weekend in Bean's Valley

Petronell Mennen and Karin Sternberg

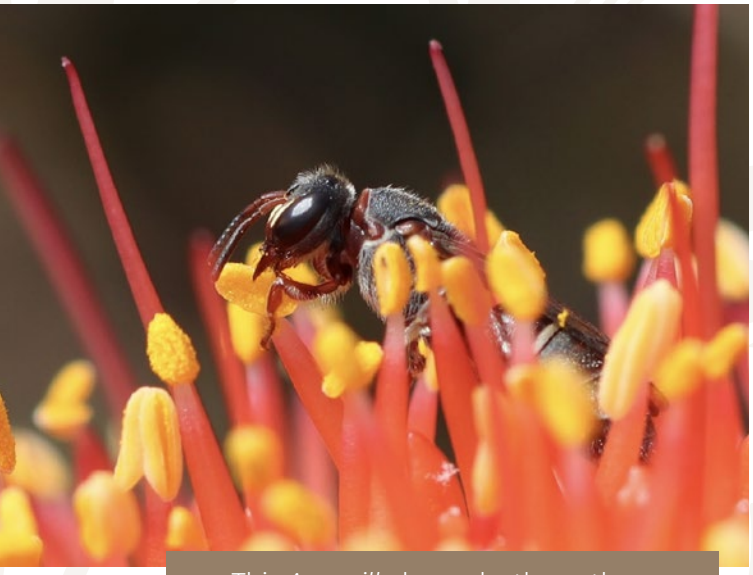
For the special Fourcade Botanical Group (FBG) CREW weekend of 24 to 26 October 2025, we went to Springlands – or Bean's Valley, as it was once known. It is a beautiful farm spanning fynbos plateau, indigenous forest along the Nouga River, and a more arid mountain area that forms a gateway to the Klein Karoo close to the Baviaanskloof Wilderness Area. The farm's Tree, River and Mountain Cottages accommodated our enthusiastic group, which was joined by Prof. Richard Cowling, his wife and two friends from Cape Town with special interests in ecology, botany, geology, birds and very large candlewoods. The weather did not look promising, but we managed to explore on Friday afternoon and again from late morning on Saturday. Some of the bravest among us ascended the treacherous, wet and slippery mountain pass by 4 × 4.

Our priority threatened species list for the year had been sent to us by our CREW node coordinator, Vathiswa. Our group champion, Caryl Logie, then assigned each FBG member two plants from the list to research and present to the group. While the rain kept us indoors, our presentations more than filled the time, much new scientific knowledge was gained, and fun and laughter were shared as we marvelled at nature's weird and wonderful diversity.

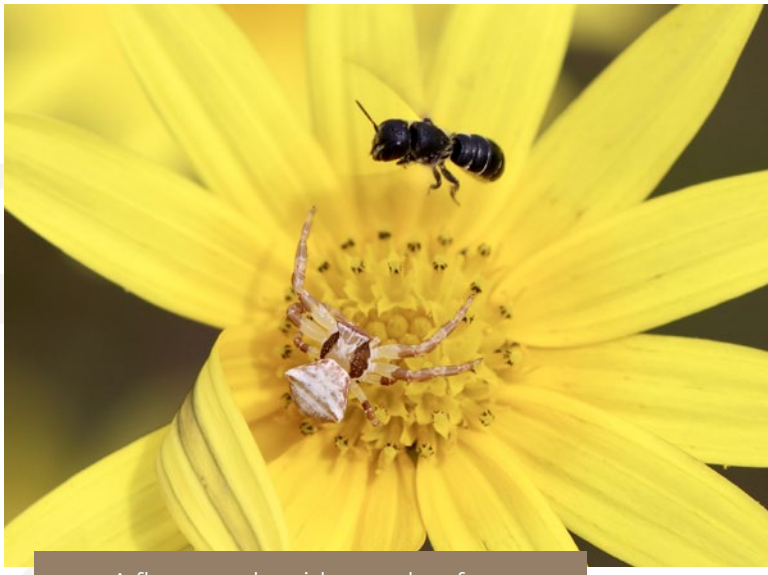
We found *Agathosma acutissima* alive and well, and kept a constant watch for *Chlorophytum cremnophilum* on the cliff faces. We also learned that our quest for *Liparia genistoides* would require finding a mummy in the Kouga Mountains – in 1999, archaeologist Johan Binneman discovered the 'Kouga Mummy', preserved in part by this very plant. We also had great joy in describing *Pterygodium cleistogamum*, the delightful blind bonnet orchid. Our curiosity about what was flowering naturally drew attention to who was visiting those flowers.

FBG at Springlands. Photograph: CREW Eastern Cape Node.





This *Amegilla* bee rubs the anthers of *Haemanthus* with its face, then transfers the pollen to the pollen-carrying hairs (scopa) on its hind legs. Photograph: Karin Sternberg.



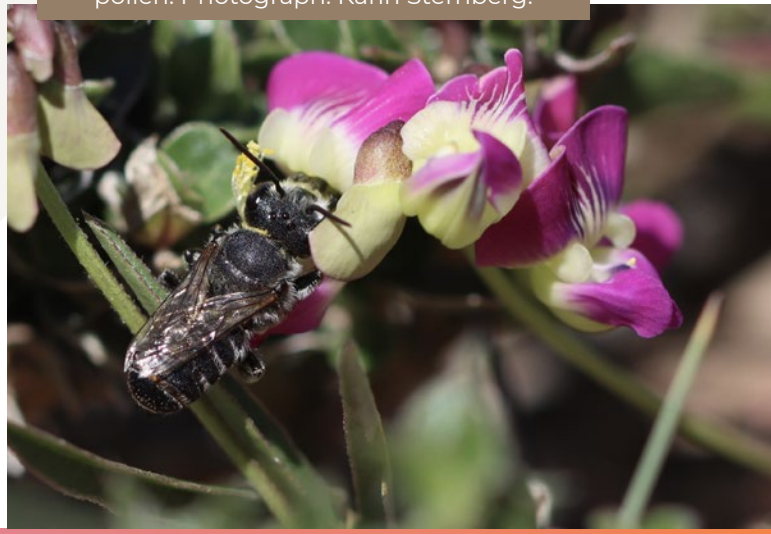
A flower crab spider reaches for a megachilid bee as it makes a quick escape from *Euryops algoensis*, illustrating the risks pollinators face while foraging. Photograph: Karin Sternberg.

Those visitors, it turns out, are far less understood than the plants themselves. Across much of South Africa, remarkably little is known about which solitary bee species are present, when they are active, and which plant species they rely on. One ongoing FBG project, led by Karin Sternberg, aims to address this gap by observing and documenting bee species, their floral associations and their seasonal activity – contributing meaningful baseline data to our understanding of bee diversity and plant–pollinator relationships in the Eastern Cape. In practical terms: photographs, dates and plant identifications together create valuable ecological records. Dr Connal Eardley, a retired bee taxonomist and former specialist at the Agricultural Research Council, whose expertise spans decades of South African bee research, has kindly agreed to assist with identifications.

Anyone interested in learning more, SANBI has published two accessible online resources for bee identification – a 2024 guide to solitary bee genera (*Suricata* 11) and a 2025 follow-up volume (*Suricata* 12) – both available for free download from the SANBI Bookshop website. If you spot a bee visiting a flower, logging your observation on the Bees of South and Southern Africa iNaturalist project is a simple and valuable way to contribute to citizen science across the region.

Whether scrambling up a wet mountain pass or watching a bee navigate the intricate keel of a *Dolichos* flower, the FBG weekend at Springlands reminded us that curiosity – about plants, pollinators and the landscapes they share – is what drives good field botany.

A male *Megachile* bee on *Dolichos hastaeformis* in Kabeljous Nature Reserve. As the bee pushes down on the flower's keel, the anthers are released to present pollen. Photograph: Karin Sternberg.



Rooted in the veld: celebrating 90 years of Bart Logie and a lifetime with CREW

Zimkita Mavumengwana

At 90, Bart Logie stands as one of the Eastern Cape's longest-serving and most dedicated volunteers in the CREW Programme. His journey with plants and with people stretches across decades, landscapes and generations, leaving a quiet but lasting imprint on conservation in the region.

Bart's love for nature began at home. His mother tended a classic English country garden, while his father, a keen bird enthusiast, took pride in feeding his family with home-grown vegetables.

Years later, it was his wife Caryl, a plant-lover since childhood, who read about the formation of a new citizen-scientist initiative for plant enthusiasts. From that point on CREW became a part of their lives.

Much of their work has centred on the extraordinary Cape Floristic Region, one of the world's great biodiversity hotspots. For Bart, CREW gave purpose to travel and depth to exploration. Their field trips in the Cape Floristic Region were now opportunities to contribute to the growing body of knowledge about South Africa's indigenous flora.

There were, of course, memorable moments. On one occasion, armed with coordinates supplied by the original finder of the plant, they set off only to find that the location was some distance out at sea. On another occasion they found, using the given coordinates, a black orchid, only to be told that it was not black enough.

Bart is characteristically modest about his own contributions, describing them as too slight to deserve attention. Yet citizen science thrives precisely because of volunteers like him – consistent, observant and committed over the long term.

In the Kouga area of the Eastern Cape, CREW volunteers have worked alongside conservation partners to support the establishment of private nature reserves, including the Sand River Reserve at St Francis Bay, Kromensee Nature Reserve at Paradise Beach and Kabeljous Nature Reserve near Jeffreys Bay. These efforts have strengthened awareness of indigenous plants and underscored the importance of safeguarding remaining natural areas.

Over the years, Bart has also witnessed profound changes in the landscape. The



Olea africana, a suitable kierie for an Eastern Cape CREW member.. Photograph: Caryl Logie.



Plumbago auriculata added to the CREW logo! Photograph: Caryl Logie.

small fishing villages and holiday resorts of decades past have grown into bustling towns, complete with industrial areas and expanding residential developments. In the Tsitsikamma, agricultural expansion – particularly dairy farming – has led to significant habitat loss. Such changes reinforce the urgency of conservation work.

For Bart, however, the most meaningful impact may not lie only in protected hectares or plant records, but in people. Outreach efforts with township children brought young learners in contact with the veld, sometimes testing patience but often proving deeply rewarding. Years later, their former young veld companions, now grown men, come up to Bart and Caryl, greet them warmly and recall happy days spent together in pursuit of plants. One former participant now runs a successful garden and tree-doctor service, crediting those early experiences in the veld as formative. It is a powerful reminder that conservation also cultivates futures.



Breather on the way up the Cockscomb. Photograph: Caryl Logie.

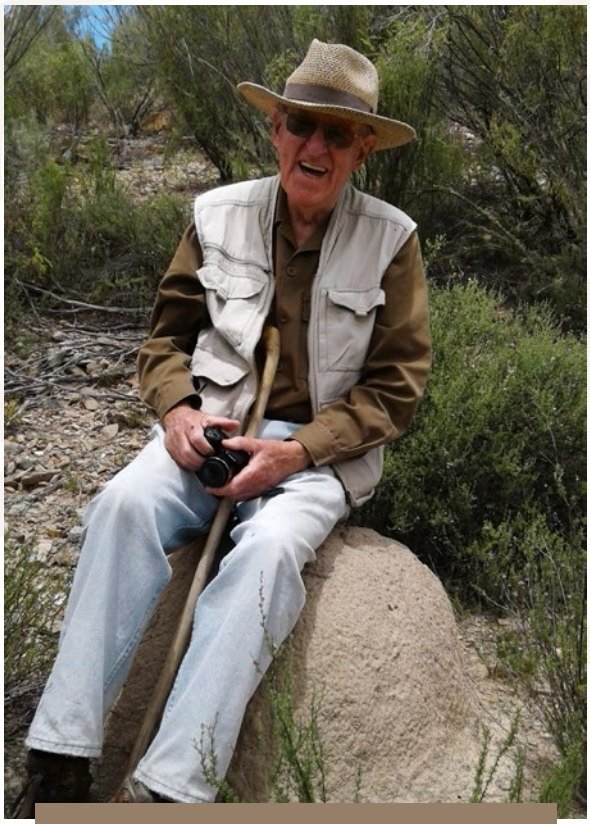


Field trip to Spoorbek-se-erf beside a very empty Churchill Dam. Photograph: Caryl Logie.

Working alongside fellow volunteers and scientists has been, in his words, a 'most happy and rewarding experience'. The camaraderie of the Fourcade Botanical Group, the shared enthusiasm at annual workshops, and the connections formed with students and academics across the country have enriched his life immeasurably.

