



AgulhasNPark eBulletin



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We're part of the solution

www.sanparks.org

South African
NATIONAL PARKS

Southern Tip Day 2021

The Portuguese explorer Bartolomeu Dias passed the Southern Tip landmass on his return journey to Europe on May 16. This is seen as a relevant date for the Southern Tip community to celebrate living at the Southernmost Tip of Africa, a World-heritage site. It is also an opportunity for the community to show off its cultural and natural heritage. It will be a festival with food, music, displays and activities, by the community for the community. The festivities kick off with a Southern Tip Talk and Meal at the *Suiderlig Dienssentrum* in Struisbaai on Friday May 14. The talk is presented by Helena Liebenberg on *Die mense en plekke in die VOC-tyd – die Strandveld en omgewing in die besonder*. The meal will be a traditional Overberg Table.

On Saturday, May 15, all can take part in the L'Agulhas Street Festival. Visitors and Southern Tippers can enjoy a day of eating, wine tasting, birding, walking and exploring. There will be stalls, art exhibitions and a special art walk. For more information contact E. De Kock at emme.dekock@sanparks.org or Eloise Krige at eloise@overbergmagazine.co.za.

International Biodiversity Day 2021

International Biodiversity Day is celebrated every year on May 22 and is dedicated to making sure that the Earth remains a place where all creatures—no matter what environment they depend on—can not only survive, but also thrive. This year it is being celebrated under the slogan:

We're part of the solution. The slogan was chosen to be a continuation of the momentum generated in 2020 under the over-arching theme, **Our solutions are in nature**, which served as a reminder that biodiversity remains the answer to several sustainable development challenges. From nature-based solutions to climate, health issues, food and water security, and sustainable livelihoods, biodiversity is the foundation upon which we can re-build better. Biodiversity Day 2021 focuses on the new global biodiversity framework, which will be adopted at the upcoming UN Biodiversity Conference (COP15). (SOURCE: <https://www.cbd.int/biodiversity-day>)



22 MAY 2021
BIODIVERSITY DAY
We're part of the solution #ForNature

Biodiversity and climate change in the Cape Agulhas region

The Agulhas National Park has high biodiversity value and is one of the top five most diverse national parks in the SANParks network. It has particularly high value as a bank of rare and endemic species.

The climate of Agulhas is expected to get hotter and drier, although flood and high rainfall events will still occur. Many of the impacts of climate change will depend on how different climate components co-occur. For example, a combination of prolonged drought with above-average temperatures has more severe consequences for water availability than either event on its own. Similarly, elevated temperatures increase the number of high fire risk days, which are also exacerbated by drought and increase wind speed. Changing wind speed in turn also combines with increases in average sea level to ramp up the impact of storm surges.



Older climate models predicted that the Fynbos and Succulent Karoo would be among the most vulnerable to climate change in South Africa. However, newer models show that the Agulhas region is one of the most stable parts of the biome. Indeed, analysis of core samples from Voëlvllei and Soetendalsvllei suggest that the Fynbos in the region has survived through a number of **wetter and drier** periods during the Pleistocene and over the last 50 000 years.

Biodiversity and climate change in the Cape Agulhas region continues

These climate fluctuations are believed to be a key contributor to the high species diversity in the Fynbos. However, in spite of limited evidence for biome change, because species’ ranges are typically determined by climatic conditions, shifts in species’ ranges and community composition will occur. In general, species are predicted to move south and to higher elevations, as temperatures are cooler at lower latitudes and higher altitudes. Rates of such shifts will increase exponentially over the coming years and decades, bringing species from the north for which the park was previously too cold and/or wet. These arrivals may be viewed as positive (e.g. charismatic birds), negative (e.g. invasive species) or have negligible impacts. For the extraordinary number of species already occurring in the park, however, changing climatic conditions may make the park increasingly unsuitable. Researchers are currently investigating the factors that determine where a species’ range ends using



