

The Waterberg

TC	VO
00:03	In the Limpopo region of South Africa lies an ancient land.
00:11	Forged by water, today it provides life to many.
00:18	From rolling grasslands to rocky gorges, wildlife has learnt to make the most of what's on offer.
00:30	At its heart life giving waters burst from giant rocks and spread across the landscape.
00:37	Supporting everything from miniatures, to the masses.
00:51	This is the Waterberg, a land of plenty.
10:01:17:09	AFRICA'S WILD HORIZONS
10:01:21:22	The Waterberg - Mountains of Life
01:35	The Waterberg runs from west to east for almost 150 kilometers.
<i>IMP</i>	<i>The Waterberg runs from west to east for over 90 miles.</i>
01:43	Lying in the north-eastern corner of South Africa it sprawls across an area of fourteen and half thousand square kilometers and makes up the first UNESCO reserve in the region.
<i>IMP</i>	<i>Lying in the north-eastern corner of South Africa it sprawls across an area of over five and a half thousand square miles and make up the first UNESCO reserve in the region.</i>
10:01:21:22	Texted element – "Waterberg"
02:04	Created by mineral rich rivers almost two billion years ago, it is so old; it has been around for longer than terrestrial life itself.
02:22	Today it stands at the center of an incredibly diverse landscape of open grassy plains,
02:32	Bushveld savanna,
02:39	Rocky gorges,
02:43	Ravines,
02:52	And cliffs that tower up to 600 meters high.

<i>IMP</i>	<i>And cliffs that tower up to 2,000 feet high.</i>
03:04	But it's the bedrock of these mountains that holds their greatest gift.
03:11	Bands of porous rock soak up water like a sponge, storing it in underground aquifers.
03:23	Once full, they pour out of the mountains themselves.
03:31	Giving rise to the name Waterberg or Water Mountain.
03:44	As they descend, the waterfalls and streams merge, creating rivers that carve their way through the landscape.
04:06	As they shape the land, they also support a rich variety of life.
04:17	Grazers feast on the lush grass of the plateau's rolling planes.
04:39	In the lowlands, sprawling savanna stretches as far as the eye can see.
04:48	And present throughout is water.
05:00	Streams, rivers, dams and waterholes bind the landscape together.
05:39	This diverse wilderness is the setting for many natural dramas.
05:46	Battles will be fought, mates will be won and a new generation will be born.
05:55	But all will rely on the Waterberg for sustenance.
06:05	The annual rains arrive in November and can last for up to five months.
06:14	Their arrival ushers in a time of plenty in the Waterberg.
06:20	Animals are preoccupied with one thing: eating their fill.
06:26	This is a time to bulk up.
06:45	Grazers move in large, mixed herds - feasting on the bounty.
07:15	After months of drought, the grass is the quickest to take advantage of the landscape's renewed moisture.
07:25	More than 200 different species grow in the Waterberg, offering a banquet to all manner of herbivores.
07:40	And the elephants are amongst those cashing in.
07:50	They have one of the most varied diets of all herbivores, eating everything from leaves to roots and bark.

08:18	But with the coming of the rainy season they shift their focus to the sweet new growth of tender grass.
08:53	It is also the perfect time of year to raise young.
08:59	With the abundance of food on offer, mothers are full of milk and in prime condition to support the next generation.
09:09	For many antelope, the first few days of life are spent hidden away among the long grass.
09:16	Safe from unwanted attention.
09:19	But as soon as they are fit enough to follow their mothers, they re-join the herd.
09:27	And within four and a half months they'll be fully independent.
09:34	For others in the grasslands the introduction to herd life is much swifter.
09:40	Blesbok mothers give birth surrounded by others.
09:50	The lambs will stand within 5 - 10 minutes and walk within 20.
09:57	This ensures the young are ready to flee as soon as possible making them less vulnerable.
10:08	It is a technique that has been adopted by a number of the grazers.
10:13	Wildebeest and zebra new-borns are quick learners.
10:17	They too are up and running in a matter of minutes.
10:24	But for the wildebeest, there's more to things than just being able to run.
10:29	Timing is everything.
10:34	Up to 90 percent of calves will drop in the space of a three-week period coinciding with the coming of the rains.
10:44	And if you want to survive, you better arrive on time.
10:55	When pursued by predators, a wildebeest's best hope is to mix in with the fleeing herd.
11:06	But youngsters have tan coats, making them easy for predators to single out.
11:16	In the two months it takes for a darker coat to grow, some calves will be lucky, some will not.
11:33	While escaping danger is the primary concern for many, there are those who have little to fear from the local predators.