His botanical interests have also intersected with his passion for history and travel. Inspired by discussions at a CREW workshop, he once used plant clues to trace the historic route of the explorer Heinrich Lichtenstein across part of the Karoo. Plants, he discovered, are not only ecological markers but historical signposts.

One story captures his deep respect for local knowledge. While working on a geological map in what was then the Eastern Transvaal, he and a colleague puzzled over a distant rock formation. A local Shangaan man explained it was dolomite 'old-man's-foot,' identifiable because *imbomba* grew there. *Imbomba*, known botanically as *Aloe*



Resting on a *Coptotermes* mound. Photograph: Caryl Logie.

hardyi, is closely associated with that geology. The insight was precise and correct. The lesson endured: those who live close to nature hold knowledge that is both practical and profound.

At 90, Bart remains forward-looking. There is still work to be done, still veld to walk, still plants to understand. His advice to younger volunteers is simple and wholehearted: join CREW, study botany and allow curiosity to guide you. The rewards reach far beyond plant identification, enriching one's understanding of ecology, geology, history and the interconnectedness of all things.

His hope for the future is clear, greater conservation of the Cape Floristic Region and a growing awareness of the importance of South Africa's indigenous plants. Through decades of steady commitment, Bart Logie has helped nurture both.

Roots and discoveries: an exceptional year for Outramps CREW

Karol Cameron

The Outramps CREW group has had an incredibly full and rewarding year, packed with regular activities, memorable field trips and some truly exciting botanical discoveries along the way. With monthly outings forming the backbone of our programme, there was rarely a dull moment, and these were wonderfully complemented by three away weekends, each thoughtfully organised by different members. Adding to the rhythm of the year were the ever-popular East-ender Flower Friday (EFF) gatherings, expertly coordinated by Nicky van Berkel, which provided a relaxed and social space to connect, share observations and celebrate our shared passion for plants.

Among the highlights were several fantastic getaways. Our CREW City Nature Challenge (CNC) weekend at Oude Muragie was a great success, combining focused fieldwork with the camaraderie that makes these trips so special. This was followed by two equally enjoyable weekends exploring the Prince

Outramps about to embark on a monitoring trip. Photograph: Christine Schnaufer.



Albert and northern Swartberg region, as well as the botanically rich Matjiesvlei area. These excursions not only strengthened our group bonds, but they also allowed us to explore new habitats and deepen our understanding of the incredible diversity within the Fynbos Biome.

Ten Outramps members attended the Annual CREW Workshop in June 2025, which proved to be both inspiring and motivating. We were struck by the impressive achievements of other CREW groups, some of which operate with only a few members, yet they contribute significantly to conservation efforts. The workshop also highlighted the remarkable diversity of the Kogelberg area, leaving many of us eager to apply new ideas and approaches to our own fieldwork.

Guided by Ismail's target species list, the group embarked on several focused searches for some of our most threatened plants. A standout success came in August 2025, when Ludwig Muller located *Moraea regalis* (CR) near De Rust during a private outing, an exciting and rewarding find. While other targeted searches for *Selago ferruginea* (CR) and *Wiborgiella fasciculata* (CR) did not yield results this time, they remain important priorities for future surveys.

One of the most exciting developments of the year was the formal recognition of the range-restricted species, *Aspalathus outramsii*, named in honour of the Outramps CREW group and their dedicated efforts over many years. First collected in 1956, this species is known from only four locations in the Western Cape. More recent records, contributed by various Outramps members between 2013 and 2022, played a key role in its recognition. This milestone, published by Dr Charles Howard Stirton, Dr Brian du Preez and colleagues in *Phytotaxa* (September 2025), is a wonderful testament to the value of long-term, citizen science-driven monitoring.

We are also incredibly proud of two of our most active members, Dave Underwood and Dr Ren Hoekstra, who have both made remarkable contributions through their independent fieldwork. Dave, a geologist from Knysna, is collaborating with Prof. Peter Linder on revising the genus *Phylica*, and in the process has discovered numerous previously undescribed species, including some not recorded for decades. Ren, too, has had a series of exciting finds, particularly within the genus *Erica*, including the rediscovery of a species not seen for over 200 years.

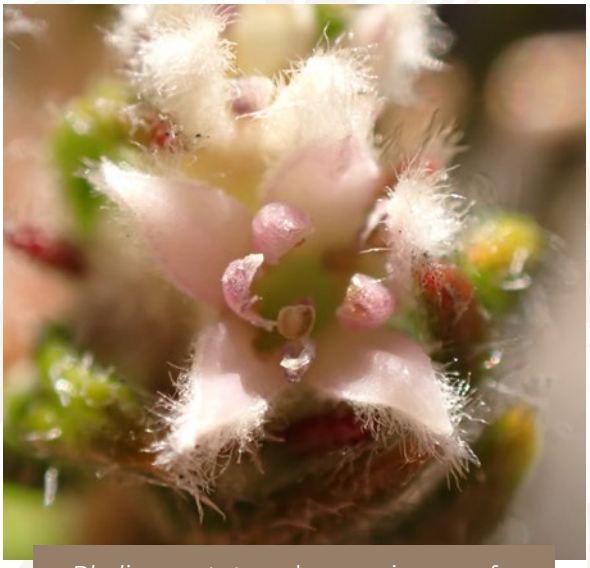
Their dedication and passion embody the spirit of CREW, and we encourage everyone to read their separate articles, where they share more about these extraordinary discoveries.

Phylica – high up in the clouds

Dave Underwood

At the beginning of December, my son, Kyle, and I set out to climb and traverse the ridgeline at Skurweberg (Robinson's Pass), driven by the goal of collecting a flowering herbarium specimen of a *Phylica* that had been puzzling me for some time. I had encountered this plant before but had not been able to identify it with any certainty, and I suspected that it might even represent something new to science.

The plant itself is a low, sprawling shrublet, growing tightly against the rocks on the south-facing side of the ridge. It occupies a very specific niche, exposed to the elements, and the entire population appears to consist of fewer than ten individuals, making it both rare and potentially highly vulnerable. While moving along the ridge, carefully scanning the rocky slopes, I also noticed another unusual *Phylica* growing



Phylica costata – close-up image of a flowering specimen of this very rare species. Photograph: Dave Underwood.



Phylica floccosa flowers. Photograph: Dave Underwood.

on the north-facing side. This one was quite different, its branches were more erect, and the whole plant was covered in a soft, silvery layer of hairs that gave it a distinctive and almost luminous appearance in the mountain light.

Once back home, with properly collected and pressed specimens in hand, I was able to examine the material more carefully. It soon became clear that the original plant we had collected was *Phylica floccosa*, a poorly known species that has only been recorded from a handful of old collections on high peaks in the Kamanassie and Eastern Langeberg mountains. The softly hairy plant from the north-facing slopes, however, did not match any known species. It appears to be new to science and will likely be described as *P. mollis*, an exciting addition to the genus.

On 22 January, I set off again, this time to Blesberg in the eastern Swartberg, after completing the necessary identification work, permits and access arrangements. The objective for this trip was to find the elusive *Phylica costata*, a species only known from a few old and rather fragile herbarium specimens, with no available photographs of the plant in its natural habitat. Records indicate that it occurs high up in the Swartberg, in just three small and isolated populations, and it has not been collected in many years.

Blesberg Peak, near the MTN tower, presented a rather bleak and windswept scene, with very little in flower at the time. At first glance, it seemed unlikely that the target species would be found under such conditions. However, by traversing along the ridgeline to the east, the landscape gradually shifted into an area of pristine, undisturbed fynbos that was still holding a surprising amount of floral activity. It was here, among the remaining midsummer blooms, that I finally encountered them – a healthy and well-established population of *Phylica costata*, still bearing the last of its flowers for the season.

The moment was immensely rewarding. To see this species alive in its natural environment, after knowing it only from old herbarium specimens, was both exciting and deeply satisfying. It served as a reminder of how much there is still to discover, even within relatively well-studied regions.

Phylica is a genus that has been somewhat overlooked in the past, but the more time I spend working on it, the more fascinating it becomes. There is remarkable diversity within the group, much of which remains



One of the undescribed species discovered in the last year, to be named *Phylica mollis*. Photograph: Dave Underwood.

poorly understood or inadequately documented. My aim is to contribute towards updating the taxonomy of the genus, helping to bring clarity to these species so that others can more easily study, appreciate and, ultimately, conserve them.

Botanical treasures in the Langeberg: long-lost and new *Erica* species

Ren Hoekstra

Surprisingly, the high peaks of the mountains around Swellendam are some of the most mysterious and botanically under-explored of the Cape mountains. The two highest points in this section of the Langeberg range, Misty Peak (also known as Goedgeloof Peak) and Leeurivierberg, hold numerous botanical mysteries. In 1815, William Burchell set out on a week-long expedition into these mountains, a highly productive trip which yielded more than a 100 botanical type collections. With well over 40 endemic *Erica* species in the Langeberg range, a handful being highly localised to the ericoid alpine zone, it is not surprising that a fair number of his unique collections were of ericas, many of which we have little to no population and threat data.

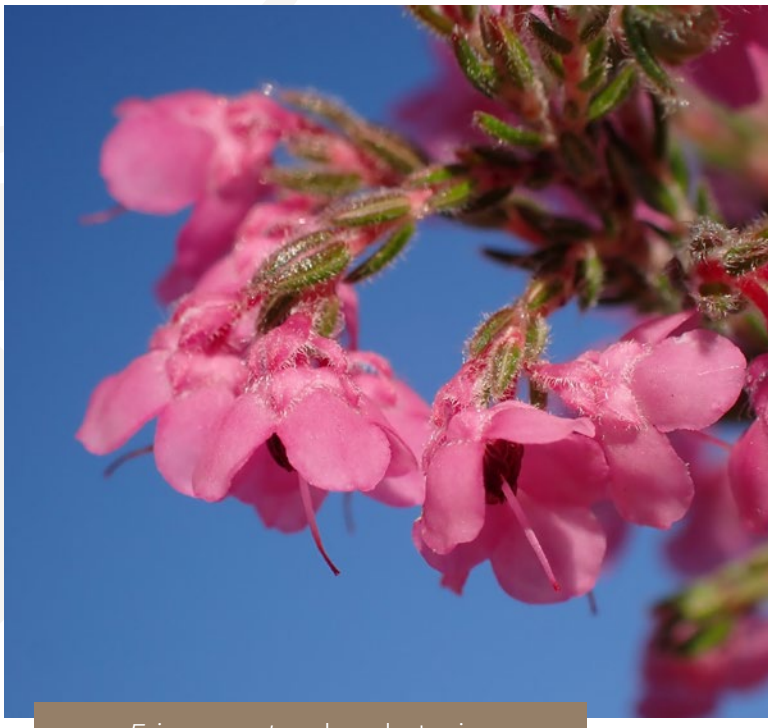
Last year, CREW met this challenge and conquered both peaks, filling data gaps and making a number of exciting discoveries.



A view of Misty Peak. Photograph: Ren Hoekstra.

Erica langebergensis, only known from a single collection by Elsie Esterhuysen in 1973 on Leeurivierberg, was found in beautiful full flower on both Leeurivierberg and Misty Peak, the latter subpopulation representing a range extension for this species. *Erica oophylla* was also found close to Misty Peak, which, prior to being rediscovered in 2023 by CREW, had not been recorded since 1974. One of the most exciting finds was *Erica comata*, a long-lost erica which is only known from Burchell's type collection in 1815, the first record for this species in more than 210 years!

More excitement followed when we found two poorly known, undescribed ericas, *Erica ophidia* ms. (known from a single collection by Elsie Esterhuysen in 1972) and *Erica helmeii* ms. (last collected by Nick Helme in 1999), both of which are highly localised endemics on Misty Peak. The final highlight was the discovery of two putative new ericas, *Erica nebulosa* ms. and *Erica altimontana*



Erica comata, a long lost erica not recorded for over 200 years. Photograph: Ren Hoekstra.

ms. from Misty Peak and Leeurivierberg, respectively, both localised to their respective peaks.

While alpine fynbos generally faces fewer immediate threats compared to lowland species, our monitoring revealed that this section of the Langeberg range has unfortunately become heavily burdened by encroaching pines, posing a very real intermediate-term threat to all these highly localised endemics. Undescribed taxa face the same threats as described taxa and are often at higher risk of extinction due to restricted distribution, amongst other factors. CREW plays an invaluable role in collecting data, which aid in understanding these threats. Data from this fieldwork will drive the expedited description and conservation of these special plants.



