



AgulhasNPark eBulletin

VOL 5 • NR 5 • April 2015

Earth under Pressure

www.sanparks.org



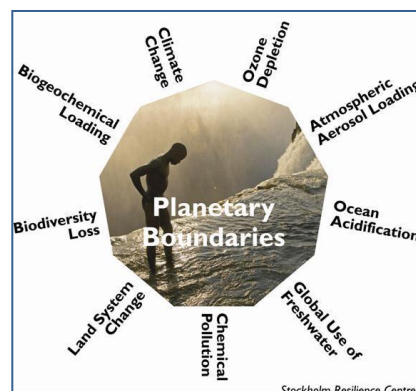
South African
NATIONAL PARKS

Celebrating Earth Day

The 45th anniversary of Earth Day will be celebrated on April 22 this year. This day marks an opportunity for volunteers to initiate actions towards a sustainable future. For over four years, *A Billion Acts of Green* has been building commitments by individuals, organisations, businesses and governments to protect the planet, inspiring and rewarding both simple individual acts and larger organisational initiatives that reduce carbon emissions and support sustainability. Taken together, these small actions add up. And *A Billion Acts of Green* has become the largest environmental service campaign in the world. Volunteers may join the *Green Generation* and register on the website www.earthday.org/takeaction. On April 22, 1970 about 20 million Americans supported and celebrated the first Earth Day and today it is celebrated worldwide, forming a global network that works towards environmental protection in communities, regions and around the world. More than 22,000 organisations in 192 countries around the world participate in Earth Day activities. In 1990 Earth Day had an enormous effect on recycling efforts worldwide and assisted in leading the way to the 1992 Earth Summit in Rio de Janeiro. Earth Day is a global attempt for international co-operation to address issues such as global warming, toxic waste, destruction of rainforests, expanding deserts and ocean pollution. Individuals and organisations are encouraged to use Earth Day to take environmental action in their area. For more information, visit www.earthday.org and <http://www.earthday.org/takeaction/>. (SOURCE: *A year of special days*, 2015. Sharenet)

Earth under pressure

The oldest inheritance we share with all mankind and other creatures is the earth. Human activities have placed increasing pressure on the Earth. To continue to live and operate safely, humanity has to stay within critical boundaries in the Earth's environment, and respect the nature of the planet's climatic, geophysical, atmospheric and ecological processes, says Johan Rockström, Director of the Stockholm Resilience Centre. He warns that exceeding planetary boundaries (see figure) may be devastating for humanity, but if we respect them, we should have a bright future for centuries ahead. The nine boundaries identified are climate change, stratospheric ozone, land use change, fresh water use, biological diversity, ocean acidification, nitrogen and phosphorus inputs to the biosphere and oceans, aerosol loading and chemical pollution. The study suggests that three of these boundaries (climate change, biological diversity and nitrogen input to the biosphere) have already been crossed. Boundaries are inter-connected — crossing one boundary may seriously threaten the ability to stay within safe levels of the others. (SOURCE: *A year of special days*, 2015. Sharenet)



Connecting to Society

2015 is the International Year of Soils (IYS)

Soil has been identified by the United Nations as one of its themes for 2015. Soil is a finite natural resource and is non-renewable on a human time scale. Soils are the foundation for food, animal feed, fuel and natural fibre production, the supply of clean water, nutrient cycling and a range of ecosystem functions. The area of fertile soils covering the world's surface is limited and increasingly subject to degradation, poor management and loss to urbanisation. Increased awareness of the life-supporting functions of soil is called for if this trend is to be reversed and so enable the levels of food production necessary to meet the demands of population levels predicted for 2050. The International Year of Soils 2015 (IYS) will serve as a platform for raising awareness on the importance of sustainable soil management as the basis for food systems, fuel and fibre production, essential ecosystem functions and ultimately allow for a better adaptation to climate change for present and future generations. (SOURCE: *A year of special days, 2015*. Sharenet)

Geology and soils of the Agulhas National Park

Geology is the study of the earth, and geologists study how the earth has been developing over the millions of years that make up its history. In the process they study rocks and land forms. The Agulhas coastal plain, a remnant of an ancient wave-cut platform, is covered primarily by calcareous sands of the Tertiary age. The coastal mountains are Cape Fold Belt sandstone, capped in sections by limestone. Inland of these mountains are the undulating plains, comprised largely of Bokkeveld shale, which together with Cape Fold Belt sandstone are part of the Cape Supergroup System. Two fairly broad bands of the Malmesbury formation occur near Viljoenshof and Baardskeerdersbos. The shoreline of the Agulhas coast has both rocky (60 km) and sandy (45 km) beaches, followed by sand dunes, including rare hummock-blowout and playa-lunette dunes between Brandfontein and Cape Agulhas. North of these dunes is a sandy, flat coastal plain with numerous marshes, vleis and pans.

