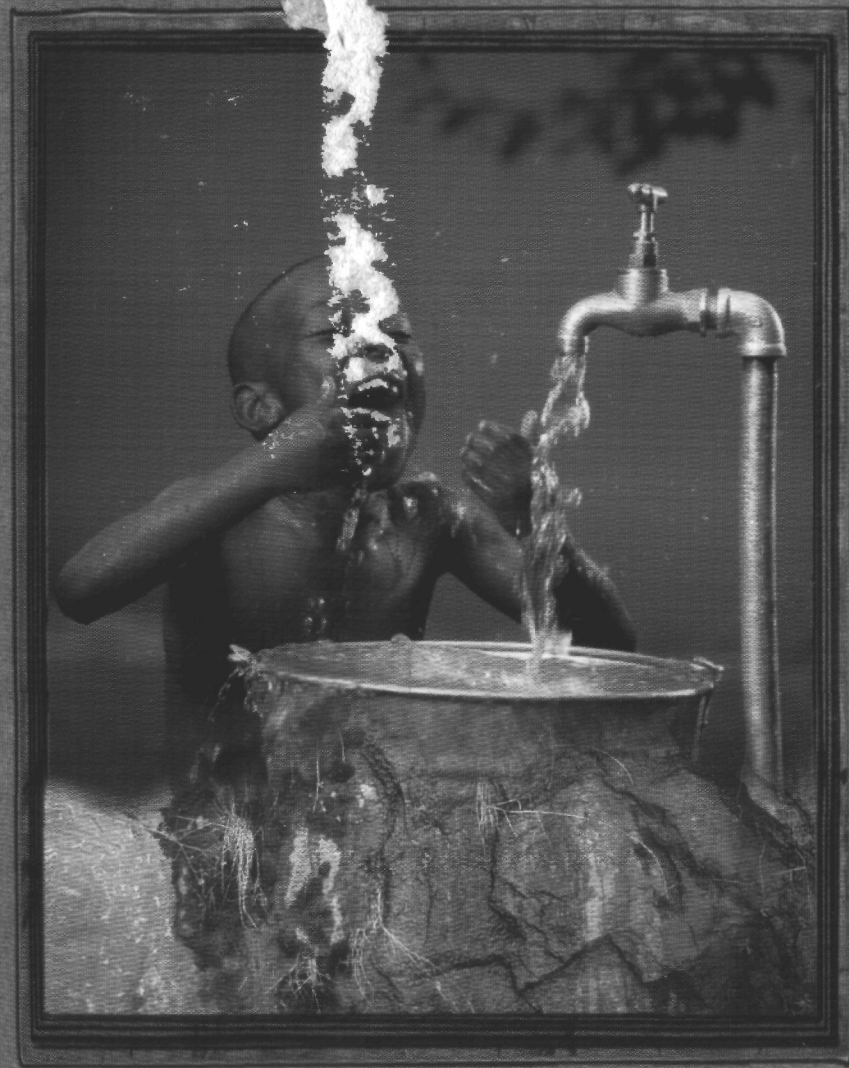


The Hidden Treasure



THE DIARY OF GROUNDWATER

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Tuesday, 5th

We entered the village cautiously, for warriors lined the entrance.

We heard cattle lowing from beyond the kraal fence and the earth seemed to bake even hotter here. We wondered how the people survived this arid thorn-tree land. With the warriors' wary eyes upon me, I sneaked a look at the cattle over the kraal fence. I expected the cattle's insistent lowing to be of thirst; dreadful dusty thirst, with desperate eyes waiting for death in the scorching sun that drains the moisture even from their tough hides.

Instead they were fat. I blinked in surprise.

Their eyes were dark and moist - almost sparkling with hidden knowledge.