Erica nebulosa ms. an undescribed species from Misty Peak. Photograph: Ren Hoekstra.

Stilbaai CREW: conservation under pressure and curiosity in the field

Christina Mars

The year began under challenging circumstances in Stilbaai, with intense heat and ongoing drought compounded by increasing development pressure across the landscape. These pressures have placed strain on proposed municipal nature reserves, prompting CREW volunteers to actively follow up on their proclamation and advocate for their protection.

One of the early highlights of the year was a hands-on conservation effort in the heart of Stilbaai, where CREW members removed invasive *Opuntia ficus-indica* (prickly pear or *turksvy*) from a significant tract of Hartenbosch Dune Thicket. This site, currently open for auction, represents an important 'green lung' within the town. In addition to clearing invasive plants, CREW has contributed valuable maps and peer-reviewed vegetation reports to support the case for conserving this area, aiming to maintain ecological integrity, safeguard

Undescribed *Cullumia* species from Gourikwa. Photograph: Ismail Ebrahim.





Our mystery leucospermums side by side. Photographs: Christina Mars.

scarce vegetation types and preserve vital wildlife corridors.

The clearing operation itself brought unexpected benefits. The *Opuntia* plants were cut to stumps and treated, while the removed phylloclades were repurposed as supplementary feed for 29 rescued Leopard Tortoises (*Stigmochelys pardalis*) at Wild Rescue Animal Sanctuary in Klipfontein. Even the fruit found its way into CREW activities, providing a refreshing treat during herbarium sessions with volunteers – a fitting example of resourcefulness and sustainability in action.

February field outings, though undertaken by a smaller group, yielded fascinating botanical observations in the Langeberg near Riversdale. On both south- and north-facing slopes, volunteers encountered populations of *Leucospermum calligerum*. Many individuals aligned well with the typical species description: single-stemmed shrubs reaching up to 2 metres, bearing oval, grey-green, leathery leaves with a blunt or slightly pointed tip.

However, closer inspection revealed intriguing variation. In areas where *Leucospermum calligerum* occurred alongside the



Collage of pictures showing our work clearing *turksvy*. Photographs: Christina Mars.

vulnerable *L. mundii*, some plants displayed broader leaves with multiple blunt teeth – sometimes five to seven – each tipped with a distinct, thickened pink point. These deviations sparked lively discussion among the group.

Two main hypotheses emerged. The first considered whether drought stress might be influencing leaf morphology, with plants producing broader, more toothed and hairier leaves. This idea was later discounted after observations on drier, north-facing slopes showed no such variation. A related question arose about whether the thickened leaf tips could function as extrafloral nectaries, potentially linked to the species' ant-mediated seed dispersal (myrmecochory), although no ants were observed during the survey.

The second, more compelling, hypothesis suggested possible hybridisation between *Leucospermum calligerum* and *L. mundii*. While the flowers remained characteristic of *L. calligerum* – hemispherical to globose, shifting from yellow to powdery pink – the leaf variation hinted at genetic mixing. Historical records support this possibility, with

a hybrid between these two species documented by John Patrick Rourke in his 1970 thesis, based on collections from the Riversdale area.

Despite these exciting findings, not all observations were encouraging. A robust *Opuntia* plant, spotted high on a rocky ledge near a waterfall, served as a reminder of the persistent challenge posed by invasive species, even in relatively inaccessible locations.

Looking ahead, the Stilbaai CREW group is energised by several promising leads. Collaboration with the Outramps CREW group continues on a potentially new *Cullumia* species discovered near Gourikwa in 2022, notable for its robust and spiny form compared to the local *C. carlinoides*. There has also been a possible sighting of *Rafnia vlokii* on the Albertinia fynbos flats near Blombos – an unusual occurrence for a species more typically associated with mountain fynbos.

Further intrigue came from soil analyses at an Albertinia Sand Fynbos site in Stilbaai, home to the local form of *Disa lugens* var. *lugens*. Measurements revealed unexpectedly acidic conditions, with a pH of around 5.5 – somewhat at odds with the species' generally described habitat preferences and a finding that may warrant further investigation.

From tackling invasive species and advocating for threatened habitats, to uncovering botanical mysteries and potential new discoveries, the Stilbaai CREW group continues to demonstrate the value of dedicated citizen scientists in advancing our understanding and conservation of the Cape Floristic Region – proving that even in challenging conditions, curiosity and commitment can yield remarkable insights.

Kogelberg CREW's hunt for *Erica cunoniensis*

Magriet Brink

Local Overstrand news media buzzed with a different kind of story in 2025: a team from CapeNature and CREW rediscovered the rare *Erica cunoniensis* (Endangered) on Buffelstalberg in Kogelberg Nature Reserve. This small erica, described as 'ox-blood red', was feared to be extinct.

But how are discoveries like these made possible?

The Kogelberg is known as the heart of the Cape floristic region with over 1 800 plant species recorded within the biosphere to date. Of these plants around 150 are endemic to this area, which means that they occur nowhere else on Earth, and more than 300 are currently classified as threatened. If we lose them, they're gone forever.

Thankfully CapeNature's Kogelberg Nature Reserve is considered relatively safe from direct threats such as urban development. As part of its mandate as a public conservation entity, CapeNature's conservation staff need to regularly monitor the reserve's especially vulnerable species.

This work is supported by a small group of local volunteers who are members of CREW. Founded in 2003 as a collaboration between SANBI and the Botanical Society of South Africa, CREW operates in priority parts of the South African landscape. CREW members survey and document plants of conservation concern, identify areas requiring action and make valuable contributions to the field of botanical research across the country.

Through a powerful mix of local knowledge and scientific support our Kogelberg CREW team is working its way through a list of target species that would keep Thomas Stokoe



CapeNature staff on Buffelstalberg searching for target species. Photograph: Magriet Brink.



Blood red flowers of *Erica cunoniensis*. Photograph: Magriet Brink.

up at night. Some of these plants have not been seen for decades. Others have only a handful of known specimens clinging to life in habitats so degraded that their only chance of survival is seed collection and propagation in botanical gardens.

It was this team, together with CapeNature staff, who paid a rare visit to the upper reaches of Buffelstalberg in Kogelberg Nature Reserve.

Volunteer Jeremy Cronin will never forget that day, 'I was in a group of three. We were clambering up a steep slope with nearly impenetrable growth, trying to follow two younger team members who were soon out of sight. As I crested the top of the ridge I realised I had lost contact with my immediate group, too. Best to take a breath and wait, I reckoned. I was about to sit down when, oh my gosh, could it really be? Yes, unmistakably, there it was at my feet: a stunning specimen of *Erica cunoniensis*. It turned out to be one of a small subpopulation of eight on this part of the ridge. It is such a privilege to live here in the Kogelberg, to be an enthusiastic if entirely amateur CREW member and to share a sense of wonder and responsibility for this unparalleled floristic region.'

Meanwhile, NT Moolman and Jean-Max van Pul had also discovered a small population higher up on the ridge, a first target species find for our youngest CREW member. Jean-Max is only 14, but already a keen botanist with a sharp eye for rare plants. He calls himself an orchid nut but said that after this outing he'll be dreaming of ericas. 'I joined recently and it's wonderful to be surrounded by such amazing people, all with the same thought in mind, to conserve our floral heritage. I am so thankful to have been introduced to this organisation and will hopefully be a part of it for many years!'

Email kogelbergcrew@gmail.com if you would like to get involved in CREW activities in the Kogelberg area.

In the valley of the spider's nest

Jeremy Cronin

For some time, as the Kogelberg CREW team, we have been wanting to find the Critically Endangered *Erica vallis-aranearum* ('Erica of the valley of the spider's nest'). First discovered by Thomas Stokoe in 1920, it was last observed by Amida and Mark Johns in 2013. In our previous attempt in 2025, one of our party, NT Moolman, came close but time constraints frustrated further exploration.

On that earlier hike we had the assistance of the Steenbras Nature Reserve rangers and we approached Kogelberg Peak from the jeep track on the escarpment. However, we could only depart from the reserve offices after 09:00 and the 2024 floods had ruined much of the jeep track. This meant critical botanising time was lost with a longish 6 km hike before we could even start the ascent to the peak.

This year we decided to make an independent, 06:00 start, approaching the escarpment via the zig-zag path up from Kogel Bay. We split into three groups: a fast group to summit and to then proceed along the high Five Beacons Ridge, a second group that would aim to summit and botanise there, and a third group to explore the escarpment.

Ren Hoekstra and NT Moolman were in the fast group, along with Marian (Mo) Oliver who, self-deprecatingly, said it hadn't been her intention to stick with the two ultra-fit young men. The trio reached the peak at 10:00, well ahead of the next group. They then proceeded to climb down the other side and up to the horseshoe-shaped Five Beacons Ridge. With no path, steep inclines and unremitting thick bush, the going was



Hiking party about to set off for Kogelberg Peak. Photograph: Charleen Brunke.

difficult, made worse by a strong southeaster that had started to pick up.

Halfway along the ridge, Ren reckoned a small kloof below was where the Johns had last recorded the *Erica*. He went down first and a while later clambered up with the broadest of smiles. NT and Mo followed. They found six plants 'spectacularly beautiful, in your face gorgeous', as Mo recalls.

On the same day, the CREW group succeeded in finding all our Red List target species, including *Mimetes hottentoticus* (VU), *Liparia boucheri* (EN), *Erica cincta* (CR), *Brunia purpurea* (Rare) and the very first photo of a living specimen of *Galium rourkei* (CR). But it was the trio of Ren, NT and Mo, finally returning to their cars at 20:20, whose crowning achievement up in the valley of the spider's nest truly carried the day.



Erica vallis-aranearum. Photograph: Ren Hoekstra.



An extremely rare photo of *Galium rourkei*. Photograph: Ren Hoekstra.

CREW Hottentots Holland and partners: bioblitzing for a protected environment

Carina Lochner

With post-fire monitoring, participation in the CNC and GSB, and visits to several new sites, 2025 was another busy year for CREW Hottentots Holland. Two highlights were trips organised by NT Moolman; one to see *Serruria florida* in bloom near Franschhoek, and an overnight visit to Landroskop, where we observed many interesting high-altitude species. This article, however, focuses on a bioblitz in the Groenlandberg area.

In September, we were invited by D'Reull de Beer from The Nature Conservancy to participate in site assessments for the proposed Groenlandberg Protected Environment. The four-day bioblitz, held from late September to early October, aimed to collect data to establish the biodiversity and conservation value of the sites. Other participants included representatives from the Fynbos Trust, CapeNature, SANBI, WWF and Nature Connect. With 13 properties to visit, the logistics must have been considerable. The first day began at Oak Valley, where we surveyed a previously cultivated area with small remnants of Elgin Shale Fynbos. Although the visit was brief, we recorded two Species of Conservation Concern (SOCC): the small white daisy *Thaminophyllum multiflorum* (Rare) and *Asparagus lignosus* (NT).

On day two we were split into two groups, one group exploring on the lower slopes above Luddite and the other group looking at veld higher up. At these sites we recorded *Arctotis angustifolia* (CR), *Echiostachys ecklonianus* (EN), and *Protea angustata* and *Serruria rubricaulis* (both VU), as well as about nine other SOCC. *Acrodon parvifolius* (EN) was photographed on a quick stop along the Van der Stel Pass Road. Later that day we explored pristine fynbos on the upper slopes of the farm Korteshoven. Despite the visit being cut short by rain, it was really enjoyable and a highlight of the bioblitz for me.



Conservation partners and landowners working together to have a protected environment established. Photograph: Carina Lochner.



Ixia longituba subsp. *longituba*, one of the threatened plants monitored. Photograph: Carina Lochner.

The next day we were treated to a different vegetation type (Western Rûens Shale Renosterveld) east of the Bot River. The veld was very dry at this time of year, but the area does look very interesting and we will definitely revisit the site in the next spring season. Most sites consisted of small remnants within cultivated farmland, but they proved to be highly interesting. Threatened species recorded included *Ixia longituba* subsp. *longituba*, *Babiana purpurea* and *Aloe brevifolia* (all EN), as well as *Moraea cooperi* (VU). With time running short, we raced up to a rocky outcrop in a natural remnant surrounded by ploughed land, where we recorded *Drosanthemum flavum* (EN) and *Trichodiadema occidentale* (VU).