Protea compacta as a case study. This research will provide insights into how we might assist species in adapting to climate change. Since species on the Agulhas Plain are already at the southern tip of Africa, the ocean blocks further southwards range expansion. In time, this is likely to create a ‘living graveyard’ of species that will soon have nowhere suitable left to live. As such, the park has an essential role to play in conserving species and showcasing the impacts of climate change. (SOURCE: Agulhas National Park: Climate Change Vulnerability Assessment, compiled by Nicola van Wilgen-Bredenkamp (Cape Research Centre, SANParks), et al)

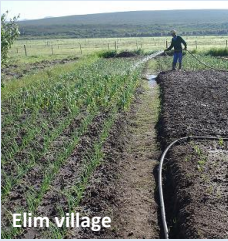
A keeper of seeds hopes to save the world from starvation

As food security comes under threat from climate change, maintaining crop diversity is necessary to ensuring a stable and sustainable food supply. The Global Seed Vault, which houses 825,000 unique seed samples in Svalbard, Norway and opened in 2008, is the insurance plan. The Global Seed Vault on the archipelago of Svalbard, Norway, is built to protect the world’s seed diversity from natural disasters and warfare. Designed to last 10,000 years, this vault is the world’s insurance policy, a way to ensure that humanity never runs out of diverse sources of food to grow. The vault is the brainchild of Cary Fowler, the culmination of a career dedicated to agricultural diversity. Back in the 1970s, he wrote his PhD dissertation on intellectual property rights related to crop varieties, which started him on his lifelong quest to protect the world’s plants. In the 1990s, he led the first-ever global assessment of the world’s plant genetic resources for the United Nations. In 2007, he became the executive director of the Global Crop Diversity Trust, a foundation to protect food security, and worked on starting the vault, which is funded by the trust and the Norwegian government. About 1,400 seed banks exist around the world, but in general they are working collections used by plant breeders and biology researchers who retrieve seeds to work on. The Global Seed Vault, which houses 825,000 unique seed samples, is the insurance for these local vaults, a backup to the backup. As food security comes under threat from climate change — a recent Intergovernmental Panel Climate Change report projects that future wheat yields will drop by two percent per decade — crop diversity is necessary to ensuring a stable, sustainable food supply. Many kinds of crops will have to be tried to see what grows in the new weather. For more information on the Global Seed Vault project go to <https://ideas.ted.com/a-keeper-of-seeds-hopes-to-save-the-world-from-starvation>.



South African plant seeds, which includes Fynbos, are kept at the Millennium Seed Bank at Wakehurst Place in the United Kingdom. Carly Cowell, previously employed at the Cape Research Centre, was the Cape Project co-ordinator for the Cape Region when this seed bank was established in 2000. SANBI was the designated South African partner in the project.

**2021 Environmental calendar days
Sustainable Cities and Communities**



May
School Grounds

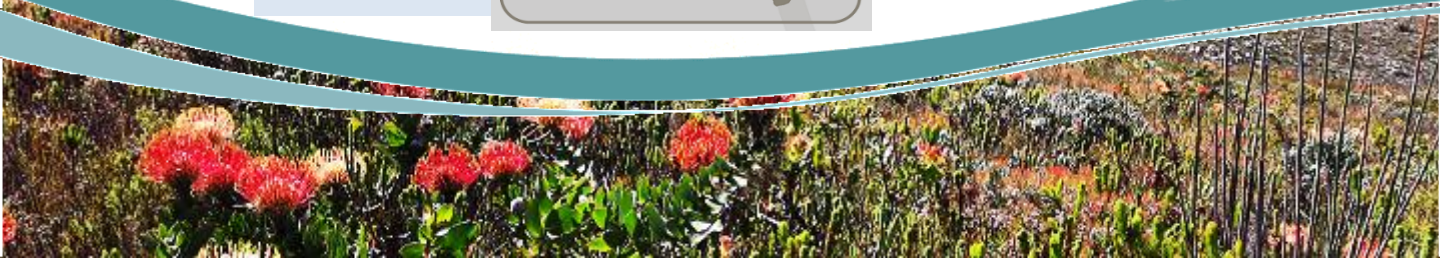
2-8	Int Compost week
8	National Bird day
8	World Migratory day
22	Int day for Biological Diversity 15
23	World Turtle day
25	Africa day 11