11:48	White rhino calves have formidably armed parents to look after them.
11:57	The youngsters will spend the first two to three years of their lives with their mothers.
12:06	Staying side by side under her protection until she calves again.
12:24	But for the grazers timing the birth of their offspring with the arrival of the rains gives them the best chance of survival and results in a sudden increase in herd members.
12:38	But despite all their best efforts, it doesn't go unnoticed.
12:46	Lions patrol the grasslands and savannas, on the lookout for an easy meal.
12:52	The herds many pairs of eyes watch back and the age-old battle of predator versus prey continues.
13:03	But sometimes the danger lies closer to home....
13:18	A male zebra must fight off the challenge of a rival in order to secure sole breeding access to his harem of females.
13:40	Fights can be fierce.
13:52	A combination of biting and high-powered kicks is used to secure victory.
14:19	The Waterberg provides a home for huge numbers of creatures and it is not only out on the grasslands where this can witnessed.
14:45	The mountain range is home to one of the rarest animals on the planet.
14:53	The Waterberg Copper.
15:01	Thought to have gone extinct in the 1980s it was recently rediscovered living on a small plateau.
15:13	A microhabitat no larger than three hectares has harbored the species and sheltered it from the encroachment of the modern world.
<i>IMP</i>	<i>A microhabitat no larger than seven and a half acres has harbored the species and sheltered it from the encroachment of the modern world.</i>
15:28	It is an amazing story of survival against the odds.
15:34	The Waterberg Copper requires a unique set of conditions to reproduce and has a fascinating life cycle.

15:43	It will only lay eggs near one of two host plants and a particular species of sugar ant must have a nest within the vicinity.
15:55	The ants build their homes in sandy soil, close to wetlands, making the Waterberg the ideal environment for them.
16:06	This is the only place in the world where these butterflies are known to exist.
16:14	Females lay their eggs in the sand.
16:20	Once hatched the caterpillars live within the ant nest.
16:26	But by night the ants escort the caterpillar to the host plant, where it feeds.
16:35	There is a reason the ants go to so much trouble to accommodate and protect the caterpillars.
16:44	As they feed they produce a sweet honeydew secretion from glands on their abdomen which the ants find irresistible.
16:55	Ants are one of the few creatures in the world that farm other animals.
17:02	In this incredible symbiotic relationship, both the ant and the butterfly are rewarded.
17:10	For the security of their nest the ants receive an invaluable food source and the caterpillars are provided with a safe place to grow and develop.
17:22	During its next stage of life the Waterberg Copper transforms into a stunning butterfly.
17:31	The bright colors are a warning to predators: it's poisonous.
17:39	While feeding on the toxic host plants, the caterpillars absorb the poisons, retaining them through their metamorphosis into adulthood.
18:00	Not all of the Waterberg's residents have such an intricate life cycle but there are some who face the same pressures of extinction.
18:12	White rhino populations are being decimated throughout Southern Africa by an insatiable demand for their horn from Asia.
18:22	In traditional Asian medicine, rhino horn is thought to cure illness and guarantee good health.
18:33	It is a problem that is affecting parks and reserves across the region, including the Waterberg.
18:42	Drastic measures are being taken and armed guards are posted throughout the

	area.
18:49	It is a battle that must be won if the rhino is to have chance of survival in the wild.
19:02	But for now life is good for the Waterberg's rhino –
19:08	There is plenty of grass, which makes up their entire diet.
19:16	An inability to lift their heads above shoulder height combined with poor eyesight means they must rely mainly on their sense of smell and hearing to detect threats.
19:31	Big ears move independently, focusing in on the direction of sounds like huge satellite dishes.
19:52	Their inability to lift their heads above shoulder height means that they are unable to swim, and can't submerge themselves completely.
20:08	Rhinos are dependent on the presence of water, often drinking twice a day to quench their thirst.
20:18	The waterholes are a common meeting place for the large mammals and they offer more than just drinking water.
20:29	Wallowing serves many purposes - it discourages and removes irritating insects like ticks.
20:42	But it is also a bit of fun.
20:50	Elsewhere in the country, elephant herds can walk for many days in their search for food, often going without water but here in the Waterberg they never go thirsty.
21:03	Once refreshed, the muddy elephants find a scratching post and rub up against it, dislodging any unwanted passengers in the process.
21:22	Returning to the same waterholes and rivers year after year, their favorite trees become smoothed over time.
21:37	But some itches require a little extra soothing.
21:57	The hot, wet months of the rainy season see a boom in insect numbers.
22:05	Swarms of flies follow the herds.
22:16	For the buffalo it seems there is a price to pay for the abundance of food and water.
22:29	The grasslands largest animal has developed another technique for keeping the

