

# off the fence.

## Endangered with Michaela Strachan

13 x 30'

EPISODIC BREAKDOWN

### 1. Introduction

This series presented by Michaela Strachan explores the magic biodiversity and the natural landscapes in South Africa, featuring the many species that are under threat (mainly due to the reduction of their natural environment due to the enormous pressure of the fast expanding human population). Extinctions are the product of human activities and lead to a massive loss of unique biodiversity. There are many positive examples in South Africa highlighting how a positive attitude towards conservation of biodiversity can have long-term benefits for the entire country. This series follows scientists and conservation projects working in the field with species that are threatened in an effort to reverse the adverse situation.

### 2. Fynbos

This episode explores the spectacular landscape and biodiversity found in the fynbos and set in the Table Mountain National Park (TMNP) - surrounded by the city of Cape Town. The protected wilderness of the TMNP gives us a glimpse of the landscape before human settlement. With a huge diversity of plants, baboons, black girdled lizards and the enigmatic Cape dwarf chameleon. The city has also surrounded wetlands and traps the unique tenor of the Cape, the western leopard toad that in August wake up the neighbourhood with their impressive mating call.

### 3. Renosterveld

This is the vegetation of the Cape of which most have been lost to agriculture. The few patches that remain contain two rare species - the Black Harrier and the Geometric tortoise. Rob Simmons is using the latest technology to reveal the secret life of this magnificent raptor. Satellite tracking are providing vital information to protect these birds and Rob is followed while working in the field trapping birds to attach the tracking devices. This episode follows scientists and volunteers searching the Renosterveld for the elusive geometric tortoise to maintain accurate information of the population numbers.

### 4. Succulent Karoo

This is an extensive semi-arid landscape on the western side of South Africa. Here the cold Benguela current releases little moisture into the air and the land is bare. The little water that falls in this region is rather predictable and there is relief from the ocean in the form of fog that is the

lifeline for many plants in this region. This episode explores the unreal diversity of succulents found in this dry landscape, all of which have adapted to conserve water. Ranging from the giant quivers, to the dwarf succulents in the pebble fields. Plants have adapted to this harsh landscape. This is a delicate landscape and recently recognised as an area of outstanding biodiversity - a real natural asset for the country.

## **5. Great Karoo**

A large expanse of semi arid land in the centre of South Africa is the Great Karoo. This was the land that in the past witnessed large herds of animals migrating, constantly tracking the rainfall and the abundant grasslands. The arrival of man changed that balance and many grazers competed with the livestock brought into the country. The decimation was fierce and many species went extinct due to uncontrolled hunting. The Cape Mountain Zebra was nearly exterminated from this landscape, but opportune intervention saved this magnificent African horse. Today the Cape Mountain Zebra National Park holds a healthy population of this magnificent zebra and a relocation program is aiming to populate other areas, where this zebra occurred historically. We follow the capture team that works long hours to relocate several families to new reserves. We show the conservation efforts to restore damaged riverine landscapes in the Karoo the main habitat of one of the most endangered and elusive mammals in Africa, the Riverine Rabbit.

## **6. Subtropical Thicket**

This vegetation covers a very small portion of the country, but is a highly diverse ecosystem with no less than 1500 plants species and 48 species of medium to large mammals. Thicket is an impenetrable bush wall with many plants showing mechanical and chemical adaptations to reduce herbivore impact. The key players in this environment are the African Elephant that is able to open tracks while foraging and reducing the plant cover. The Addo Flightless dung beetles also contribute to recycling the nutrient output from the elephants back into the soil. The thicket vegetation has a wonder plant, which instead of becoming unpalatable to herbivores has done just the opposite; the entire plant is a succulent and highly nutritious meal. After heavy browsing the plant is able to recover or re-root from small pieces that are dropped on the ground. This is the spekboom - a plant that is not only a key player in the thicket vegetation, but also reduces global warming, trapping CO<sub>2</sub>, and can become the new answer to restore degraded farmland in the region.

## **7. The Highlands**

This program covers the imposing Drakensberg Mountains and two of its most striking birds that are resident of the highlands of South Africa. The majestic Bearded Vulture is rapidly disappearing in this region mainly due to poison by farmers and for traditional medicine. We follow the research team from uKhahlamba Drakensberg Park in their quest to trap and satellite tag one of the birds. The information provided by this method is vital to understanding the dispersion range of these birds and will help to direct the conservation efforts on the farms surrounding the park. Vulture restaurants provide poison free meals for vultures and are an ideal location to trap these giant birds. Another team works on the cliffs close to the vulture colony. When the Southern Bald Ibis chicks are almost ready to fledge, they ring the birds as part of a long-term project that will help to elucidate their dispersion in the country.