**Sustainable development goals
Life on Land**



(SOURCE: www.wessa.org.za)



Birds of the Agulhas Plain Biosphere – Wim De Klerk

2020 was a fruitful year for the Agulhas Plain Birding group and the Agulhas Plain in general. 203 species were recorded in 2020, a 5% increase on the previous year and an indication of the improved rainfall since 2019. Two new species were recorded for the Agulhas Plain. Eugene Hahndick recorded the first **Karoo Korhaan** near Bredasdorp and Pieter Verster a **Squacco Heron** on the farm Zoetendals Vallei. This brought the total number of species identified so far in the Agulhas Plain to 277. Other significant observations in 2020 were: a Cape Rock Thrush at Sparrekloof, a Spotted Flycatcher at the Nuwejaars SMA and one seen at Nachtwacht, an African Spoonbill breeding colony at Kocksrivier, a **Ground Woodpecker** in L'Agulhas, a **Goliath Heron** at Zeekoeivlei, the first inland record of a Black Oystercatcher, a first picture record of a Cape Penduline Tit, a Temmincks Courser seen at Blomfontein, a first picture of a Red-chested Flufftail, a Greater and Lesser Sand Plover seen at De Mond on one day! The issue whether Nicholson's Pipit does occur in the Agulhas Plain had to be solved. After consultation with Faansie Peacock and scrutinising all available pictures, it was decided to delete all records of Nicholson's Pipit as it was most likely juvenile African Pipit that was observed. The search for other breeding sites of the African Grass-owl were unsuccessful. Similar habitat next to the Nachtwacht site where the Grass-owl was spotted for the first time in 2006 was explored, but nothing was found. This project will now be widened to other areas. (SOURCE: Agulhas Plain Birding Project annual report 2020.)



Wikipedia



Unknown



W. De Klerk



pinterest

Leopard spotting in the Western Cape

The Big Five and other large animals like hyenas and hippopotamuses once roamed the valleys and plains of the Cape region. Only the leopard (*Panthera pardus pardus*) has managed to persist, largely due to its adaptable and versatile nature, and still roams free in the mountain regions of the Western Cape. However, the species faces multiple threats, including limited and fragmented habitat, reduction in prey numbers and high levels of conflict with humans. The Cape Leopard Trust (CLT), established in 2004, is a non-governmental, not-for-profit, public benefit organisation, engaging in innovative research, conservation and education projects established to facilitate and promote the conservation of biological diversity. The CLT's vision is to ensure the continued survival of leopard populations, help secure their habitat and prey base, and promote their coexistence with humans. The CLT has embarked on a mission to create a consolidated database of leopard distribution and threats to leopards in the Western Cape. This database will contribute towards a leopard habitat suitability assessment and identifying ecological corridors for leopards in the region.



Cape Leopard Trust

Leopards are nocturnal, solitary animals whose excellent camouflage and secretive nature often means that their presence in an area can go largely undetected. In a bid to centralise leopard presence data, an online data portal was created for citizen scientists to upload their leopard observations and contribute to the database. Within the online "Leopard Data Portal" data can be submitted to one of three purpose-built platforms, namely "Leopard Spotter", "Threat Tracker" and "Snare Aware". For more information on the Cape Leopard Trust, the database and the citizen scientist competition, contact Jeannie Hayward, CLT Communications and Media Manager, communications@capeleopard.org.za or visit www.capeleopard.org.za.