Examples of soil types



Koffieklip (Ferricrete)

Ferricrete is a mineral conglomerate consisting of surficial sand and gravel cemented into a hard mass by iron oxide derived from the oxidation of iron salts. It is better known in Afrikaans as *Koffieklip* (coffee stone) and is found more regularly in Agulhas National Park and towards the coastline.



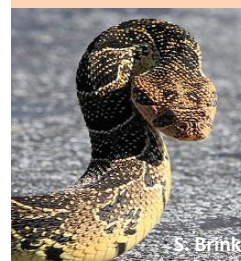
White quartzite

White quartzite is a hard metamorphic rock which was originally sandstone that was converted through heating or pressure. Pure quartzite is usually white to grey and can often be found in shades of pink and red due to varying amounts of iron oxide. Quarts grains recrystallized with other cementing material to form a mosaic of quartz crystals.



Yellow ferricrete

These rocky soils consist mostly of rocks and less sand. Puff adders are for some reason attracted to this soil type.



Red ferricrete

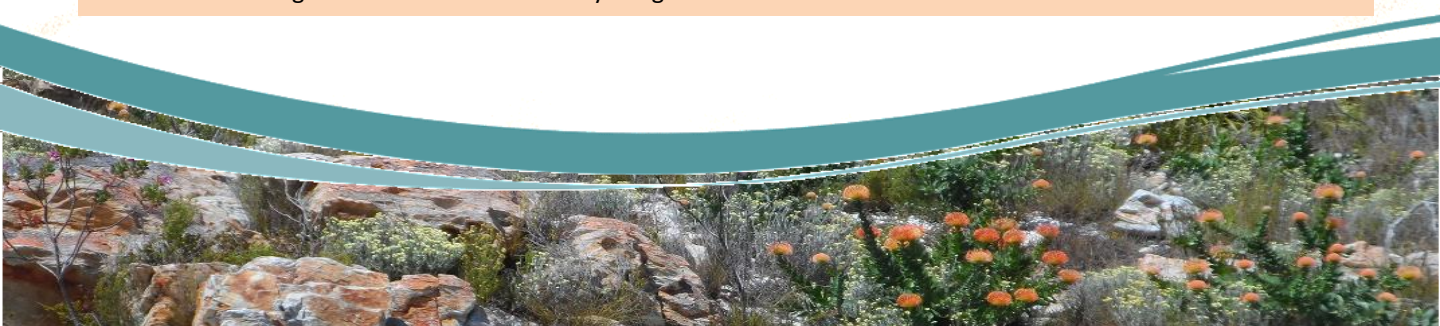
This soil type is distinctly reddish and gives off a red dust when touched. The rocks are soft.



Info on soil types - Strandveld Vineyards

Elim Ferricrete Fynbos/Elim Asteraceous Fynbos

Elim Ferricrete Fynbos consists of all fynbos types with transitional communities of species, but extensively asteraceous fynbos dominated by low proteoid elements containing species like *Protea repens*, *Leucadendron salignum* and *L. elimense*. When degraded, *Elytropappus rhinocerotis* dominates. Occurring on soils derived from Bokkeveld Shale, Cape Granite, ferricrete and silcrete, it is distributed extensively around Elim, spanning the area from Soetmuisberg in the north to the Soetanytsberg in the south.





