Threatened plant conservation: CREW Programme making a difference V.Zikishe



























Threatened Species Programme

Threatened Plant
Programme
work within SANBI



Threatened Animal
Co-ordination unit,
with universities,
NGO's & government dept







Reptile Atlas & RL



Bird Atlas & RL



Butterfly Atlas & RL

Reason for the CREW programme

- South Africa has 2577 plant species that are threatened with Extinction.
- South Africa has more species of plants that have gone extinct than any other country in the world.
- One in every 4 plants in South Africa is of conservation concern.
- South Africa has a very active network of civil society interested in conserving plants thanks to the Botanical Society.















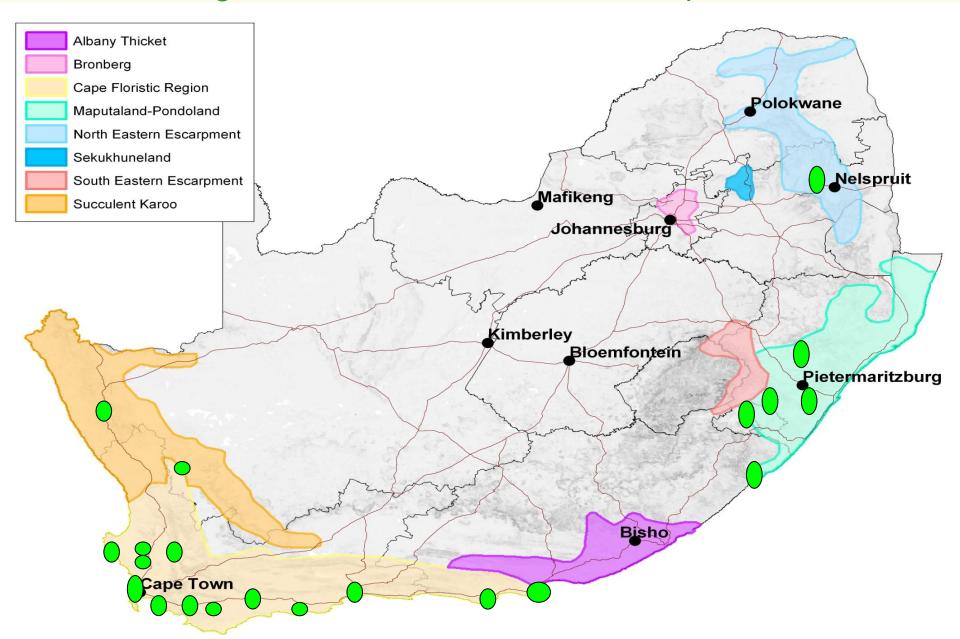
How CREW works



- Involve volunteers from the public.
- 98% of CREW volunteers are BotSoc members.
- Monitor populations of threatened plants.
- Work with conservation agencies to conserve key sites for threatened plants.



CREW operates only in threatened Ecosystems or in areas with high numbers of endemic and rare plants





Red List of South African Plants

Search the Red List Search

Red List statistics

Summary of recent changes

Home >> Genera: C >> Genus: Clivia

National Red List categories

Assessme

CREW's role in plant conservation

Browse

Genera: A

Genera: C

Genera: D

Genera: E

Genera: F

Genera: G

Genera: H

Clivia miniata (Lindl.) Regel var. miniata Genera: B

http://redlist.sanbi.org

Scientific Name

Higher

Classification

Family Genera: I Genera: J

Genera: K

Genera: L

Genera: M

Genera: N Genera: O

Genera: P

Genera: Q

Genera: R

Genera: S

Genera: T

Genera: U

Genera: V

Genera: W

Genera: X

Genera: Y

Genera: Z

Taxonomy

Clivia miniata (Lindl.) Re

Monocotyledons

Synonyms Common Names AMARYLLIDACEAE

Clivia miniata (Lindl.) Regel. Benediction Lily (e), Bush Lily

September Lily (e), St John's Lily (e), Boslelie (a), Ubuhlungu-bemamba (z), Ubuhlungu-

beyimba (z), Umayime (z)

National Status

Status and Criteria VU A2abcd Assessment Date

2008/01/15

V.L. Williams, D. Raimondo, N.R. Crouch, A.B. Cunningham, C.R. Scott-Shaw, M. Lötter & Assessor(s)

A.M. Nawenva

Justification The population has declined at least 40% in the last 90 years (generation length 30 years)

due to harvesting for the medicinal plant and horticultural trades as well as some habitat loss to commercial forest plantations, crop cultivation and urban development.