africanbudgetsafaris



eyesonafrica

Discovery of possible elephant molars on Dyer Island

Recently, a set of possible elephant molars was found on Dyer Island. This discovery was made by staff during a routine trip to the island to deliver rations. Extensive documented and peer-reviewed evidence indicates that around 18,000 to 20,000 years ago following the Last Glacial Maximum, reduced sea levels exposed a broad southern coastal plain or “Palaeo-Agulhas Bank” of around 60,000 square kilometres. This allowed large land-based mammals to migrate onto this coastal plain. Fossil evidence indicates that the large mammal community was species-rich and dominated by large grazing ungulates, including equids and antelopes, and quite possibly elephants. More recent evidence also suggests that elephants occurred on the Agulhas Plain as the remains of an elephant skeleton was found at De Mond Nature Reserve some years ago. The Shipwreck Museum in Bredasdorp also houses elephant remains from the region. This discovery is under investigation to confirm the record and how it ended up on Dyer Island. (SOURCE: Cape Nature Weekly 9 March 2021)



Andrae Marais

Large mammals of the Palaeo-Agulhas Plain - Jan A. Venter, Christopher F. Brooke, Curtis W. Marean, Hervé Fritz and Charles W. Helm

Research showed that the now submerged continental shelf, the Palaeo-Agulhas Plain (PAP), formed a novel ecosystem during periods of low sea level. This landscape provided nutrient-rich forage and habitats to a variety of large mammals. This is in contrast to the modern faunal assemblage found in the present-day Cape Floristic Region, which is dominated by landscapes with nutrient-poor soils and unpalatable plants. Archaeological and paleontological records for the region were used to reconstruct past large mammal communities. Modern knowledge of ecosystems and ecosystem processes helped to understand how systems functioned in the past. Species communities were reconstructed for the PAP of the last 300 ka and potential gaps in the record were investigated using Hutchinson's weight ratio theory. The results were compared to modern occurrences of mammals on the Cape South and West Coasts and the Serengeti (a comparable migratory system) using general linear models. Both sea-level and sampling effort influenced species richness in both the South and West coast regions during the last seven marine isotope stages. In the South coast a decrease in species richness during intermediate sea levels was observed which indicates patterns of use by early humans and habitat availability. Large mammals showed an extraordinary resilience to extreme habitat loss and survived as refugee species during high sea levels and low habitat availability. However the combination of habitat loss and modern human weapons were the cause of severe extinction rates during the last 400 years. Read more at <https://www.sciencedirect.com/journal/quaternary-science-reviews>.



John Leff of Poland, future Light Keeper, on his way to Cape Agulhas - Suzanne-Jo Leff Patterson continues

John Leff's journey to Cape Agulhas had him navigating the Hottentots Holland Mountain Range, crossing rivers and over rocky tracts, hoping for a ride from time to time on a passing cart, mule or ox wagon, always seeking work and accommodation at the local farmsteads. He would have travelled along wild and stormy coastal paths, fishing and living off the land. Eventually, he found himself in Herries Baai, now named Hawston, where there was an outspan for fishermen and lime-burners. They collected shells washed up on the shoreline and burnt them to produce powdered lime to sweeten the soil, making cement and lime wash to paint the walls of the houses. It was in Herries Baai that John Leff met Johannes Michiel Henn, the fisherman descended from Michael Henn from Saxony, a land-locked province of Germany. Michael had been a carpenter/sailor, with the Dutch East India Company, arriving on the Cape shores in 1748 and settled in Stellenbosch to continue his work with the Dutch East India Company as a wagon-maker. Johannes Michiel and his wife Henrietta Wilhelmina (nee Matthee), had five sons and five daughters and had moved from Hartebeesrivier to Herries Baai after identifying the need for fish in the Caledon area. In 1857, after finding more lucrative prospects to expand his growing fishing business, Johannes Henn moved his family further up the coast with his four wagon carts from where John Leff and his family left for Cape Agulhas in 1875. (To be continued)



Pole house left
Fisherman cottage, originally a pole house, right
Hawston (Herries Baai), both structures do not exist anymore.
Images: James Walton



#nu//khab = “black moon (grass and veld food begin to grow)”