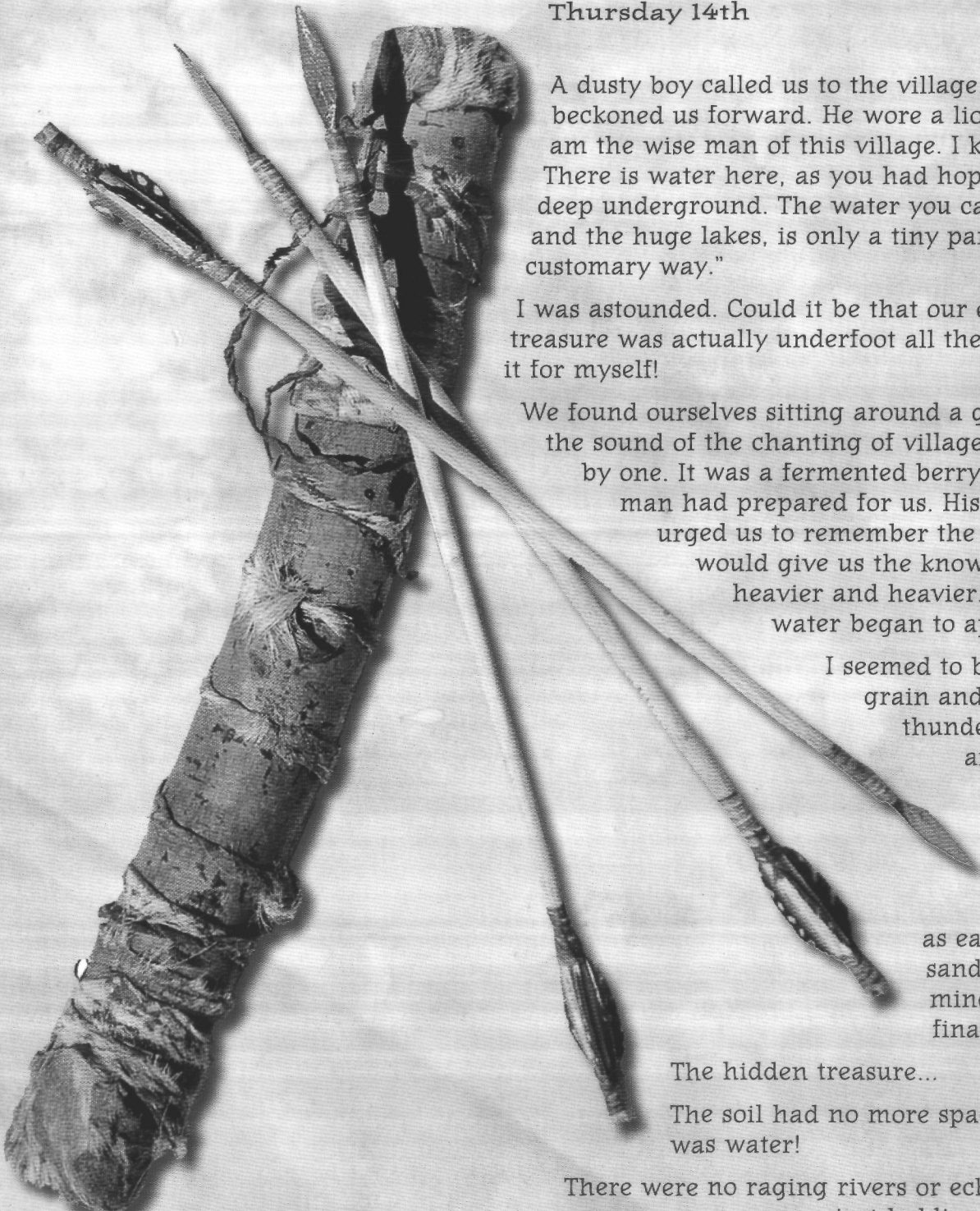
"What on earth is going on?" I thought, my mind a blank.

"Where on earth are these people getting water?"

From across the kraal, I heard a dry laugh. I turned to see a man of great presence. He stood taller than the kraal fence and was magnificent in his regalia. The sun shone brilliantly on his silver hair, and I was struck by the wisdom within his eyes.

This man knows, I thought, where to find that for which I and so many before me have searched this thirsty land.