Distribution

Endemism Not endemic to South Africa

Provincial Eastern Cape, KwaZulu-Natal, Mpumalanga aistribution

Range Barberton to Kei mouth, also in Swaziland.

Habitat and Ecology

Major system Major habitats

Terrestrial Forest

Description

Scarp, mistbelt and coastal riverine forests, in loose rocky habitats in light or partial shade,

100-1400 m.

Threats

Threatened by harvesting for the traditional medicine trade. Traders do not distinguish between Clivia species and all species are therefore at risk of over-exploitation. The primary factor determining which species is sold on a particular day in the market relates to where a harvester has managed to find suppopulations to exploit. Five Clivia species found in South Africa are harvested for traditional medicine and have been recorded in all the major medicinal plant markets in South Africa. Clivia miniata and C. nobilis were the most frequently referenced species in the literature, but C. miniata, C. caulescens and C. gardenii are the most prevalent in the markets. The whole plant (except for the flowers) is used and the tops of the leaves are typically cut off, thereby making it difficult to distinguish between the species. Cunningham (1988) estimated that 397 bags (50kg-size) were sold

CREW data is the most important information informing the Red List of plants - Only project of its kind globally



Clivia miniata var. miniata



(c) C. Paterson-Jones

(c) C. Paterson-Jones





(c) J.E. Burrows

THE IUCN RED LIST OF THREATENED SPECIES'

Updated every 6 months

Different strokes works for different folks!



















Para-ecologist model

- Biodiversity assessment and monitoring, collection and documentation of organisms.
- Enhancement of communication between land users and scientists (multi-disciplinary approach).
- Collaborative research activities for both conservation and human welfare benefits

Villages identified



Progress made so far

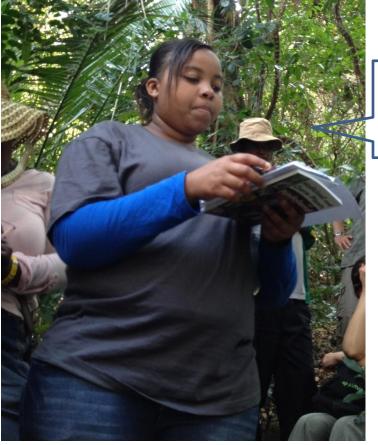
- Community questionnaires about environmental issues and cultural values
- Training on how to collect Herbarium specimens
- Personal evaluation for each Para-ecologist
- Narrative report on individual learning behavior

Comments from the questionnaires

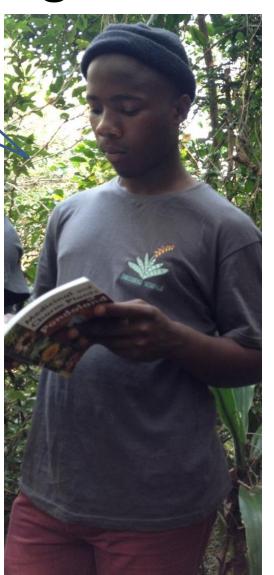
- "Ngqinisa is very rich in natural resources, we love this place it gives us all we need"
- Over-harvesting of medicinal plants by people from other villages and bush encroachment are the major environmental issues we face in this community (*Diospyros dichrophylla*)
- Disappearance of indigenous knowledge another major issue identified by both communities
- Poverty and youth unemployment(Pirie)
- Too frequent fires, climate change, unsustainableharvesting and water pollution

Lessons from the Para-ecologists

"This opportunity has inspired me to dream again"



"This is an interesting field of study and I'm falling in love with it"





"There's so much more to a flower than just its beauty" I now look at plants differently!
"I used to hunt animals, harvest sea food, and medicinal plants with the motive that they belong to us, and so we can harvest them as much as we like, but that mindset has now changed! I'm now aware about the importance of our natural resources, and that we need to protect them for the future generations"

'I'm fascinated about looking at the plant morphology, especially the internal structure"



"This project has changed my mindset, I used to have a problem with DAFF rangers arresting our people in the forest when collecting medicinal plants. I now understand the reason why: it is to stop our indigenous plants from being extinct"

"Being out of Grahamstown for the first time in my life"

"I now have a better understanding of what Nature conservation is all about and that helps with my teaching at schools"



Lessons learnt so far

- Working with rural communities can be a daunting task, but doable.
- Be sensitive to their background, insecurities and cultural values to maintain good relationship and gain support in return
- Planning is very crucial (define your opportunity to get good candidates and stay focused)
- There is always a solution!



Enkosi!



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