The final day of the bioblitz was spent surveying farms around the Eikenhof Dam. Following these surveys, the completed biodiversity site assessments were presented to the CapeNature Stewardship Review Committee, where the properties collectively qualified for protected environment status. The next steps include continued engagement with landowners interested in pursuing declaration as a protected environment, as well as the development of a protected area management plan in preparation for eventual declaration. This bioblitz provided an excellent opportunity to interact with representatives from various environmental organisations and allowed us to explore sites that may be revisited in future. Although the four days were busy and often rushed, CREW members posted almost 2 000 observations and about 400 species on iNaturalist, demonstrating, once again, how citizen scientists can make a valuable contribution to conservation.



The survey team on the fourth day of the bioblitz. Photograph: Carina Lochner.

Seeking 'clarety' on Stettynsberg: some reflections on the CREW *Erica feminarum* quest

Heather Hodgson

The target for a wonderful weekend in spectacular surrounds was *Erica feminarum*, a species highly restricted in its distribution, occurring in only one small seepage area on the eastern slopes of Stettynsberg in the Villiersdorp area of the Western Cape.

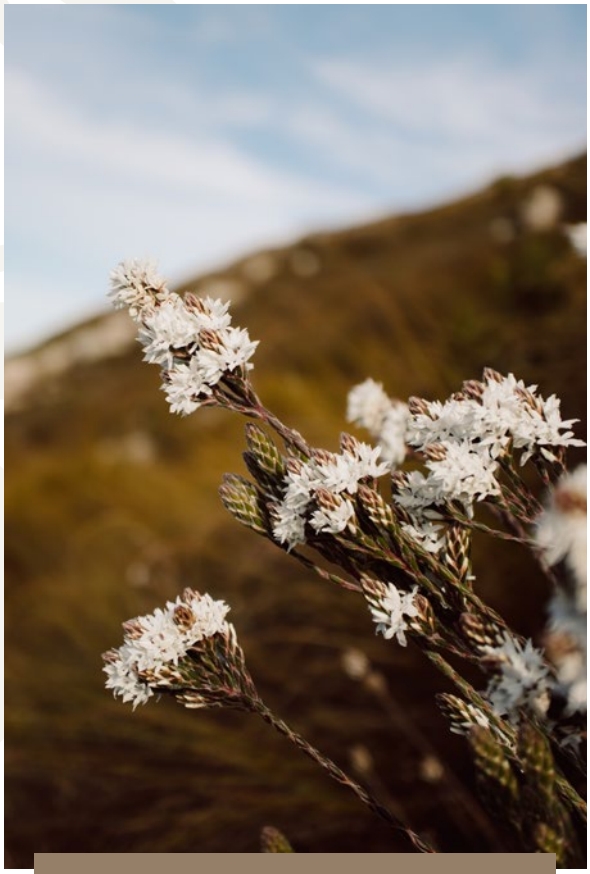
From what I understood this rare erica had only been seen twice, once when it was first collected around 1949 and then last in 1997. The specific epithet means 'of women' and it was chosen because the species was first collected by a woman, Elsie Esterhuysen, and then refound on Women's Day in 1997.

Our expedition was planned for the weekend before Women's Day and our group of enthusiastic explorers included: Andrew Hodgson, Charleen Brunke, Danie Viljoen, Ella Douglas, Heather Hodgson, Helen Pickering, Ismail Ebrahim, Jakes Wallage, Jean Stephenson, John Manning, Margriet Brink, Mike Brunke, Ren Hoekstra, Sandra Falanga and Seth Musker. I was in awe to be in the company of so many Ericaceae fundis, experts and aficionadas!

Our convoy of vehicles set out early on the Saturday morning on the Stettyn 4 × 4 route. NT Moolman had taken care of trip logistics, which included arranging for us all to overnight at the hut. The route required concentration from our drivers and included a stream crossing and some switchbacks that had to be done in reverse.



Erica feminarum with its wine-red flowers. Photograph: NT Moolman.



Brunia monogyna, a high-altitude rarity. Photograph: NT Moolman.



CREW volunteers on the hunt for threatened plants. Photograph: Ismail Ebrahim.

It was sobering to realise that the thickets of shrubs with a profusion of silky white flowers on the lower sections where in fact invasive alien *Hakea sericea* (bushy needlebush). Fortunately, as we ascended this infestation was gradually replaced by other more appropriate white-flowering plants, including *Erica monsoniana* (snow heath) and *Brunia monogyna* (white lanceleaf).

On the drive up, we did try to stay focussed and not get too distracted, to maximise time at the higher altitudes in search of the erica. To start 'seeing red' and getting the search pattern colour calibrated I remember noting *Leucadendron rubrum* (spinning-top conebush) and the deep red *Protea acuminata* (blackrim sugarbush).

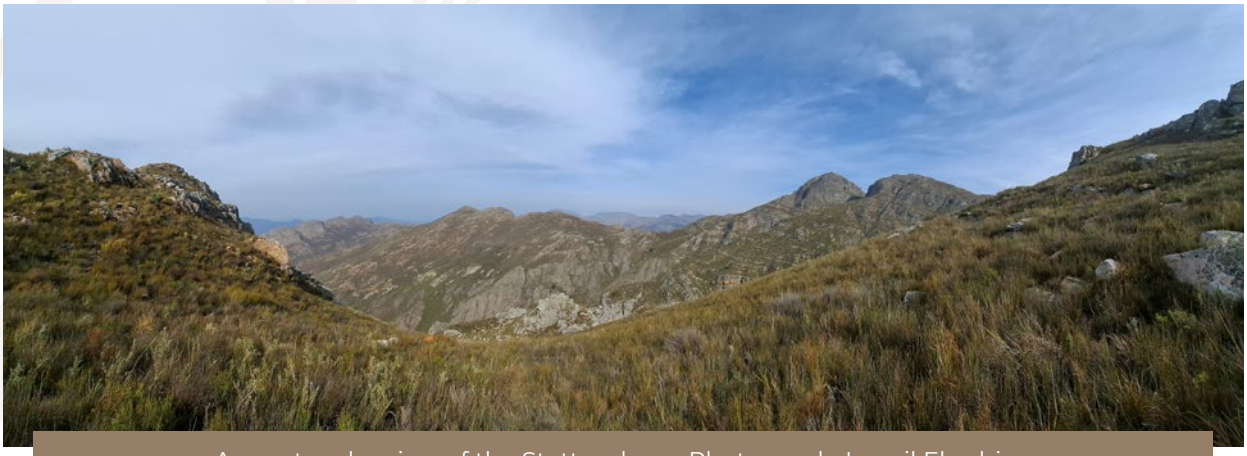
Our trackside lunch in among the Proteaceae (including *Paranomus capitatus* and *Serruria acrocarpa*) was accompanied by a glass of chilled bubbly offered by Jakes in suitable flutes. A botanically appropriate Silvertree 2024 Wijnberg Vonkel! I wasn't sure if this was simply to celebrate *joie de vivre*, or an early confident celebration of the erica we were anticipating to find.

We had read the botanical literature and knew we were looking for a plant with 'dark, wine-red flowers that appear almost black in direct sunlight, are very finely hairy, occurring singly on very short lateral branchlets, these often arranged in a pseudospike on the main branches, and have muticous anthers.'

There was much excitement when after a couple of hours of searching various seeps, the message was shared on the trip WhatsApp group that flowering plants had been located. It had been refound! Goal achieved.

If I had to choose a single word to describe the experience of sitting on the slope admiring and examining the erica it would be 'claret' – the deep, rich, red hue with subtle purple undertones, resembling the colour of Bordeaux wine.

Although the group saw a total of over 40 different *Erica* species, the trip wasn't just about the pretty plants. We had some herping highlights too. The Montane Marsh Frog (*Poyntonia paludicola*), a monotypic genus, was a first sighting for many. We got close views of the critter, which Ren caught, and our observation turned out to be a northern range extension. We also heard and were able to record and identify lots of calling Drakenstein Moss Frogs (*Arthroleptella draconella*). On the Sunday morning, while waiting in the howling wind next to



A spectacular view of the Stettynsberg. Photograph: Ismail Ebrahim.

the vehicles for the rest of group to return from higher altitudes, Andrew commented that a small overhang nearby looked like a suitable habitat for ghost frogs. I think he was a bit surprised when he stuck his head in for a closer view and spotted a cute Cape Ghost Frog (*Heleophryne purcelli*). Andrew, Seth and I enjoyed good views of this Western Cape endemic, at home in the fynbos heathland. I thought it was apt and special that we should share this critter sighting with Seth who we had first met in this very same area in 2020 when we were also seeking 'clarety', that time a rare dragonfly, the Elusive Skimmer (*Orthetrum rubens*), with a claret-red abdomen.

On Sunday when we were back at our cars and were almost disbanding, some of the group decided to fit in one final flower fix. We headed off in convoy following the tip from John Manning to seek out the local endemic, *Freesia fucata*. Easily located in roadside culverts, we snapped and sniffed this Red-Listed *kammetjie* before 'ditching' our friends and heading home, grateful and happy to have been a part of this historic and memorable weekend.

Blaauwberg and Tygerberg CREW: highlights from a remarkable field season

Petra Broddle

In the last newsletter, we welcomed De Waal Hugo to CREW and since then he has wasted no time in getting out into the field and making a real impact. Over just a few months, his keen eye and taxonomic expertise have already led to some remarkable discoveries. In December, De Waal identified *Agathosma propinqua* (CR, EX) from Briers-Louw Private Nature Reserve – a species not recorded for 85 years. Its long absence from records is likely not only due to its rarity, but also the lack of specialist knowledge within this challenging group, where many observations in our area remain unidentified.

In January, he continued this streak by identifying *Prismatocarpus fastigiatus* (DDD), a species last seen by Drège in the 1830s. This taxon was recently rediscovered by J.P. le Roux in the Nieuwoudtville area, making De Waal's identification an exciting confirmation of its continued existence.

Following the clearing of invasive alien *Acacia saligna* at Kalbaskraal in mid-2024,

CREW members returned to survey the site and were rewarded with an impressive flush of biodiversity. A total of 28 Red-Listed species has now been recorded from this recently cleared area. Among the highlights are a new but small population of *Marasmodes trifida* (CR), as well as *Metalasia octoflora* (VU) and *Gladiolus trichonemifolius* (VU). Interestingly, while this site is mapped as a local nature reserve managed by the Swartland Municipality, it was in fact sold to a private landowner in 1994, highlighting the importance of continued monitoring and clarity around land status.

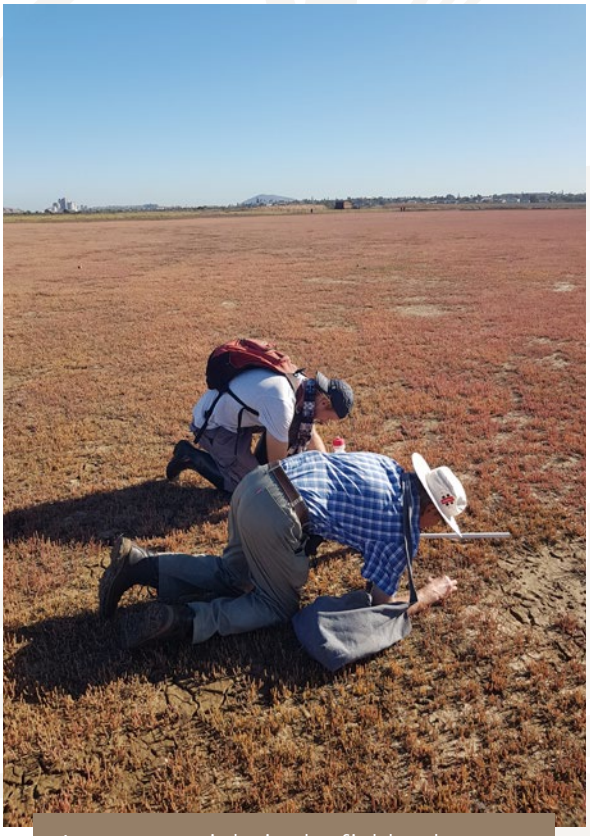
In April, we recorded the particularly beautiful *Lachenalia corymbosa* (VU) at Hercules Pilaar, adding a welcome splash of colour to the season's observations. Encouragingly, the known population of *Cephalophyllum parviflorum* (CR) in the area is still holding on despite ongoing pressures. Nearby, at Joostenbergkloof, we were also fortunate to find *Tritoniopsis elongata* (EN) in flower, a rewarding sight after careful searching.