	invaders at bay.
22:36	Elephants don't only bathe in the water - they also caked their skin with soil to avoid biting and sucking insects.
22:59	While the insects are a nuisance for most, they are an opportunity for others.
23:09	Golden orb spiders are prepared for the infestation.
23:15	One of the oldest types of spider in existence, they hold the crown for the world's strongest spiders web.
23:24	Spun from yellow silk, it is maintained on a daily basis.
23:32	Ensuring it is as sticky as possible.
23:38	It's done the job.
23:42	Neurotoxic venom is injected, immobilizing the victim.
23:50	Before it is wrapped in silk, taken deeper into the nest, and stashed.
24:12	With so much food available in the Waterberg at this time of year, the spider stores some for a later date.
24:29	Throughout the Waterberg predators are taking advantage of the new food on offer.
24:36	Whirligig beetles feed on other aquatic insects.
24:45	Compound eyes allow them to see both above and below the water.
24:52	And their ability to turn sharply helps them evade larger predators, casting neat circular shadows on the streambed.
25:13	Of all the animals benefiting from the glut of food, the Ox-pecker is one of the most successful.
25:22	Attaching themselves to a host, they rid the animals of their parasites.
25:30	Ticks, fleas and almost anything that moves stand no chance against their nimble beaks.
25:39	Perfectly equipped for this life, they have evolved a number of adaptations.
25:48	Short legs and sharp claws help them grip their host and an incredible feeding technique of combing hair with their beaks has allowed them to thrive.
26:05	Known as scissoring, it is a very effective method for them to find food.

26:13	But despite their reputation, some Ox-peckers seem to have a darker side.
26:24	Individuals have been witnessed feeding from wounds.
26:31	It is believed that some Ox-peckers have developed a taste for the blood they find within the ticks they feed on.
26:42	And they have been observed opening up existing wounds on their host animal's hide in order to drink their blood.
26:57	By keeping the wound open in this way, the bird gets a constant supply of blood but it also exposes its host to an increased risk of infection.
27:09	It seems not all Ox-peckers are as helpful as we once thought.
27:26	Throughout the Waterberg the daily search for food has driven creatures to adapt.
27:33	While many utilize the daylight hours, others emerge after dark.
27:40	The Lesser bushbaby.
27:51	Sleeping in groups of up to 7 during the day, they spend the night foraging alone.
27:58	Tree sap makes up a large part of their diet and is vital to their survival during the winter months.
28:08	But tonight, there is more than just sap on the menu. The abundance of insect life has caught the bushbaby's attention.
28:19	Long hind limbs and short forelimbs make them well adapted to launching attacks from vertical branches.
28:31	Feeding on a range of arthropods, they are one of the nights most accomplished predators.
28:46	For another mammal, the search for insects is not all about food.
28:52	A troop of Vervet monkeys bask in the morning sun.
29:00	Ranging all the way from South Africa to Ethiopia, they are found in healthy numbers in the Waterberg.
29:16	Living in large groups they are highly social - and one of the best ways of reinforcing bonds is by grooming.
29:28	Relatives sift through one another's fur, removing any parasites.

29:39	Grooming is commonly used as a courtship strategy as it brings males and females into close proximity to one another.
29:50	It is vital to the troop's success.
29:59	For the Vervets the Waterberg's rains will provide a glut of fruits to see them through the dry months.
30:19	Despite the abundance the waters bring, some creatures still rely on the dry and dead in order to find what they need.
30:36	A bearded woodpecker is on the hunt for a meal.
30:41	He uses a sharp, barbed tongue to remove anything he uncovers.
30:53	Unlike the Waterberg's other insectivores, bearded woodpeckers feed mainly on wood-boring beetles and their larvae which can be found all year round.
31:05	As well as helping locate a tasty meal, drumming on trees also helps him establish a territory and attract a mate.
31:16	The hollow tree acts as a perfect megaphone.
31:32	Another of the Waterberg's feathered inhabitants doesn't need to drink. In fact, ground hornbills don't need to drink at all.
31:43	They can survive entirely on the moisture in their food.
31:50	These unusual creatures are the largest hornbills in the world and can live for over sixty years.
32:02	Spending most of their day searching the savannas for food.
32:08	Ground hornbills are predominantly carnivorous, feeding on a large range of insects, reptiles, amphibians and even small mammals and birds.
32:30	Living in groups of up to 12 individuals, they occupy and vigorously defend large territories - reaching 100 square kilometers.
<i>IMP</i>	<i>Living in groups of up to 12 individuals, they occupy and vigorously defend large territories - reaching 38 square miles.</i>
32:51	These groups normally have one breeding pair, and as a species they have one of the slowest reproductive rates in the bird world.
33:00	On average they breed successfully every 9 years.
33:10	Females always lay two eggs, three to five days apart.
33:16	The first chick to hatch invariably out-competes the second, which will be killed