Thursday 14th

A dusty boy called us to the village. The wise man who I'd seen across the kraal beckoned us forward. He wore a lion tooth necklace which clicked as he spoke to us, "I am the wise man of this village. I knew you were coming and thus I have prepared. There is water here, as you had hoped. Yet, it is held close to the bosom of the earth spirit. It is deep underground. The water you can see far from here, in the mighty thundering waterfalls and the huge lakes, is only a tiny part of the water underground. I will show it to you in the customary way."

I was astounded. Could it be that our endless searching had been misguided and the treasure was actually underfoot all the time? Bosom of an earth spirit or no, I intend to see it for myself!

We found ourselves sitting around a glowing fire. The air was shimmering with heat. To the sound of the chanting of villagers, we drank from the gourd passed slowly to us, one by one. It was a fermented berry concoction with a bitter-sweet smell that the wise man had prepared for us. His eyes shone. He was grinning in the firelight and urged us to remember the smell, for it spoke of what was to come. He said it would give us the knowledge we needed to find our treasure...my head felt heavier and heavier. The noises around the fire grew distant...a vision of water began to appear...

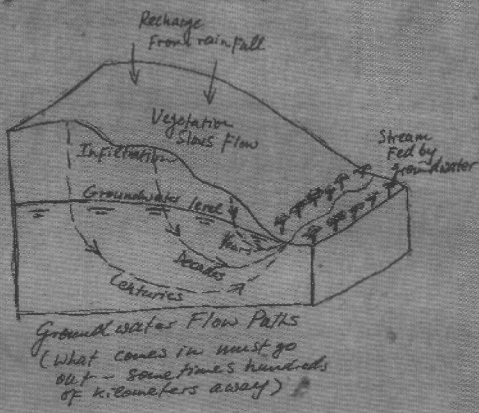
I seemed to be moving through the soil. I saw each tiny perfect grain and the tiny spaces of air in between. I saw huge thunderheads grow in the massive skies above the plains, and with shrieking winds, break pouring rain over the parched land. Enormous rain drops hit the soil, each drop like a perfect sparkling diamond. The water grew into puddles, and slowly trickled away through tiny cracks in the hard ground. It sank deep into the soil. The earth became darker as each glistening drop danced through the grains of sand. I saw that it took the goodness of the minerals in the rocks and soil with it, and finally, I reached it...

The hidden treasure...

The soil had no more space for air; oh, glorious Mother of Earth, it was water!

There were no raging rivers or echoey caverns as I had imagined - the earth was like an enormous sponge, just holding the water there, cool, deep underground.