Long lost *Agathosma propinqua*. Photograph: Petra Broddle.



Lachenalia corymbosa happily flowering at Hercules Pilaar. Photograph: Vera Frith.



A common sight in the field: volunteers on their knees searching for elusive plants. Photograph: Petra Broddle.



A beautiful specimen of *Gladiolus recurvus*. Photograph: Petra Broddle.

The granite hills of the Dassenberg proved to be a major highlight during the City Nature Challenge. This botanically rich area yielded records of several notable species, including *Microdon capitatus* (EN), *Cannomois arenicola* (EN), *Eriospermum spirale* (VU) and *Roella arenaria* (VU). We were also fortunate to gain access to Quantum Foods in Atlantis (formerly Tydstroom), where surveys revealed an impressive 23 Red-Listed species, of which 10 are Endangered. Among the standout records were *Penaea fruticulosa* (=*Stylapterus fruticulosus*) (EN), *Diosma dichotoma* (EN), *Macrostylis cassiopoides* subsp. *dregeana* (EN), and a flowering population of *Gnidia spicata* (VU).

Post-fire surveys at Kuilenberg have been particularly rewarding, with repeated visits yielding a total of 24 Red-Listed species. One of the standout highlights has been *Watsonia strictiflora* (CR), alongside other notable finds such as *Athanasia crenata* (EN), *Babiana odorata* (EN), *Lampranthus scaber* (EN) and *Restio rigoratus* (EN). These observations once again underscore the critical role that fire plays in driving fynbos biodiversity and enabling the expression of many threatened species.

We also enjoyed a particularly memorable visit to the southern slopes of the Paardeberg following a fire event. The site delivered 24 Red-Listed species, including *Serruria brownii* (EN) and *Gladiolus recurvus* (VU) on the lower slopes. Although we did not encounter *Erica hippurus* (EN) on this occasion, the overall diversity and condition of the site made for a highly rewarding outing.

There have also been encouraging developments in terms of land acquisition for conservation in the Melkbosstrand and Duynefontein areas. To date, 24 Red-Listed species have been recorded across these sites. Within the Atlantis Sand Fynbos, we have located new populations of *Gladiolus griseus* (CR) and *Hermannia procumbens* subsp.

procumbens (CR), further reinforcing the conservation importance of these remnants.

We remain incredibly fortunate that the City of Cape Town continues to implement prescribed burns across many of the fragmented veld remnants within its boundaries. These management interventions are essential in maintaining the ecological integrity of these systems and provide invaluable opportunities for CREW volunteers to document and monitor the rich and often hidden biodiversity that emerges in the post-fire landscape.

Biodiversity in my backyard, Botmaskop

Brian du Preez

Ten years ago, I made the big move from George to Stellenbosch to pursue academia. A new city meant new areas to explore and many new plants to admire. For the first few years, I only ventured on the typical walking routes like Coetzenberg, but that soon became too repetitive. A few years ago, my friend Dave Pepler invited me to join him on a mushroom forage in the Botmaskop plantations. Looking beyond the mushrooms, this new area caught my attention and I saw the potential for more walking in this less popular area adjacent to Stellenbosch, compared to Coetzenberg. The first spring walks delivered little in terms of flowers and left me a bit disappointed. Over the coming months, we had very strong storms that resulted in pine trees in the plantation snapping in half, like twigs, leading to some areas being harvested by the municipality. Come the following spring, a new world opened to me, and what was once a sterile plantation, had sprung back to life. The freshly cleared plantations allowed geophytes to emerge after decades of dormancy, and in subsequent years, indigenous shrubs have also been making their return.

In October 2023, I came across a single white, blue and yellow moraea along a track, took some photos, but did not think much of it. A year later, I found a larger population of around 20 plants, each with a unique flower pattern. A herbarium specimen was

Botmaskop is an area that is slowly recovering. Invasive alien species and development pose a huge threat. Photograph: Brian du Preez.





Newly described *Moraea anastasia*. Photograph: Brian du Preez.

collected and taken to Dr John Manning who confirmed it to be a new species, less than 2 km from my Stellenbosch home. We went on to describe the species as *Moraea anastasia* in 2025. The specific epithet is derived from the Greek *anastasis*, meaning resurrection, which reflects the re-emergence of these plants after spending decades under a pine plantation. In 2025, I spent many afternoons clearing about a hectare of pine seedlings and small trees to open additional habitat for the moraea. All individuals were marked with red tape and seed has been collected and submitted to the Millennium Seedbank at Kirstenbosch to establish an ex situ population.

To date, over 300 plant species have been identified in the Botmaskop Nature Area, a property of about 100 hectares in size, most of which is still under plantations and stands of other alien species. We are approaching 20 species of conservation concern recorded for the nature area. A project proposal is currently under consideration with the municipality for Sugarbird Project to clear the remaining plantations and other alien species from the property, to allow for further ecological restoration of what appears to be a treasure trove of botanical specials.



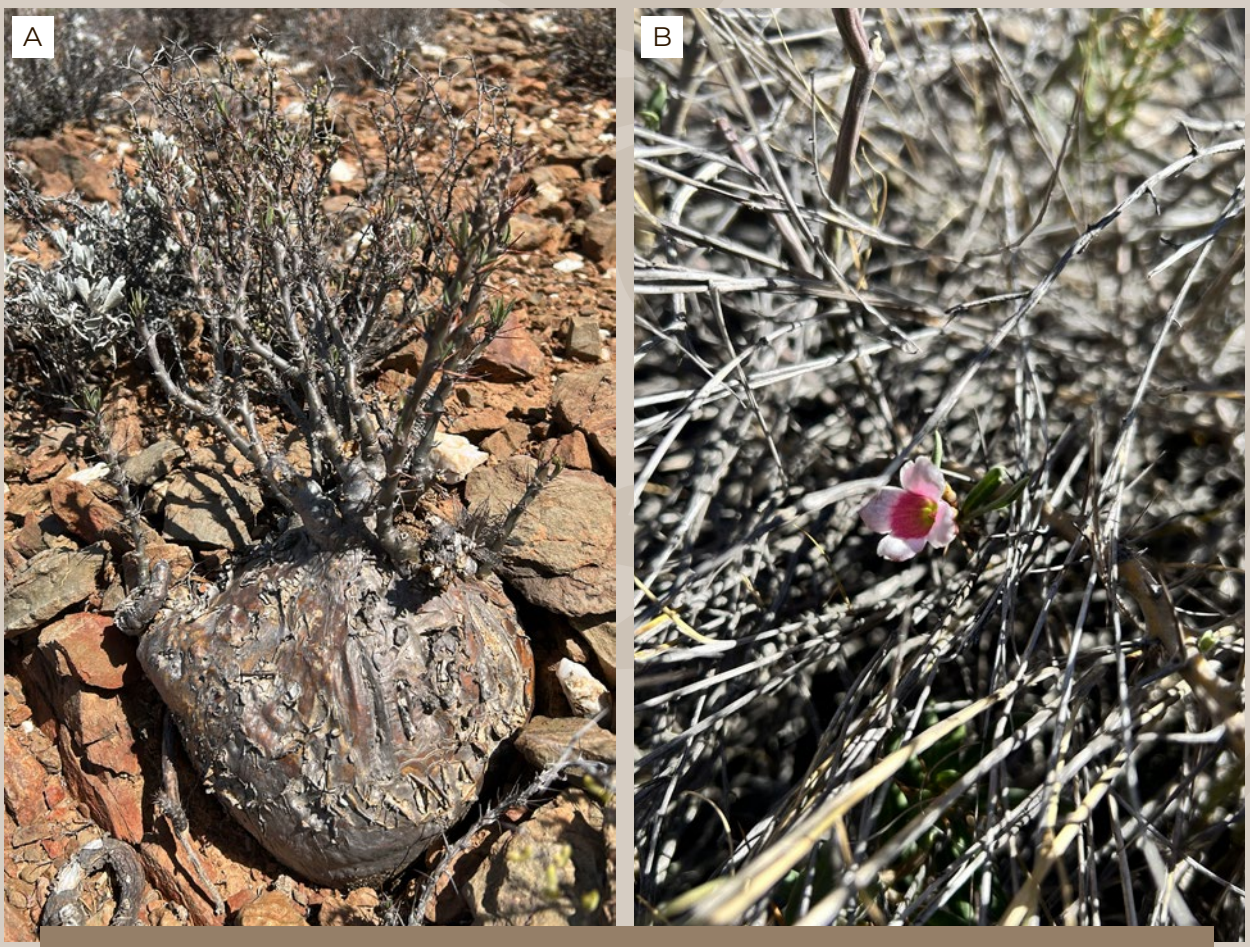
Aspalathus attenuata (EN), one of the other surprises found at Botmaskop. Photograph: Brian du Preez.

Trade, drought and decline: a field survey of two threatened *Pachypodium* species

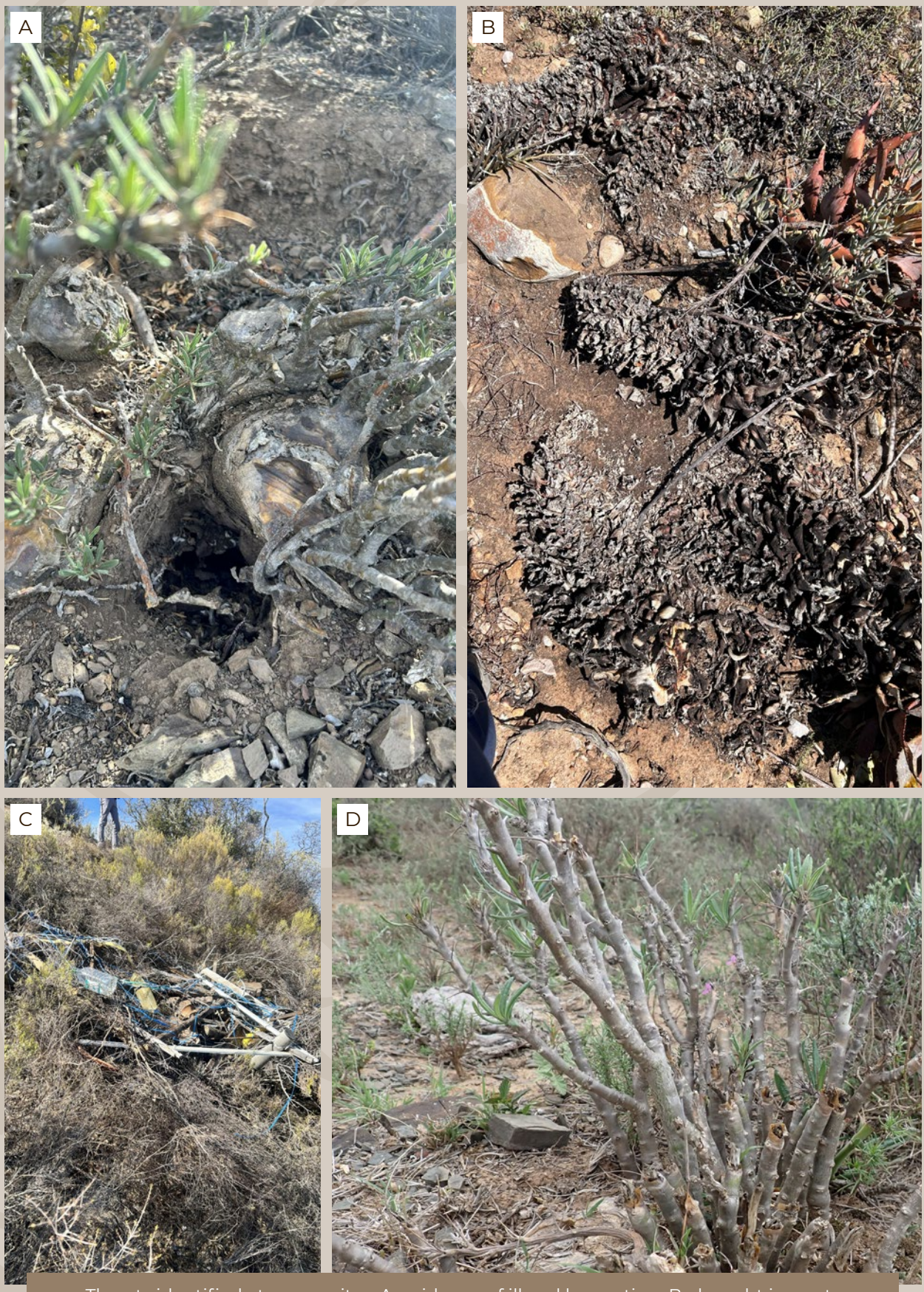
Vathiswa Zikishe and Nokukhanya Mhlongo

The Scientific Authority is a committee of experts established under the National Environmental Management: Biodiversity Act (NEMBA) of 2004 to advise the Minister of the Department of Forestry, Fisheries and the Environment (DFFE) on the sustainable use and trade of South Africa's wildlife, with its unit within SANBI responsible for scientific coordination and administration. One of the core functions of the Scientific Authority is to monitor the trade in Threatened or Protected Species (TOPS), as well as species included in the Appendices of CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora).