<p>33:29</p> <p>33:36</p>	<p>by its elder sibling or starve to death.</p> <p>The surviving chick then takes another six years to reach adulthood.</p> <p>These birds have evolved to survive in the harshest of environments but in the Waterberg they are provided with more than they need.</p>
<p>34:06</p> <p>34:16</p> <p>34:21</p> <p>34:41</p> <p>34:49</p> <p>34:56</p> <p>35:07</p> <p>35:15</p> <p>35:30</p> <p>35:40</p> <p>35:50</p> <p>36:01</p> <p>36:06</p> <p>36:11</p> <p>36:28</p> <p>36:37</p> <p>36:51</p> <p>37:08</p>	<p>Although water doesn't play a key role in all life cycles, it impacts most.</p> <p>And most animals couldn't exist without it.</p> <p>The Waterberg's water levels are dictated by the rains, but there are areas of permanent water. Rivers and waterholes remain full year-round.</p> <p>These wetlands provide a residence for a host of animals.</p> <p>But one group appears in more variety than most.</p> <p>The Waterberg's rivers, streams and waterholes teem with birds of many shapes and sizes.</p> <p>Wattled lapwings patrol the wetland fringes.</p> <p>Terrestrial birds, they never venture into deeper water.</p> <p>This domain is reserved for true waterfowl.</p> <p>Unlike the lapwing, Knob-billed ducks are buoyant, allowing them to float on the water's surface.</p> <p>This ability allows them to reach the rich aquatic grasses and water lilies other birds can't.</p> <p>Some have taken life on the water a stage further.</p> <p>Cormorants feed exclusively on fish.</p> <p>Special feathers allow water to penetrate, enabling the birds to swim well under water as they chase their prey.</p> <p>After fishing, cormorants stand in a characteristic pose, with wings out and neck extended.</p> <p>Originally thought to dry their wings, it is now also considered to aid digestion by helping the birds swallow fish.</p> <p>Darters and grebes have evolved the same technique for fishing - and all can be found along the permanent water sources of the Waterberg.</p> <p>While many have mastered life under the water, one has adapted to a life on top</p>

	of it.
37:19	African jacanas spend their lives foraging on floating lily pads. They even build their nests here.
37:30	In what is known as 'lily-trotting', elongated toes enable them to spread their weight enough to stop them sinking.
37:47	It is an adaption that has allowed them to conquer a habitat few other birds can.
37:54	Meaning all the more insects for them to feed on.
38:06	The birds are not the only ones feeding here.
38:23	Hippos spend the majority of their day in the water and have evolved a number of adaptations as a result.
38:33	Their ears fold closed when submerged...
38:41	And flick open in a flurry when surfacing.
38:47	High, ridged eyes protrude above the water.
38:52	And nostrils have evolved to seal shut while swimming.
38: 58	Adults can spend up to five minutes below the surface –
39:13	And surfacing is as instinctive as breathing itself, even in their sleep.
39:27	Feeding out of the water, mainly at night, days are spent digesting, sleeping and socializing.
39:44	Hippos are so at home in their aquatic habitat, calves are able to suckle underwater.
39:56	There are others who depend on Waterberg's permanent oases.
40:03	Modern day dinosaurs, their adaptations have evolved over millions of years.
40:11	Crocodile's ears are now just slits and their eyes are coated in a protective membrane.
40:21	They are the ultimate freshwater predator.
40:36	Lying undetected in the water, they ambush animals as they come down to drink.
41:06	Rows of deadly teeth drag prey into the depths, holding them there until they drown.
41:39	For many the dependence on water is because it provides food. And crocodiles are not the only reptiles patrolling the Waterberg.

41:48	Water monitor lizards bask in the sun.
41:53	Like crocodiles, they need to warm up before heading off to hunt.
42:01	They are also perfectly adapted to their habitat.
42:18	Once warm, they head to water's edge to fish.
42:31	At home in or out of the water, a long, powerful tail powers them along.
42:41	While long nails and sharp claws are perfect for catching prey.
42:49	They are not the only ones relying on the waters to provide a meal.
43:03	It's not long before their patience is rewarded.
43:29	The monitor lizards, hamerkops and herons all have different techniques.
43:47	But the result is always the same.
43:55	
44:33	The Waterberg supports a diverse mix of habitats and a host of creatures.
45:21	From the ancient and deadly...
45:26	To the weird, and wonderful.
45:31	Almost all have come to depend on the land's waters for food and shelter.
45:41	It is an ever-present life source in the Mountain of Life.
10:45:50:19	Credits