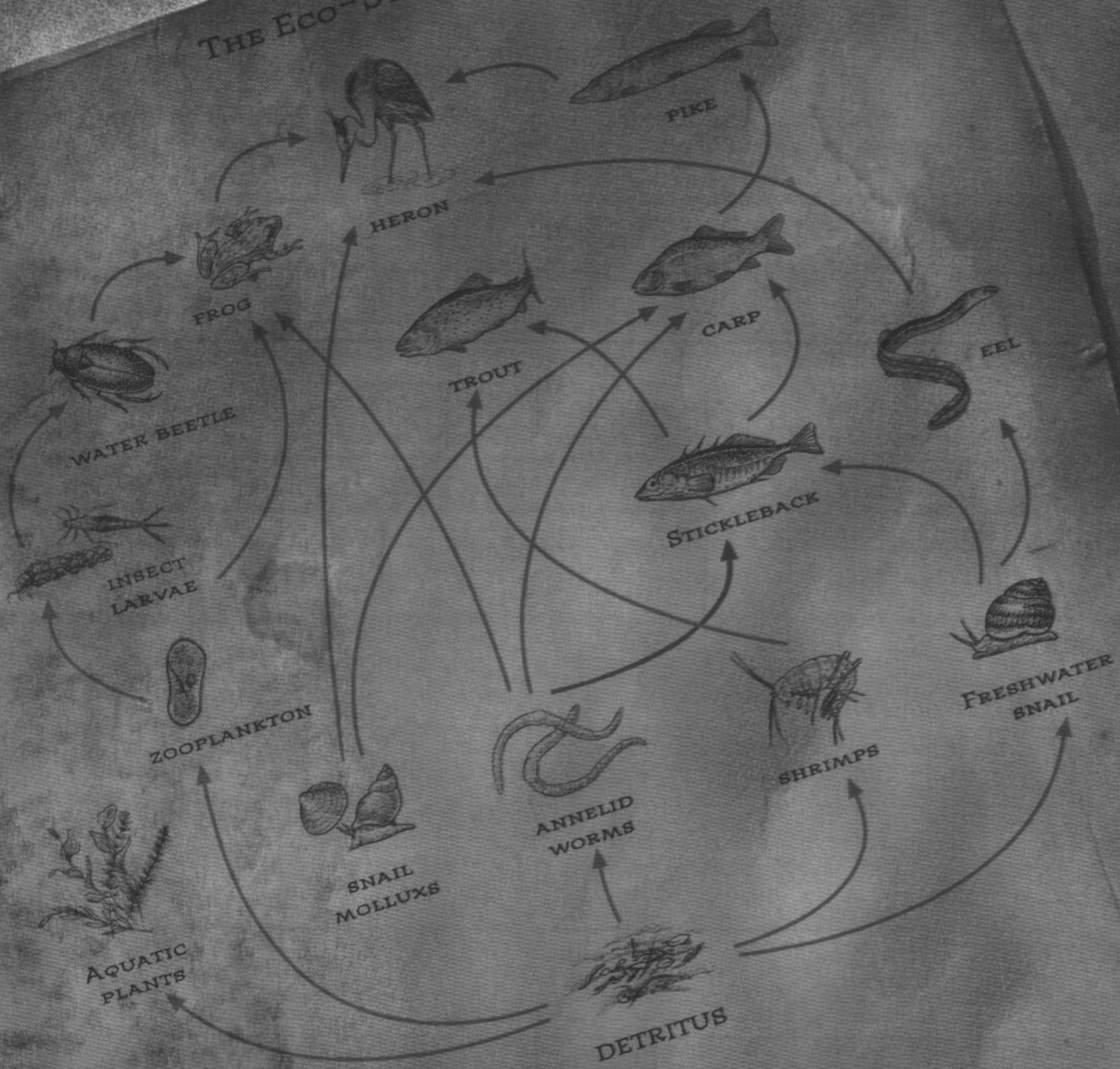


I saw the wise man again and he pointed to a place deep in the sun-scorched brush. Through the dusty leaves the water of a little spring glistened, tumbling out of a crack in the rock. We saw the water level underground rise and fall with each season, and we saw the people of the village carefully watching the level of the spring. They were prudent with water always - but even more so when the little spring began to trickle slower at the end of the long dry season. The people used the water to grow crops, to water their animals, and to take deep, thirsty gulps of pure, clear water....

I saw roots from happy plants pushing into the soil, and sucking up the minerals in the water to make beautiful blossoms for the bees and butterflies, fruit for the birds, and leaves for the wild animals. I saw the plants make cool shade for the people of the land and mothers watched contentedly as their children played games and their warriors made bows and arrows from the wood of the healthy trees...

I saw how the plants helped trap the rain and stop it running away to rivers that would simply flow away to the sea... no, the plants slowed the water's flow when the massive rains broke, and helped the magical drops seep down to replenish the hidden treasure that had sustained the people for so many centuries...