Pachypodium bispinosum and *P. succulentum* are succulent species endemic to the arid and semi-arid regions of South Africa, including parts of the Northern Cape, Western Cape, Free State and the Eastern Cape. Characterised by enlarged, partially submerged tuberous stems, both species were flagged by the Scientific Authority for the development of non-detriment findings (NDFs) due to the high volumes being exported from the country. Both species are listed on the IUCN Red List – *P. bispinosum* as Endangered and *P. succulentum* as Vulnerable – making the high volumes being exported a matter of serious concern.



Pachypodium succulentum in habitat (A) showing the large subterranean caudex. B, showing its bell-shaped flowers. Photographs: Nokukhanya Mhlongo.



Threats identified at survey sites: A, evidence of illegal harvesting; B, drought impacts observed in other plant species; C, rubbish dumping; D, a plant possibly browsed by wild animals. Photographs: A, B, C, Nokukhanya Mhlongo; D, Vathiswa Zikishe.

NDFs are science-based risk assessments that evaluate a species' vulnerability in relation to the effectiveness of its management. To date, more than 56 159 *Pachypodium bispinosum* specimens have been exported from South Africa, of which 49 921 were reportedly artificially propagated, 3 877 were wild collected, 10 were from confiscations/seizures and 2 351 had no reported source codes. In comparison, 23 720 *P. succulentum* specimens have been exported, of which 22 328 were artificially propagated, 1 368 were wild collected and 24 had no reported source codes. In light of these figures, SANBI undertook field surveys of both species to assess the status of their wild populations and to determine whether exports had been detrimental to their populations.

Five teams within SANBI, including the CREW Eastern Cape Node, expressed interest in undertaking the survey. As this aligns with our mandate to monitor species of conservation concern and coincides with the field season, we saw it as a valuable opportunity to support the Scientific Authority's work and enhance data for the Red List process. Participation in this survey also allowed us to better understand population sizes and the threats these species face, enabling more informed conservation recommendations.

The Eastern Cape team surveyed eleven sites, some of which were in areas that we had never visited before, including private nature reserves, where access is not always easily obtained. We also encountered other species of conservation concern at several sites, making the survey even more rewarding. Healthy populations of both species were found at most sites, especially those on the northern outskirts that are less accessible for illegal activities. However, roadside populations were easily accessible and consequently heavily targeted for harvesting, with evidence of digging visible. *Pachypodium bispinosum* appeared to be the more heavily targeted of the two species. Harvesting seemed to focus on individuals with large caudexes, though plants were not entirely removed, as evidence of resprouting from underground storage was visible.



A drought-stricken roadside strip, between Paterson and KwaNojoli (Somerset East), with a single *Pachypodium succulentum*. Photograph: Vathiswa Zikishe.

As with any field trip, we encountered challenges. Permission to access certain sites was not always granted, and some landowners were understandably cautious given the increase in illegal plant trade, even when presented with a letter of intent from the Scientific Authority. Nevertheless, we made valuable contacts for future fieldwork – an important outcome for CREW as we continue to expand our footprint in the Eastern Cape.

Nokukhanya Mhlongo, one of our Red List scientists who participated in the survey, shares her findings and explains how they contribute to the Red List assessments of both species.

Red List perspective – Nokukhanya Mhlongo

Within a species' range, plants are often found in distinct, isolated groups known as subpopulations. My group was one of the more fortunate survey teams, locating at least one subpopulation of either species per day at sites near Van Wyksdorp, Ladismith and Dysselsdorp in the Western Cape. For *Pachypodium bispinosum*, only two subpopulations were found, one consisting of 12 plants and another that is functionally extinct, with only a single individual. At the 12-plant site, no visible threats were identified. At the single-plant site, signs of digging were observed – initially suspected to indicate illegal harvesting, but the landowner assured us that the property is well secured. After numerous similar observations across the survey, we now believe these diggings were most likely caused by aardvarks or porcupines. Nevertheless, we recommend repeated surveys during the flowering season to minimise the risk of falsely declaring this species extinct at this site.

Of the eight subpopulations of *Pachypodium succulentum* recorded, sizes ranged from 10 to 94 individuals. The largest, on a well-managed enclosed property, showed no threats beyond drought. Several others showed clear signs of illegal harvesting, rubbish dumping and poaching activity, while drought-related mortality in surrounding vegetation was a recurring observation across sites. Interestingly, other large and healthy plants were present near the harvested individuals, suggesting that either a different species may have been targeted or that some form of sustainable harvesting practice may be occurring (e.g., harvesting on a 'need to use' basis).

What was evident from most survey groups was a severe decline in subpopulation numbers for both species, even within well-known and well-protected areas. Many groups were unsuccessful in locating the species at sites where they were previously known to occur – whether due to extensive past harvesting or prolonged drought. Property owners should be encouraged to restrict access to areas where these species occur in order to minimise trampling, rubbish dumping and illegal collection. It is also likely that illegal collection is occurring even on ostensibly well-protected properties, as continuous monitoring is rarely possible and poachers likely target these areas at night.

The next step will be to export all recent iNaturalist observation records for both species, including all sites surveyed by the five teams, to update population size estimates and document threats. Given the findings of this survey, changes to the current Red List assessments of both species are possible. Draft assessments will be shared with field botanists across the species' distribution range for comment before any changes are finalised.

Overall, these field surveys reveal a deeply concerning picture: a persistent decline driven by both human pressure and prolonged drought, suggesting that some arid species may be approaching or exceeding their ecological tolerance thresholds. For CREW, the value of this collaboration extends beyond the data – it has opened new doors in the Eastern Cape, strengthened partnerships with landowners, and reinforced why on-the-ground monitoring by dedicated volunteers remains irreplaceable in conservation.

Three collectors, nine provinces: CREW and the Millennium Seed Bank Partnership

Sibahle Gumede and Naomi Mdayi

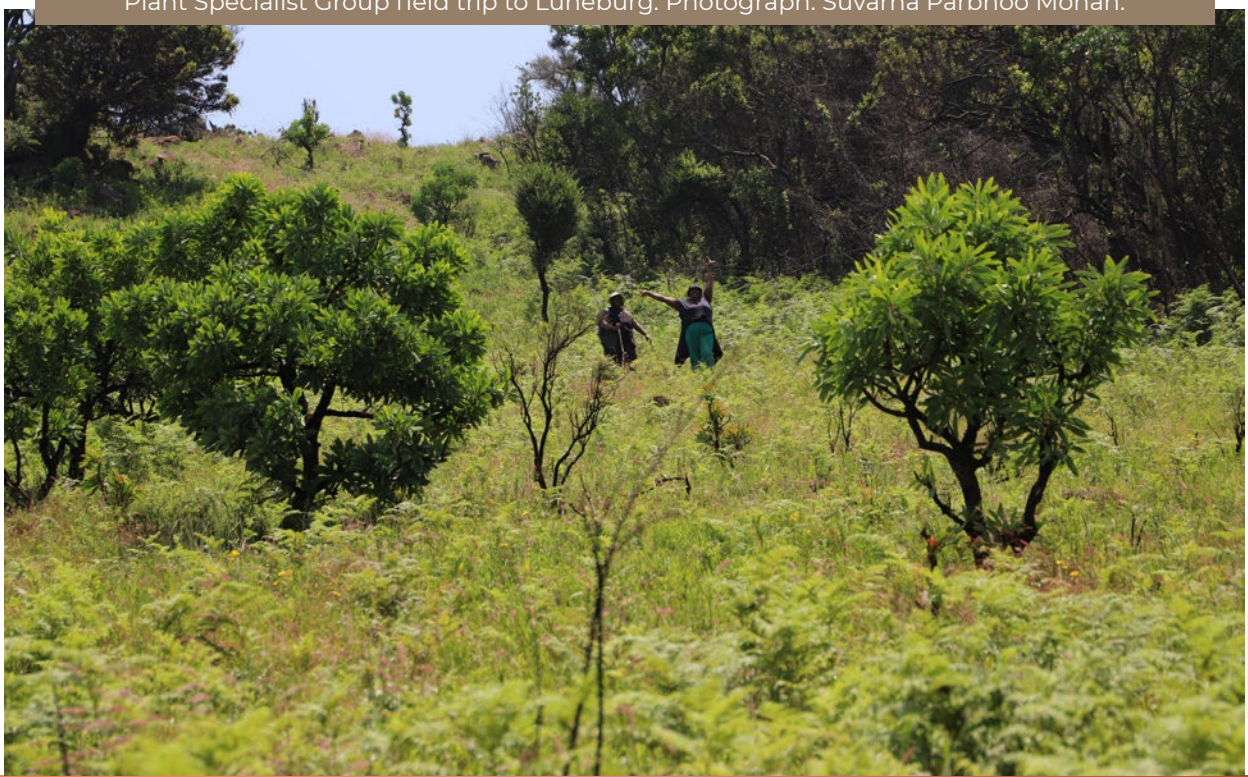
Nine provinces for three seed collectors in the country sounds impractical, right? Logically, it seems impossible, but the partnership and strong relationships between the Millennium Seed Bank Partnership (MSBP) collectors and CREW volunteers have shown that working together can truly achieve great things. CREW has significantly supported MSBP in meeting their targets by monitoring plant populations and reporting back on species that are ready for collection. The MSBP team shares their target lists with CREW volunteers across the country, and out of the goodness of their hearts, they keep an eye out for these species.



Sibahle attended herbarium training at the University of KwaZulu-Natal, conducted by Alison Young of the Midlands CREW group. Photograph: Sibahle Gumede.

Some volunteers have received formal training from MSBP on how to collect seeds according to MSBP standards. They collect and submit seeds as donations to the bank. Others assist by allowing us access to collect on their properties, introducing us to private landowners we would not have found ourselves, and even providing resources

MSBP and a Lowveld National Botanical Garden horticulturist join the CREW and Mpumalanga Plant Specialist Group field trip to Lüneburg. Photograph: Suvarna Parbhoo Mohan.



such as discounted or free accommodation to make our work easier. They go as far as examining our herbarium specimens and offering first-hand identification in the field – highlighting the strong collaboration between MSBP and CREW volunteers.

When called upon, they respond without hesitation, much like real-life superheroes. For instance, Alison and Roy invited Sibahle on trips to the Midlands, which always resulted in new MSBP sites being discovered and new collections made. In her absence, Alison and the team take it upon themselves to collect seeds, clean them, and send them to Sibahle with all the required data. Michelle Griffith, based in Hogsback in the Eastern Cape, helps by bagging seeds that may disperse before Sibahle can return.

The MSBP Western Cape team also took the initiative on passive restoration at the Kwadijkeskraal Conservancy. Through Di Marais, a CREW volunteer based in Hermanus, they worked to rescue the Critically Endangered *Erica karwyderi* by clearing invasive alien plants that were suffocating the species. Hopefully, this effort will enable *E. karwyderi* to thrive and multiply.

Honestly, the list is endless, and we deeply appreciate every act of kindness – big or small. With partnerships like these, we can be confident that the conservation of our indigenous species is in good hands.



