

Nuwejaars River 13 October 2020



AgulhasNPark eBulletin



VOL 11 • NR 3 • February 2021

"Wetlands & Water"

www.sanparks.org

South African
NATIONAL PARKS

Rainfall figures for 2020 – after about 6 years of drought

Agulhas National Park office: 500.6mm; Bredasdorp mountain foothills 608mm; Agulhas Plain (Heuningrug) 537mm

World Wetlands Day 2021

The drought in Southern Africa in the last ten years should be an eye-opener for all people living in this part of the world. The theme for the 2021 World Wetlands Day is **Wetlands and Water**. The theme puts a spotlight on wetlands as a source of fresh water and encourages actions to restore them and stop their loss. A growing fresh water crisis is threatening people and the planet. Wetlands are being destroyed by the very users who depend on water to survive as they use more water than nature can replenish. The 2021 campaign highlights the contribution of wetlands to the quantity and quality of fresh water on the planet. Water and wetlands are connected in an inseparable co-existence that is vital to life, the well-being of people and the health of planet Earth. February 2 each year is World Wetlands Day to raise global awareness about the vital role of wetlands for people and the planet. The **2021 theme** encourages actions to restore them and stop their loss. This day also marks the date of the adoption of the Convention on Wetlands on February 2, 1971, in the Iranian city of Ramsar on the shores of the Caspian Sea. **Wetlands** are land areas that are saturated or flooded with water either permanently or seasonally. Inland wetlands include marshes, ponds, lakes, fens, rivers, floodplains and swamps. Coastal wetlands include saltwater marshes, estuaries, mangroves, lagoons and even coral reefs. Fishponds, rice paddies, and saltpans are human-made wetlands.

(SOURCE: <https://www.worldwetlandsday.org/about>; <https://www.gwp.org/.../2021/world-wetlands-day-2021>)

World Wetlands Day

2 February 2021



Wetlands and Water

Water bodies in the Agulhas Plain

The Nuwejaars Wetland ecosystem

The Nuwejaars Wetland ecosystem consists of rare and endemic natural fynbos and wetlands, which are all interlinked by the streams and rivers of the Nuwejaars Wetland ecosystem. This system drains the Southern Agulhas Plain and the very low gradients in the south-eastern plain, result in significant wetland development. A number of annual and permanent water bodies or vleis is created. The Agulhas region is unique in terms of the wide variety of wetlands (freshwater springs, rivers, estuaries, lakes, vleis and endorheic pans) that occur within a relatively small area. The river waters are generally alkaline and brackish as a result of passage through limestone-bearing Strandveld sands.

The Nuwejaars River

The headwaters of the Nuwejaars River are on the south-facing slopes of the Bredasdorp Mountains, the Koue Mountains to the west, the hills to the south of Elim, and the north-facing slopes of the Soetany's Mountain. The five tributaries of the Nuwejaars River are the Koue, Wolwegatskloof, Jan Swartskraal, Boskloof and Uintjieskuil. The Nuwejaars River measures 55km from its westernmost source, through Soetendalsvlei to the confluence of the vlei's overflow channel with the Kars River. From this confluence it flows as the Heuningnes River for 15km to its estuary at De Mond, a Ramsar site.



August 2020



Connecting to Society

Soetendalsvlei

The very low gradients in the south-eastern Agulhas Plain resulted in significant wetland development, and created the second largest lacustrine wetland and permanent water body in South Africa, the Soetendalsvlei. It is the southernmost lake in Africa and the biggest fresh water lake which drains into the sea in South Africa. Soetendalsvlei is 8km long from north to south and 3km at its widest. The drainage to the sea is the Heuningnes River and the inlet the Nuwejaars River.



Voëlvlei

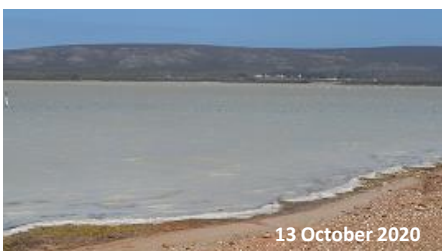
Voëlvlei is an important lake on the Nuwejaars River. It has a small catchment of its own from the Geelrug hills and receives most of its water when the Nuwejaars River is in flood and the floodwaters push into Voëlvlei. An uninterrupted link to the Nuwejaars system is important for the functioning of the vlei. Voëlvlei is moderately saline.