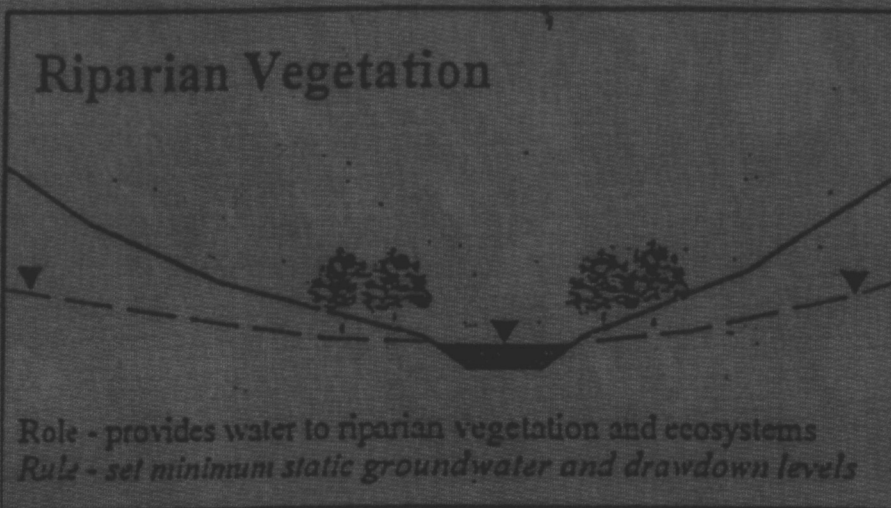
THE ECO-SYSTEM





I saw water deep underground, untouched by man, which had been still and did not flow like the other healthy water. It had collected so many minerals from the soil that it was salty to drink, and this was not good for people. But this was unusual, and most of the water was healthy, until...

Then, with my body cold, I saw huge factories made of blinding metal where the plains had once been. The people of the cities, my people, were happy because the factories made them fine things...but the factories spewed black grime into the air and the rain became dirty. I saw the factories carelessly dump green sludge that was once water and it flowed back into the soil; it slipped down through the sands and turned the water foul. The hidden treasure sparkled no more.



I saw my people bury their rubbish in huge pits and forget how much waste they had produced. They threw rubbish into rivers, thinking that nature, so huge and bounteous, could not be harmed. But poisonous water was seeping into the soil and animals were dying from the litter in the rivers. I saw huge underground tanks storing oil leaking black stuff into the ground, making it toxic and killing the life above it.

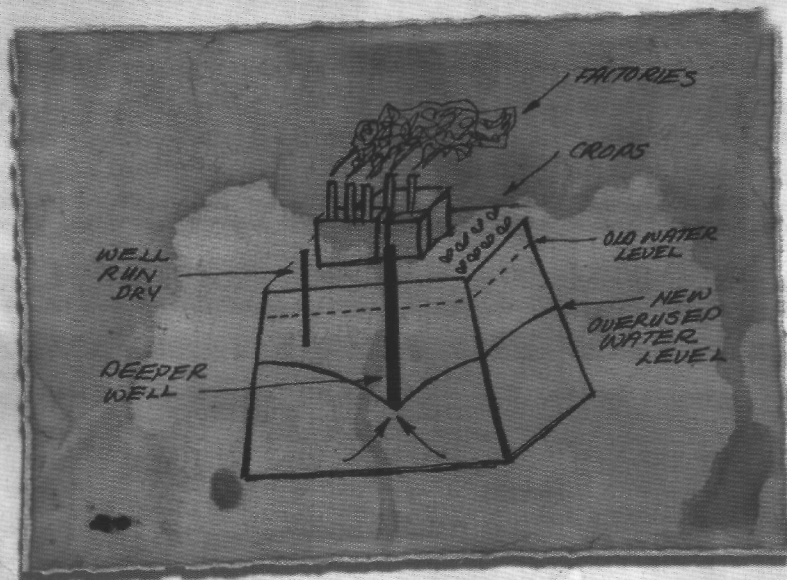
I saw my people, hungry for work and more fine things, ripping up the plants to lay roads and mine for precious stones. The plants were no longer there to slow the precious rain that once fell on the wild African plains, and the hidden treasure deep underground could no longer be charged with fresh, life giving water.

More and more people sunk wells and dug boreholes. Windmills dotted the landscape, sucking up the water. The level below the earth began to drop. Even in the rainy season, the little spring near the village was dry and both the cows and the people grew thin and quiet. The few plants that were left began to wither, for their roots pushed desperately through the soil for water, to find nothing but dry dirt.