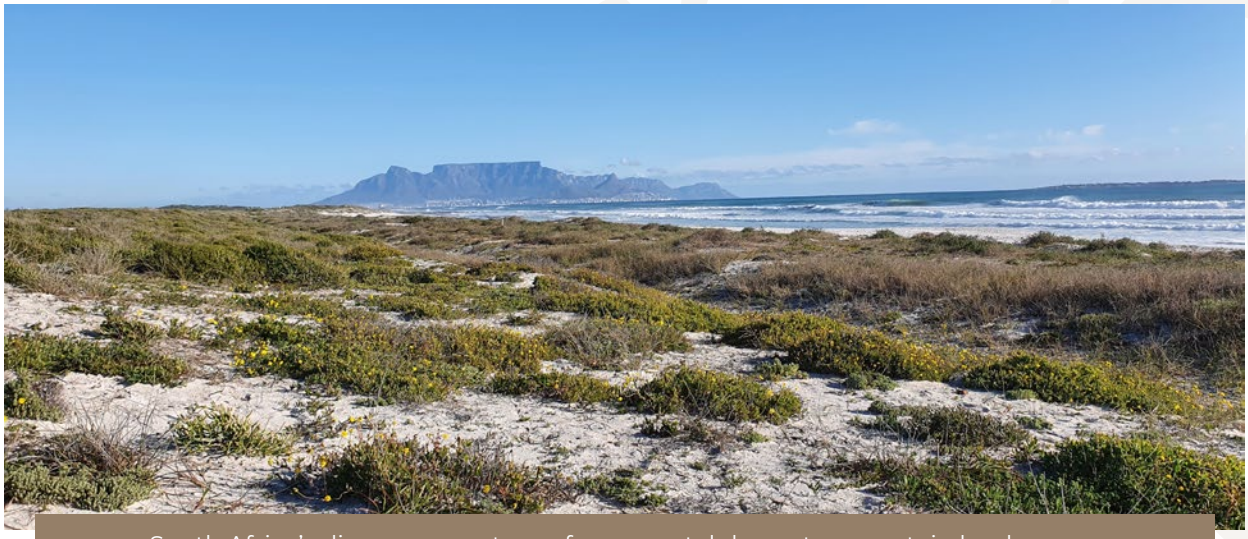
Michelle Griffith, a CREW volunteer from Hogsback, bagging seeds of the rare *Watsonia amatolae*. Photograph: Sibahle Gumede.

Citizen science and the National Biodiversity Assessment

Zimkita Mavumengwana and Suvarna Parbhoo Mohan

The National Biodiversity Assessment 2025 offers a sobering yet hopeful snapshot of South Africa's irreplaceable biodiversity – and it underscores just how essential citizen science is, especially through programmes like CREW, to keep our conservation efforts grounded in reality.

South Africa remains one of the planet's megadiverse countries, home to three global biodiversity hotspots and exceptional plant and marine endemism. The NBA 2025 – launched in December 2025 by SANBI in partnership with a wide network of leading experts – draws on the best available data to assess ecosystems, species and genetic diversity across terrestrial, freshwater, estuarine, marine, coastal and sub-Antarctic realms. It informs everything from national policy to our reporting under the Kunming-Montreal Global Biodiversity Framework, while highlighting the vital services



South Africa's diverse ecosystems, from coastal dunes to mountain landscapes, are assessed through the National Biodiversity Assessment to track their condition and protection status. Photograph: Tsamaelo Malebu.

biodiversity provides: clean water, resilient landscapes, livelihoods and ecotourism.

The picture is mixed. Over 60% of ecosystem types are not threatened, yet aquatic and coastal systems – wetlands, rivers, estuaries – face the most severe pressures from altered flows, pollution, over-extraction and fishing. Terrestrial trends largely continue from 2018, with Fynbos and Grassland biomes heavily impacted, the Indian Ocean Coastal Belt standing out as the most threatened overall, and arid zones showing sharp declines driven by mining, renewable energy developments, harvesting and climate change. Marine realms reveal nuanced differences between pelagic and benthic zones, but protection has advanced impressively: expanded marine protected areas now effectively cover 83% of marine ecosystem types.



Citizen scientists conduct field assessments in wetland habitats, contributing data to national biodiversity monitoring. Photograph: Tsamaelo Malebu.

Species assessments expanded to 16 taxonomic groups, revealing heightened threats for freshwater fishes (heavily endemic and hit by invasive species), cartilaginous fishes (43% threatened), reptiles, mammals and plants in arid biomes. Yet there are bright spots: around 70% of sampled plant taxa are well protected, and targeted recoveries demonstrate what focused action can achieve.

These successes, and the NBA itself, rely heavily on experts and citizen scientists. Volunteers fill enormous data gaps that formal surveys can't reach, especially for endemic, threatened and rare plants in remote or fragmented habitats. CREW citizen scientists' fieldwork – searching for threatened species, monitoring populations, documenting invasive alien plants, and recording observations on the iNaturalist platform – directly feeds into the Red List assessments of species and ecosystems.



Marasmodes propagation and restoration in action – nursery care and community planting in the field. Photographs: Ismail Ebrahim.

The NBA's core messages call for integrated action to tackle cross-realm pressures while scaling up proven tools: protected areas, stewardship, innovative funding and inclusive participation. For CREW citizen scientists, this is affirmation that every field trip and record counts. Your contributions strengthen national monitoring, help prioritise the threatened plant taxa needing recovery, and build the evidence base for turning declines around.

South Africa's biodiversity story is still being written, and citizen scientists are co-authors. Keep exploring, documenting and sharing. Together, we're not just assessing change; we're helping reverse it.

Watch the webinars for deeper insights:

- BotSoc plant-focused NBA webinar: https://youtu.be/EVz5d8LjGn4.
- Other sessions: https://www.youtube.com/watch?v=m6NkcfjvR-o&t=2161s and https://www.youtube.com/watch?v=ob7svDrhbxc&t=390s.

Explore the full NBA at: https://nba.sanbi.org.za.

Rising risks, strengthening protection: plant trends from the National Biodiversity Assessment 2025

Hlengiwe Mtshali and Lize von Staden

South Africa is home to over 20 000 indigenous plant species, 13 642 of which occur nowhere else on Earth. From the tiny succulents of the Karoo, to the iconic proteas of the fynbos and the towering forest trees along our eastern escarpment, these plants make our country truly extraordinary.

Despite this extraordinary richness, the latest National Biodiversity Assessment 2025



Quiver tree impacted by droughts. Photograph: Wendy Foden.

raises concerns, but also offers encouragement. The risk of extinction for threatened plant species increased by 2% between 2017 and 2024. We have been tracking species trends over time using the IUCN Red List Index (RLI), which assesses changes in extinction risk and helps guide conservation efforts. Since a repeat assessment of all 20 000 plant species is not feasible, a random sample of 900 plant taxa is used to monitor trends. The latest results show that plants are becoming increasingly vulnerable as their habitats are invaded by invasive alien species, lost to mining activities and renewable energy developments, and are targeted for illegal trade.

Breaking down trends by biome, the RLI reveals a rising extinction risk in the arid western regions of the country, particularly within the Succulent Karoo and Desert biomes. This increase is driven by intensifying droughts, illegal harvesting, and expanding mining and renewable energy developments in the Northern Cape.

We assessed how well plant species are represented in protected areas using the Species Protection Index (SPI), which tracks both coverage and management effectiveness over time. First measured in 2017 and reassessed in 2024, the results show clear progress: fewer species remain unprotected, largely due to the expansion of protected areas and improved management.



The rare and range-restricted Namaqualand species, *Daubenya namaquensis*, has benefited from a genuine improvement in protection status following the declaration of new protected areas between 2018 and 2025. Photograph: Nick Helme.



Disa barbata, once commonly found, is now on the brink of extinction and among the species targeted for recovery efforts. Photograph: Tristan Kruger.

Many species benefited from stronger security, better fire management, control of invasive plants and the declaration of new protected areas. Overall, 7% of plant taxa improved in protection status, while only 1% declined. However, some sites still face challenges, including declining management effectiveness and rising pressures like poaching and the spread of invasive alien species, highlighting the need for sustained, effective conservation efforts.

Importantly, habitat models indicate that many newly declared protected areas may already contain underprotected plant species, but this isn't yet visible in the data because a species only gains protection score in the SPI once its presence is confirmed. This is where citizen scientists and conservation teams, especially CREW volunteers, play a crucial role. Every targeted search, population check, monitoring visit, or photo upload to platforms like iNaturalist helps verify occurrences, fill data gaps and unlock the true protection value of these areas.

While the situation is concerning, it is not entirely bleak. Recovery efforts for highly threatened species are underway, particularly for those in urgent need. This national story depends on what you see and share. Every observation adds a valuable piece to the bigger picture. So keep exploring, keep recording and keep telling us what you find. Together, we're not just watching changes happen; we're helping them shift in a better direction.

To learn more about the assessment approach, visit: https://nba.sanbi.org.za.



Fynbos. Photograph: Jeremy Shelton.

Citizen scientists empowering KwaZulu-Natal Conservation Plan

Paul Gordijn and Ian Rushworth

Ezemvelo KZN Wildlife has initiated a major revision of the KwaZulu-Natal Conservation Plan (C-Plan), the spatial product that guides all important conservation decisions in the province. The data collected by the CREW Programme is fundamental to this revision, ensuring the updated product correctly identifies priority areas for plant conservation.

What is a conservation plan and why does it matter?

A conservation plan is a data- and science-based product that identifies which parts of the landscape are most important to conserve in order to maintain biodiversity, ecological processes and climate resilience. It brings together species records, ecosystem maps, climate projections and land-use pressures to highlight priority areas for protection, restoration or compatible development.

A conservation plan forms the basis of the Protected Area Expansion Strategy, supports new protected area declarations through the KwaZulu-Natal Biodiversity Stewardship Programme, identifies climate change adaptation corridors, guides municipal spatial plans and underpins all environmental impact assessment comments. Without it, development pressures could easily erode remaining natural areas and the ecosystem services communities rely on.

Species level data is vital because effective planning depends on knowing precisely where species occur. If a species' distribution is missing or poorly captured, the ecological value of an area may be underestimated – often with devastating consequences for biodiversity.

The KwaZulu-Natal Conservation Plan is being revised

The first KwaZulu-Natal Conservation Plan was produced in 2013 and has not been updated since. Over the next two years, Ezemvelo KZN Wildlife will undertake a major update, targeting completion by December 2027. This revision incorporates refined ecosystem maps, the latest climate change projections, updated ecological corridors and a decade's worth of new species distribution data.

CREW manager, Suvarna Parbhoo Mohan, is part of the partner team ensuring plant species data are current and that field surveys target gaps in provincial protected areas. iNaturalist projects have been established for each reserve (https://www.inaturalist.org/projects/kzn-provincial-protected-areas) – the CREW community is encouraged to undertake bioblitzes in reserves with limited data. Freshwater and wetland plant data are among the most poorly represented in the National Biodiversity Assessment, and targeted observations of aquatic and wetland species are urgently needed to close this gap – please contribute to the KwaZulu-Natal Wetland and Aquatic Plants project (https://www.inaturalist.org/projects/kzn-wetland-and-aquatic-plants).

'Thanks to the CREW data we will have a much better provincial conservation plan in 2027,' said Ian Rushworth. 'Together we can ensure the conservation of KZN's unique and threatened biodiversity.'

Safeguarding South Africa's rarest plants: highlights from the 2025 National Stakeholder Meeting

Emily Norma Kudze

South Africa's illegal succulent trade continues to shift and change, and so must the response to it. In October 2025, conservation partners, researchers and government representatives met in Calitzdorp to reflect on progress made so far and to consider what still needs to be done to protect our country's extraordinary succulent flora.

One of the big takeaways from the meeting was just how quickly poaching trends are evolving. What began with the widespread targeting of dwarf succulents has expanded to include geophytes and caudiciforms, many of which still lack proper baseline ecological information. This makes the ongoing work of monitoring teams, including CREW, especially important as new hotspots continue to emerge.

There were also encouraging updates. Monitoring of more than 61 priority *Conophytum* species continues, supported by seed banking and ex situ collections. Technology is playing a growing role too, with licence plate recognition cameras now operating along major routes and inside protected areas, helping strengthen enforcement efforts. Access to private land, however, remains a challenge, and reduced capacity within field teams means there is still a need for broader support and collaboration.

Another key focus of the meeting was the social side of succulent poaching. In many affected areas, unemployment and pressure from criminal groups make communities vulnerable to involvement in illegal harvesting. Because of this, long-term solutions must include social research, ethical community engagement and stronger partnerships within the landscape.

Education and awareness were highlighted as opportunities for real impact. Participants



Participants of the National stakeholders meeting held at the AZEF conference in Calitzdorp. Photograph: Tristan Kruger – on tripod, with timer.

called for more school materials, more local language communication and better coordination among organisations to avoid duplicated efforts.

Steps toward building a legal succulent economy are also underway, especially through community nurseries and propagation from confiscated mother stock. These initiatives show promise for creating sustainable alternatives while easing pressure on wild populations.