Waskraalvlei

Waskraalvlei is also an important wetland on the Nuwejaars River. It has a small catchment area from the surrounding hills and receives water from the Nuwejaars River in good flood years when the floodwaters push up into the vlei. Thus, it is important that an uninterrupted link to the Nuwejaars River stays open for the functioning of this system. Waskraalvlei is a relatively saline water body.



Nuwejaars SMA



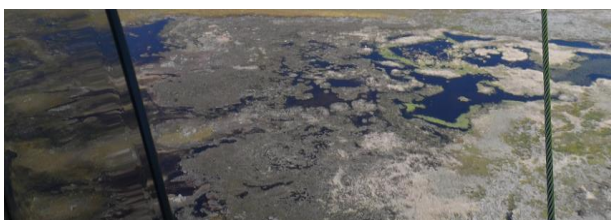
13 October 2020

Salt pans

The Springfield Saltpan forms part of a collection of pans in the Agulhas Plain; the others are the Rhenosterkop pan, the Soutbosch pan and a few smaller pans. Most Cape inland salt pans were coastal lagoons that became dry after been cut off from the sea. The term 'pan', used in South Africa, refers to endorheic basins or depressions. It includes salt pans, pans filled due to river flooding, and clay-bottomed pans filled by rainfall. Pans may be both temporary and permanent.

Pans and vleis on the western plains

On the plains between Rietfontein and Ratelrivier are a series of natural pans and vleis, *Vispan*, *Wasvlei*, *Drievleijtjies* and *Melkbospan*. The water that feed these pans come from Geelrug during the rainy season. The vleis and pans are also filled from the sea at high tide a spot called *Waaiplek* during the winter months. These smaller pans are strongly saline.

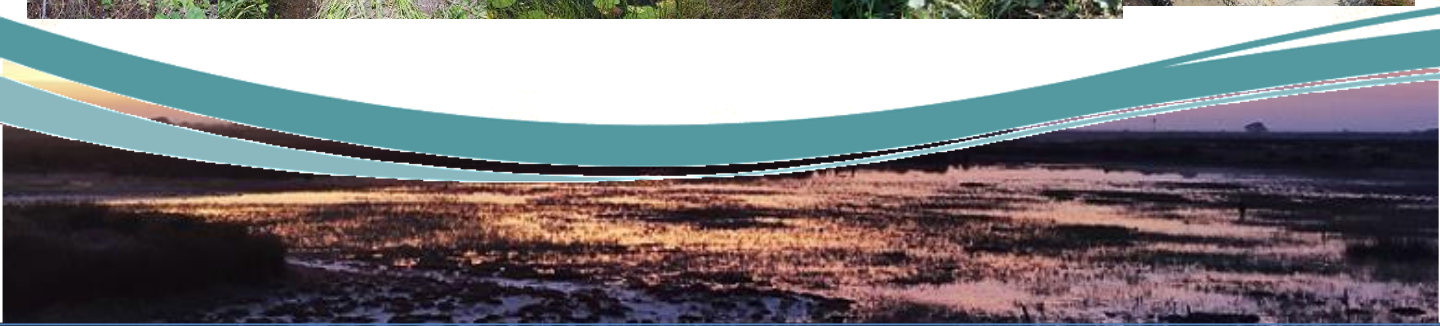


Ratel River

The Ratel River rises to the west of Elim, the Gonnakraal and Wolvengat area, and flows into the sea via an extensive wetland 20km east of Quoin Point, which is described as a storage floodplain. The catchment area is, according to Toens *et. al.* (1998), 405km² and the mean annual simulated runoff is 7.05 x 10⁶ m³.

Natural springs and bore-holes

During a groundwater census conducted in the Agulhas National Park in November 2020 by scientists from the Cape Research Centre 33 groundwater sites were documented. Sites documented as part of the Park's cultural landscape must still be added.