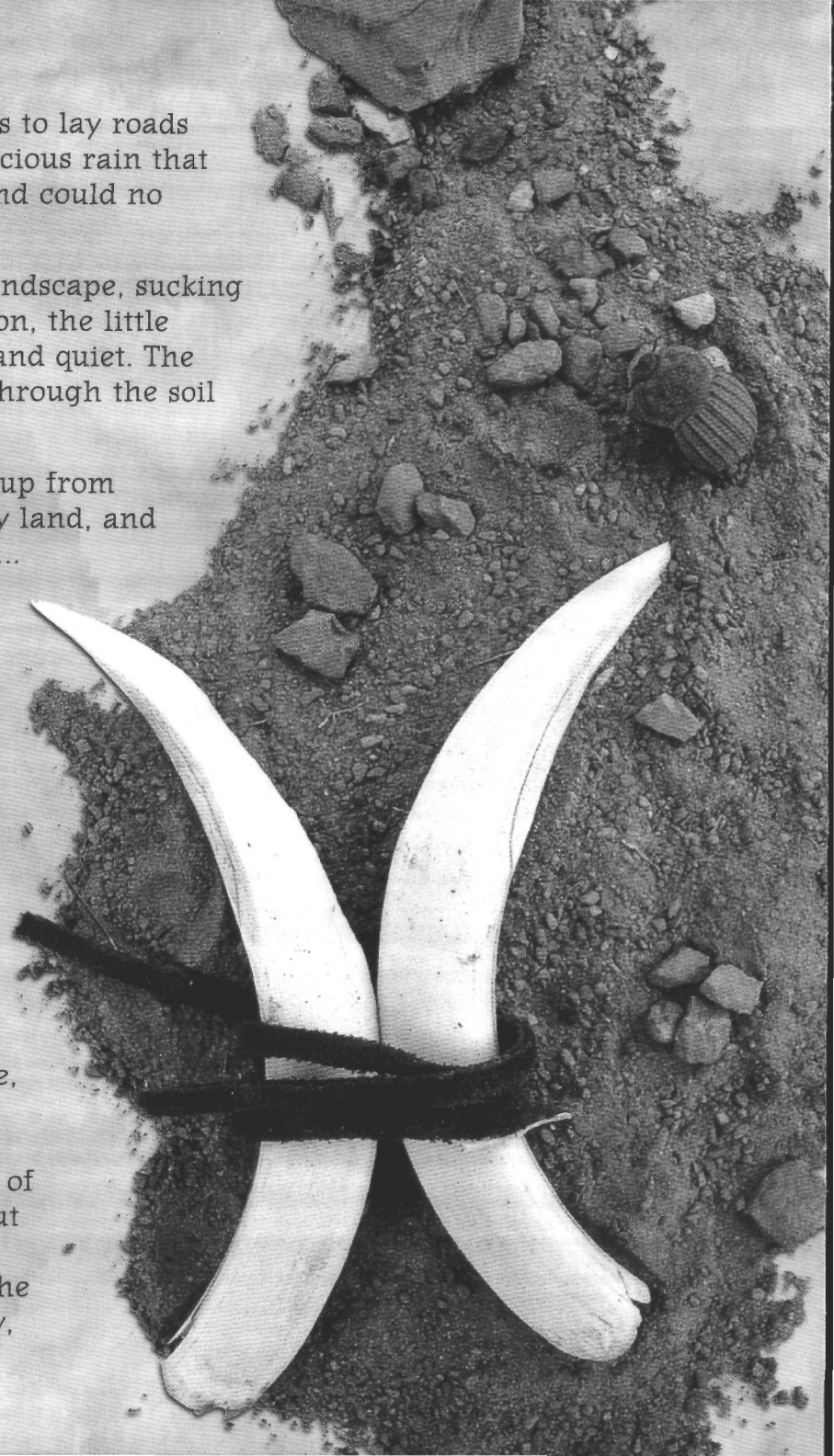
But the happy stupid people of the cities played on in the water that squirted up from fountains, and they grew pretty flowers that drank too much water in this dry land, and they left the pumps pumping water, even once they had had enough to drink...

Finally, the windmills spun and the pumps pumped in vain – too much had been used – there was no water left – and the few drops they managed to pump up were contaminated.