Overall, the tone of the meeting was cautiously optimistic, with a shared commitment to continued collaboration, learning, and action to protect South Africa's unique and irreplaceable plant heritage.

From desktop to field: finding my 'why' in my first field trip

Basetsane Malubane

January marked my very first field trip as a SANBI intern and it is difficult to put into words how much it shifted my perspective. I travelled with my supervisor, Stephni van der Merwe (University of Cape Town and SANBI), and her SANBI colleagues, Anisha Dayaram and Suvarna Parbhoo Mohan, through the southern Drakensberg, the Midlands and Pondoland. Piggybacking on CREW's network of stewardship sites and dedicated citizen scientists, we collected ground-validation points for our remote sensing-based ecosystem condition assessment project. What began as a ground-truthing exercise quickly became something far more formative.

Before this trip, most of my work existed behind a screen – analysing data, developing ecological condition assessment frameworks and exploring remote sensing tools. In the field, however, the landscape demanded a different kind of attention: observation, interpretation and patience. I made good use of the impressive plant identification skills of Suvarna, CREW citizen scientists

Taking a lunch break at the beautiful Umtamvuna Nature Reserve. Stephni van der Merwe (left) and Basetsane Malubane (right). Photographer: Anisha Dayaram.



and iNaturalist to identify plant species I had never seen before and to keep a record of the species we encountered across sites. iNaturalist became a digital field companion, helping me build confidence in plant identification while creating a trail of biodiversity observations.

CarryMap, with the National Vegetation Map pre-installed, allowed me to track our movement in real time and understand which vegetation unit we were standing in. I could capture ground-truthing points, photograph vegetation structure, and add notes from CREW citizen scientists describing what species composition and structure suggested about the ecosystem's condition. Connecting digital spatial layers to what my eyes were seeing on the ground was truly enlightening.

In Underberg, we met Julie Braby, a resident CREW member and co-author of the field guide, *Wild Orchids of the Southern Drakensberg*. Before we had even begun walking the Sleeping Beauty Cave trail, she had already identified eight orchid species – all new to me in the field. Walking with someone so deeply familiar with the landscape was incredibly informative. Julie helped us interpret whether patches were intact or showing signs of degradation.

Moving from grassland to savanna, we then visited Msinsi Resorts & Game Reserves where the reserve ranger guided us through ground-truthing exercises along short walking trails. In Eastern Valley Bushveld we encountered dense vegetation, abundant orb-web spiders to dodge and beautiful butterflies. Elsewhere in the reserve, however, we saw significant invasions of *Lantana camara* and bugweed (*Solanum mauritianum*). Active clearing was underway, highlighting both the pressures on the system and the restoration work in progress. Seeing healthy and heavily invaded areas within the same landscape showed me just how dynamic and fragile ecological systems can be.

When we moved from the Midlands to Pondoland, something shifted for me. Guided by Stephni, Anisha and our local hosts (and



Michelle Griffith, a CREW volunteer from Hogsback, bagging seeds of the rare *Watsonia amatolae*. Photograph: Sibahle Gumede.

CREW citizen scientists), Kate and Graham Grieve, I began to see ecological condition not just as a technical assessment, but as a story written into the land. Soil depth, rock type, drainage and chemistry shape everything we see above ground. Disturbance regimes – such as grazing pressure or altered fire patterns – leave clear signatures in plant composition and dominance. For example, bracken fern often signalled previous disturbance, while clusters of herbaceous species pointed to wetter microsites.

When I began this internship, I was learning ecological condition from a 'what' perspective – what metrics to use, what tools to apply, what pressures to map. This field trip with CREW gave me the 'why'. Fieldwork showed me that desktop analysis and on-the-ground ecology are inseparable; one continually informs the other.

I am especially grateful to have experienced my first field trip through the knowledgeable

eyes of the CREW citizen scientists, alongside Suvarna's scientific guidance. Their ability to read shifts in species composition and vegetation structure deepened my understanding of ecological condition beyond what any dataset alone could provide. This work is more than metrics and mapping – it is about shared knowledge, mentorship and collective responsibility for our ecosystems, including the ground-validation that supports ecosystem condition assessments in the National Biodiversity Assessment 2025. I'm eager to return to the field and continue learning from CREW's incredible network.

Continued detection of new *Furcraea foetida* populations in South Africa

Keabetswe Nhlapo



Furcraea foetida growth form. Photograph: Keabetswe Nhlapo.

SANBI's Directorate on Biodiversity Evidence (DBE) oversees the management of emerging alien species, particularly those listed as Category 1a and Species Under Surveillance for Targeting (SUSPECT). Management interventions include early detection, systematic removal of newly identified populations and ongoing monitoring to prevent further spread. Small to medium infestations are addressed by para-ecologists, while larger populations are cleared by designated contractor teams.

The early signs of invasive alien plants are easy to overlook at first, appearing as a few scattered individuals along roadsides, in open fields, or during routine surveys. These early observations are important because they allow teams to respond before the species spreads widely. Recently, the DBE team



Furcraea foetida leaf margins.
Photograph: Keabetswe Nhlapo



Furcraea foetida flowers.
Photograph: Keabetswe Nhlapo.

has been closely observing and managing the spread of *Furcraea foetida*.

A species worth watching out for in the field

Furcraea foetida is a succulent monocot in the Agavaceae family, indigenous to the Caribbean and northern South America. In South Africa, it was introduced as an ornamental plant and for use in the fibre industry.

What makes this species particularly concerning is its ability to spread rapidly. The plant produces large numbers of bulbils, which readily establish once they fall to the ground. This can lead to the formation of dense stands that outcompete indigenous vegetation. Over time, these infestations reduce available habitat and forage for wildlife, while also creating costly management challenges for land users.

In South Africa, *Furcraea foetida* is listed as a Category 1a species under the National Environmental Management: Biodiversity Act's (NEM:BA) Alien and Invasive Species Regulations, 2014 (as amended in 2020). This classification requires that the species be removed wherever it occurs.

From a single sighting to growing awareness

The species was initially recorded from Mpumalanga, Western Cape and KwaZulu-Natal. More recently, its presence has been confirmed across most of the country, apart from the Free State. In Gauteng and North West, early detections were limited. Only one population was recorded in each province in 2021 and 2022. However, since 2023, detections have increased significantly, with ten populations recorded across the two provinces.

This increase may suggest potential naturalisation or expansion of the species within the region. It may also reflect intensified advocacy and awareness efforts around emerging invasive alien species, which could have improved detection and reporting of previously overlooked populations. Detection efforts combine targeted field surveys with information gathered from platforms like iNaturalist, where members of the public and citizen scientists upload observations of plants and animals that they encounter in the field.

Rapid response on the ground

Once a population is confirmed, teams move quickly to remove it. Small to medium-sized infestations are cleared by trained para-ecologists, while larger populations

may require dedicated contractor teams. Follow-up monitoring is essential, as new plants can still emerge from bulbils or overlooked individuals. Continued surveys ensure that cleared sites remain free of the species and that any new infestations are addressed quickly.

How CREW volunteers can help

If you encounter *Furcraea foetida* in the field:

1. Take clear photographs of the plant, including the overall growth form and close-ups of the leaves or flowers if present.
2. Record the location.
3. Upload the observation to iNaturalist at https://www.inaturalist.org.

Observation can help the DBE respond quickly and prevent new infestations from becoming established.

Leopard movement corridors – building connections between leopards and landowners

Katy Williams

In areas where natural habitat has been fragmented by urban, agricultural and other development, clearly defined spaces or corridors that connect the remaining intact habitat fragments are vital to maintain effective ecological connections. Protecting this connectivity across broad, transformed landscapes is essential for many species' survival, especially wide-ranging species like leopards.

To investigate corridors for leopards, the Cape Leopard Trust (CLT), in collaboration with Stellenbosch University, has extensively modelled current suitable habitat for leopards in the Western Cape, and used that information to further model and map potential leopard movement pathways between core habitats across the region.

Subsequently, through a project with the Table Mountain Fund, the CLT, along with partner organisation Conservation Outcomes, have been engaging with landowners in three of these predicted leopard movement corridors. The aim is to protect these spaces and maintain or enable safe passage through them for leopards and other species.

Prior camera trap surveys in the corridors provided baseline knowledge of the mammal diversity in these areas. However, corridors are not only important for larger mammals. In 2025, a series of biodiversity assessments (bioblitzes), where biodiversity experts and volunteers combed through properties within the corridors, uncovered a deeper understanding of the biological value of these spaces. The three bioblitzes resulted in the recording of hundreds of species across the three corridors. Landowners joined in these surveys and the



CREW volunteers in action. Photograph: Christoff van Rensburg.



CREW volunteers, conservation partners and landowners working together. Photograph: Christoff van Rensburg.

participatory experience opened their eyes to the immense richness of their own land – reminding us all that protecting corridors isn't just for the benefit of leopards, but for a whole ecosystem of smaller, often overlooked, endemic treasures.

Ultimately, this project is about more than securing ecological corridors for leopards – it is really about building bridges between people and nature. By fostering trust, shared knowledge and positive partnerships, the Cape Leopard Trust, Conservation Outcomes, biodiversity experts and volunteers, and local landowners are demonstrating that conservation is a joint effort, where communication and connection are the most powerful tools for preserving nature.

Acknowledgements

The bioblitzes would not have been possible without the input and support from CREW, the Spider Club of Southern Africa and CapeNature, who were brought together through this Table Mountain Fund Project. A big thank you also to the many landowners who welcomed us on their land. A special thank you to Christoff van Rensburg (@cvjphotography) for his beautiful bioblitz images.

The bioblitz group, ready to make observations. Photograph: Christoff van Rensburg.



Empowering youth through plant conservation: an update from BotSoc SA

Teneal Barnard and Martina Treurnicht

The Botanical Society of South Africa (BotSoc SA) is proud to share a few highlights from the recent National Lotteries Commission-funded project, Protecting and Restoring South Africa's Natural Heritage (2024–2026). This project was a dynamic collaboration with SANBI, CREW and various other conservation partners.

This initiative set out to connect people more deeply with South Africa's extraordinary plant heritage, while creating meaningful opportunities for youth in the nature-based sector. Through an integrated approach, the project focused on four core components: citizen science expansion, youth development and upskilling, promoting digital awareness and engagement, and biodiversity garden establishment.

At the centre of the programme, at least 30 youth beneficiaries received integrated theoretical and practical training in plant taxonomy, conservation and associated restoration skills, including the use of digital tools such as iNaturalist for biodiversity data collection. Twenty-seven youth beneficiaries were supported through structured stipend-based work placements during 2025, combining classroom learning with hands-on field experience across important plant areas in Cape Town and the broader Western Cape. Training covered plant taxonomy, threatened species conservation, restoration techniques and conservation horticulture – building both ecological understanding and practical competence. Eleven of these youth participants further progressed into extended training and



Youth employed through the project on an iNaturalist training field trip with CREW CFR Node team. Photograph: Teneal Barnard.



Establishment of one of 15 biodiversity conservation gardens in schools and communities across the Western Cape: A, initial planting; B, installation of interpretive signage; C, the garden at present. Photographs: Teneal Barnard.

paid work opportunities with conservation partners, obtaining certified chainsaw and brush cutter operator entry-level certifications – valuable skills for ecological restoration and land management.

Collaboration with CREW's Cape Floristic Region (CFR) Node has been a cornerstone of the project. Together with SANBI, youth and volunteers participated in targeted plant surveys, bioblitzes and structured

monitoring initiatives in priority conservation areas in the Cape region.

Beyond this youth upskilling and field-based work, the project significantly expanded BotSoc SA's digital footprint, using online platforms and storytelling to grow national awareness and participation in plant conservation. This builds a broader, more connected community of citizen scientists and biodiversity stewards.

We extend our sincere thanks to CREW CFR Node staff, volunteers and SANBI teams for their ongoing commitment, mentorship and investment in both people and plants, which is inspiring a new generation of conservation leaders. We look forward to expanding this impactful model to other parts of the country in the near future.

Keep an eye on BotSoc SA's social media for the launch of our Protecting and Restoring South Africa's Natural Heritage webpages, where we delve deeper into the project's achievements and share the free educational resources created through this project!

Webinar about project: https://www.youtube.com/live/_eP4bI1KVDA?si=Df50B-VHIn3Tm2U5H.



The youth were trained in plant taxonomy by Wendy Hitchcock. Photograph: Teneal Barnard.

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