## **8. The Overberg**

Not far from Cape Town there is a coastal plain dominated by extensive agricultural land. On the coast the remarkable De Hoop Nature Reserve is a safe home for an unique antelope - the Bontebok. In the past it was hunted to near extinction. By night scientist capture the Cape Horse-shoe Bat. The striking adaptations of this flying mammal that is able to see in total darkness using sound waves. Outside the nature reserve the landscape have changed drastically over the years and became agricultural land. This in turn has attracted the largest population of the elegant Blue Crane, the national bird of South Africa. Researchers are working in collaboration with farmers to reduce negative impacts on the birds. The region is diverse and the small-protected land along the coast has also become an international conservation hotspot as it is the main calving ground of the Southern Right Whale, now a flagship species in the country.

## **9. Afromontane Forest**

These forests are mostly located on gorges or at the coast that are cold and with abundant fresh water. The Giant Yellowwood tree is not only a true giant, but also the pillar for the survival of the endemic Cape Parrot. This bird depends completely on this tree for breeding and as the main source of food obtained from the fruit of the female trees. Unfortunately the selective logging of these trees reduced the breeding habitat and food supply for the parrots and today they are facing a precarious scenario. We follow the work by scientist and the potential alternatives to stop the extinction of this unique bird of the African forest.

## **10. Birds of the Benguela**

Two currents, the warm Agulhas in the east and the cold Benguela on the west, bathe the southern tip of Africa. The icy waters of the Benguela is rich in nutrients and supports a large abundance of pelagic fish such as anchovies and pilchards that in turn are the main backbone of the entire marine ecosystem. Two marine birds are unique to the Benguela - the African Penguin and the Cape Gannet, one is a superb swimmer and diver and the other an expert plunge diver. Both birds depend on good quality protein obtained from pelagic fish.

## **11. Grasslands and Westlands**

In this episode we explore the grassland that seem rather a monotonous landscape, but inhabited by some intriguing animals. The grassland acts as a massive sponge capturing water on the highlands and on the coast and slowly releasing it to adjacent wetlands and rivers. Some areas still have the rare Oribi, a delicate and beautiful antelope adapted exclusively to this grassland. Today they live mostly on a fragmented landscape and farmers play a vital role in their conservation. On the adjacent wetlands the rare Wattled Cranes build their nests. It is one of the rarest birds in South Africa. In the grassland of the highlands the rainfall create spongy wetlands that are the main breeding areas of one of the most beautiful birds in Africa, the Grey-Crowned Crane. On the dry grassland the Giant Girdled Lizard (also known as the Sun Gazer) resembles a medieval spiny dragon. A unique reptile that lives in burrows and there are not many colonies left in the wild.

## **12. Lowveld and Bushveld**

This episode takes us to the heart of African game. This is the land with large mammals so unique to Africa. Species that requires massive territories, carnivores like the African Wild dogs, has become persecuted to the point of becoming most endangered mammal in Africa. The Ground Hornbill, an extremely long lived bird, has a chance to survive. Most of the large predators have

been removed from this landscape and that also affected vultures that depended on available carcasses. Today the rehabilitation of injured and poisoned birds has contributed to reduce the mortality of these majestic scavengers. The increased interest and economic benefit of tourism can contribute to conservation of this environment and there are signs that large areas of land, formerly utilised as cattle farms, have now reverted to game parks.

### **13. Kalahari**

This episode explores the red sands of the Kalahari in the North West of the country. Here we see animals and plants adapted to the harsh and dry area. Two of the most striking mammals, the African Lion and the Cape Pangolin have made their home living at the edge. The distribution of the African Lion has shrunk drastically in historic times. There are only few viable populations of Lions in South Africa and the Kalahari seems to provide hope by expanding the park to a larger Transfrontier protected land. These red sands are also home to the most well protected mammal on earth. The Pangolin, a termite and ant-eating specialist that slowly is revealing its secrets as scientist follow them at night on their foraging trips. There is no doubt that this bizarre looking mammal has evolved such protection as respond to avoid the land predators of the African night.