The role of Palmiet wetlands close to Africa’s southernmost tip – Heather D’Alton

Palmiet wetlands across South Africa have decreased by 31% since the 1940s. Yet these wetlands perform functions that human-made infrastructure simply cannot replicate, according to research by Dr Alanna Rebelo. In the Nuwejaars Wetlands Special Management Area (NWSMA), Palmiet wetlands are important “ecosystem engineers”. They are adapted to both fire and floods. They purify water and can sequester carbon. They turn stressed environments into habitats that support wildlife, as well as downstream communities that depend on this water supply. This is one of the reasons why farmers and the Elim community all came together to protect the Nuwejaars wetlands and surrounding natural areas, including the Critically Endangered Elim Ferricrete Fynbos, by creating the Nuwejaars Wetlands Special Management Area. While the Nuwejaars wetlands and vleis support immense biodiversity, these waterscapes are also crucial for another reason: they lead to the De Mond Estuary, a Ramsar site (a site of international importance because of the special bird species found here). Birders can see Damara Tern (one of only two breeding sites in South Africa for this species), Caspian Tern, Kittlitz’s Plover and the threatened Cape Cormorant, as well as Greater and Lesser Flamingo. Partnering with wonderful supporters, such as WWF South Africa and the Overberg District Municipality, the NWSMA team is working to clear wetlands and river banks of invasive alien plants. This also helps to provide a livelihood to a team of alien clearers, led by contractor, Gerty Holtzhausen. Where possible, the dried cut trees are chipped, and the chips are used wherever they are needed, like creating a walkway to reach one of the wetland sites. There are also opportunities to visit some of these wetlands sites – particularly this World Wetlands Day, February 2. The NWSMA is hosting Wildlife Guided Tours, taking visitors into a secret lake expanse where wildlife such as Buffalo, Hippo, Eland and Bontebok have been re-established. This is also an enjoyable tour for birders – especially those interested in water birds. For more info, visit www.nuwejaars.com.



Wetlands lost world-wide

It has been frequently stated, but without provision of supporting evidence, that the world has lost 50% of its wetlands (or 50% since 1900 AD). A review of 189 reports of change in wetland area has found that the reported long-term loss of natural wetlands averages between 54% and 57%, but the loss may have been as high as **87% since 1700 AD**. There has been a much faster rate of wetland loss (3.7 times) during the 20th and early 21st centuries, with a loss of 64% to 71% of wetlands since 1900 AD. Losses have been larger and faster for inland than coastal natural wetlands. Although the rate of wetland loss in Europe has slowed, and in North America has remained low since the 1980s, the rate has remained high in Asia, where large-scale and rapid conversion of coastal and inland natural wetlands is continuing. It is unclear whether the investment by national governments in the Ramsar Convention on Wetlands has influenced these rates of loss. There is a need to improve the knowledge of change in wetland areas worldwide, particularly for Africa, the Neotropics and Oceania, and to improve the consistency of data on change in wetland areas in published papers and reports. (SOURCE: <https://www.researchgate.net/publication/266388496>)

2021 Environmental calendar days

The sustainable development goals are **Life on Land** and **Peace and Justice**.

February
Water

2	World Wetland day	15
15	World Whale day	16
27	Polar Bear day	

15 LIFE ON LAND

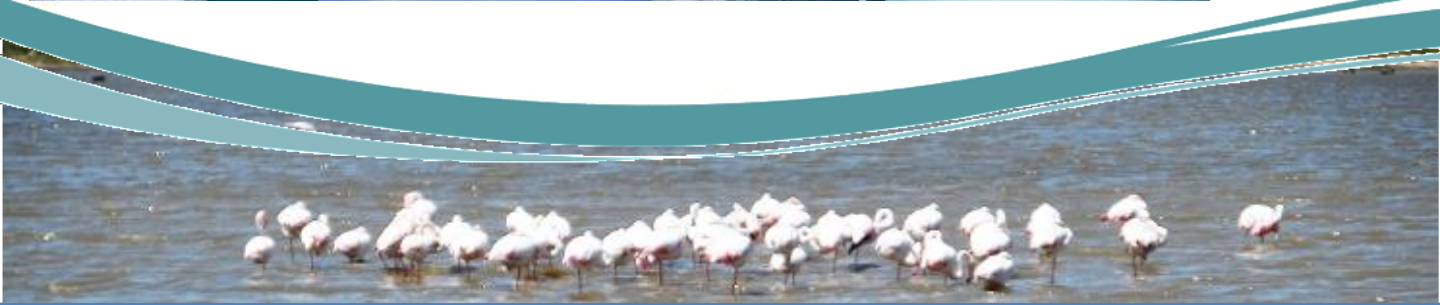


16 PEACE AND JUSTICE



(SOURCE: www.wessa.org.za)