Bird of the year 2015

The Blue Crane, Bloukraanvoël, *Anthropoides paradiseus* was identified by BirdLife South Africa as the 2015 Bird of the Year. It is also South Africa's national bird. Although plentiful in the Overberg region, Blue Cranes remain under threat, with only about 25 000 birds left in South Africa. Most of the birds live within the Overberg's borders. The Blue Crane is listed as vulnerable on the International Union for Conservation of Nature's Red List of Threatened Species. Blue Cranes are monogamous. Despite being social birds, they are territorial while breeding. They have a beautiful courtship dance: two individuals dancing and jumping up and down with wings extended. They normally raise two chicks. Look out for them on the agricultural fields of the Strandveld and Ruens. **Visit the Overberg Crane Group's website: www.bluecrane.org.za for more information.**

New 'quagga' born on Agulhas Plain

One of the top "quagga" in South Africa, Freddie, is father to three new "quaggas". Freddie lives on the Nuwejaars Wetland Special Management Area. He is one of the best stallions in the Quagga Project - which is selectively breeding Plains Zebra, to retrieve the genes responsible for the quagga's characteristic striping pattern. The last quagga died in 1883. The three new "quaggas" are already showing those features found in the original quagga, with fewer stripes and distinct brown markings on the body. The family group is still quite shy, and Freddie is very protective over his progeny. Last year Freddie fathered a colt and a filly. The Quagga Project was launched in 1987 by Reinhold Rau. As a result, the Plains Zebras included in the project are now known as "Rau Quaggas". The project aims to bring back herds of "Rau Quagga" to the areas where they once roamed, including the Agulhas Plain, where smaller herds of quagga would have lived. (Info provided)



Spotted in the Park and surrounds



Rinkhals, *Hemachatus haemachatus*



**Blouwangbyvreter
Blue-cheeked Bee-eater
*Merops persicus***

Way out of its range and another great provincial rarity for the Western Cape



Loggerhead turtle, *Caretta caretta*

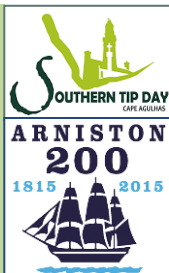
Breeds in Kwa-Zulu Natal; hatchlings are transported by currents, but water temperature was the reason turtles were washed ashore on the Struisbaai beach recently



**Grootwulp
Eurasian Curlew
Numenius arquata
At the Saltpans**

Important dates

Earth Day	22 April
Southern Tip Day	16 May
Southern Tip Meal & Talk	15 May 2015
Southern Tip Interpretive Walk	16 May 2015
International Biodiversity Day	22 May
Arniston 200	29-31 May 2015
Arniston shipwreck	31 May



Earth Day Walk 22 April 2015

Circumnavigate the Saltpans to experience the salt works and birdlife. For more info contact Emmerentia, 028-4356078 during office hours



Focus on Bontebok National Park



Bontebok National Park - small but significant

The Bontebok National Park (S34°3.2327' E20°25.7654') was originally established to conserve the Bontebok and officially proclaimed March 24, 1961 with 61 Bontebok. It is situated 223 km from Cape Town and off the N2 on the coastal plateau between the Langeberg Mountain range (five km away) and the Indian Ocean (50 km away). It is the smallest national park in South Africa and covers an area of 3475ha. It is a member of the Cape Cluster parks and sister park to Agulhas, Table Mountain, Tankwa Karoo and West Coast National Parks.



In spite of strict legislation in those days, only a few Bontebok were left in 1837. In the same year a herd of 26 Bontebok was fenced in on a farm in the Strandveld for protection.



Lang Elsie's Kraal rest camp along the Breede River

Die Stroom Day visitors facility



An attractive stop-over for travellers following the Garden Route: beautiful self-catering chalets, camping sites, day visitor facility at 'Die Stroom', hiking, cycling, fishing, canoeing, birding and many more.

Vegetation types for Bontebok NP

The new vegetation map for South Africa indicates three vegetation types for Bontebok National Park:



Swellendam Silcrete Fynbos

Swellendam Silcrete Fynbos, Cape Lowlands Alluvial Vegetation and Eastern Ruens Shale Renosterveld. The Coastal Renosterveld is the most altered vegetation type of the fynbos, 85 % being lost mainly to agriculture. Due to the virtual destruction and extremely fragmented nature of South Coast Renosterveld (especially towards the west, this vegetation type is regarded as critically endangered. The high conservation status of South Coast Renosterveld thus raises the conservation importance of BNP. (SOURCE: *Bontebok National Park Management Plan, Draft 2.2, 2012.*)