Polar bears in trouble



Birdlife South Africa Bird of the Year 2021

BirdLife South Africa announced that the Bird of the Year in 2021 is the **Cape Rockjumper (Kaapse Berglyster, *Chaetops frenatus*)**. The Cape Rockjumper, with its red eyes and striking colouration, is one of South Africa's most recognisable bird species. As it is restricted to the Fynbos Biome of South Africa, it is a major economic asset to the country, with birdwatchers from all over the world travelling here to see it and the other endemic species restricted to the Cape Floral Kingdom. Together with its sister species, the Drakensberg Rockjumper, this bird family is restricted to South Africa and Lesotho. BirdLife South Africa chose this species as **Bird of the Year** as it is an ambassador for the Fynbos biome, the unique plant kingdom found only in South Africa. Increased fire frequency creates habitat that is favourable to Cape Rockjumpers by opening up the habitat for this species, as it likes to forage by hopping around on the ground. This is a reason that it is mostly associated with high alpine areas and mountainous terrain within the Fynbos, where vegetation is naturally sparse and low. Ironically though, a range of studies have indicated that it is vulnerable to climate change rather than benefitting from it, with decreases in range and reporting rate according to the Southern African Bird Atlas Project. This vulnerability appears to be due to a combination of factors. Firstly, they have a physiology that relies on water-loss to keep cool, an odd strategy given the bird lives in a region that experiences dry summers. Juveniles and chicks seem particularly vulnerable to heat stress, while adults simply stop foraging when it gets too warm. Range modelling indicates the species is restricted to cooler regions of the Fynbos (notably at higher altitude). Furthermore, there is evidence that the nests, made on the ground, are becoming especially vulnerable to predators such as the Boomslang. The Cape Rockjumper is thus the first South African species to gain a threatened conservation status (Near Threatened according to the IUCN red list) due to the direct and indirect effects of climate change. (SOURCE: <https://www.birdlife.org.za/bird-of-the-year-2021/>)



Dune fields

The shoreline of the Cape Agulhas coast has both rocky (60 km) and sandy (45 km) beaches, followed by sand dunes, including rare hummock-blowout and playa-lunette dunes. The dune fields as a habitat type are an important conservation target for the Overberg and Agulhas National Park coastline. Dune fields are not a marine habitat but being outside the tidal influence they are linked to a marine environment. Dune fields along the Cape Agulhas coast are not only ecological sensitive, but also a very sensitive and important archaeological region from the Holocene era, of the last 10 000 years. In 1984 Martin Hall of the University of Cape Town conducted an archaeological survey of the Agulhas dune fields. It was found that the dunefield has an enormous number of archaeological sites from the Holocene period. The archaeological remains include middens but also burials and isolated finds such as clay pots. Stone-age people from the Holocene period moved in three specific environmental zones: the coastline, the inland border of the dunefield and the smaller coastal mountain ranges, Sandberg, Soetany's Mountain and Heuningrug. Groups of Stone-age people most probably lived permanently on the Agulhas Plain and moved in smaller groups to the coast to harvest seafood to bring back to the permanent dwelling. Middens are the refuse dumps of the Stone-age people from those years and they differ in structure and composition. The composition of the sites shows summer use of the area and that the low-lying areas were avoided in the winter. Shellfish have been used as a food for at least the past 120 000 years. Shell middens are distinguished from naturally formed shell mounds through the presence of stone tools, shards of pottery, bits of bone, fish hooks made of bone, stone sinkers and different types of shell which were eaten by these people. These sites are all protected by the National Heritage Resources Act, No 25 of 1999. Unfortunately, dune fields are the playing ground of the 4x4 fraternity and a substantial number of middens are being destroyed when vehicles drive over them. Artefacts are also illegally collected which make later identification and interpretation by archaeologists impossible.



Nuwejaars Wetlands Guided Tours

The Nuwejaars Wetlands Guided Tours are the **ONLY** tour in the Overberg to provide experiences with big game like Buffalo and Hippo. Two tours per day are being presented: the Sunrise and Sunset tours, both include refreshments at the lookout point. These tours will run until end February 2021, subject to COVID-19 regulations. It is essential to wear face masks, maintain social distancing, and observe all other health protocols. All proceeds will go to the NWSMA's conservation efforts. For more information, contact Eugene on 079 517 9032 or email book@nuwejaars.com. Information is also available on www.nuwejaars.com and **bookings take place through Webtickets.**



February (ong)/o-ha in Khoes means stars are dead (origin unknown)