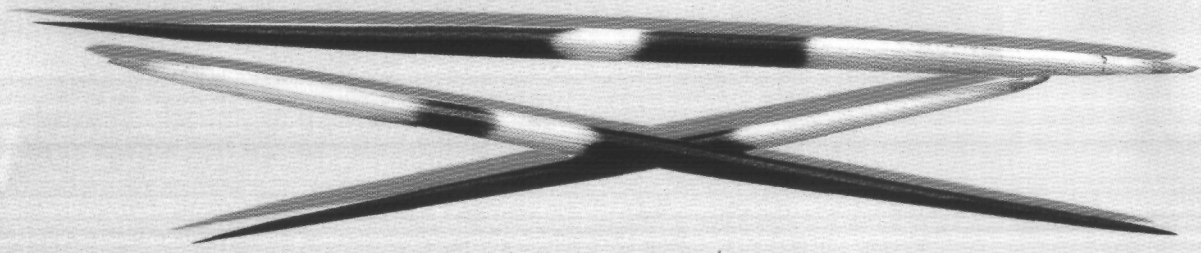
The once beautiful rivers became so poisoned, that the birds that could flapped their wings goodbye to their sick brothers, and flew away to other lands. The people became thirsty, and then sick and then in terrible danger; they had broken the balance of the land.



I saw how young people had no work, because the factories that gave them work could no longer run without water. I saw the waste of our hidden treasure, that no-one had treasured enough. The people had thought the diamond drops of rain would sustain them, but they were wrong. They had leached the very life from the ancient ground. And finally, they would die too.







The wise man spoke, and I understood.

"Tell them", he said. "Save us. Go, now, and teach your people that the sparkling water droplets are more precious than fine things, than metal factories, even than diamonds themselves; for none of those give life. There can be some, for all, forever, but only if they pay heed to you. You have seen how we, the gentle people of the land, have lived for centuries in harmony with the land and its water that takes many seasons to trickle down and replenish the hidden treasure that brings life to all. Your people must learn this before it is too late."

We awoke, groggy in the midday heat, and drank the cool water that was offered to us. Far away on the hill we saw the silhouette of the wise man and heard his wailing chant that was caught upon the wind. Despite the heat, we shivered. None spoke of the death of our people that we had foreseen in the wise man's vision.

We knew in our hearts that our people treasured diamonds and factories and fine things. They had never thought the water could dry up; that we could ever use too much.

On the grassy plains of Africa I had become a prophet and a guardian of the hidden treasure. The weight of this knowledge sits heavy on my shoulders.

Time is running out. My people will need to know so that they can become guardians themselves – each and every one – of our hidden treasure;

the infinitely precious water of the ground of Africa.





A new era of water management is dawning in South Africa, expressed by the vision:

"Some, for all, forever".

Inspired by this vision, the country has already managed to reduce, by half, a massive backlog of more than twelve million people without even the most basic water supply.

As in many other parts of the world, groundwater is playing a significant role in this development and is helping to improve the quality of life of millions of people.

Groundwater occurs everywhere, in larger or smaller quantities, depending on the underlying rock and the natural replenishment conditions. Its crystal clear appearance relates to the natural filtering effect of earth materials on its long passage underground. This makes it the ideal source of drinking water. At the same time it plays a crucial role in maintaining living ecosystems and habitats on which all water services depend.

Groundwater is especially vulnerable to human impacts of misuse, as its loss and deterioration are almost invisible and are often irreversible.

The only way to achieve sustainable use of groundwater for the benefit of all, is that people everywhere in South Africa become empowered to play their role in the wise management of our hidden treasure.

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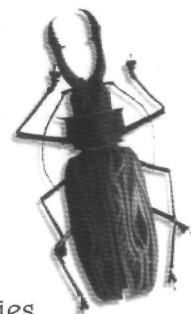
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Drilling Contractors Association
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Hydrogeological Map Series of the Republic of South Africa

Available from:
Department: Water Affairs and Forestry,
Pretoria

The General Hydrogeological maps and brochures provide a synoptic overview of the hydrogeological character of the area by processing groundwater-related data according to a standard legend.

Each single AO map sheet comprises:

Main map

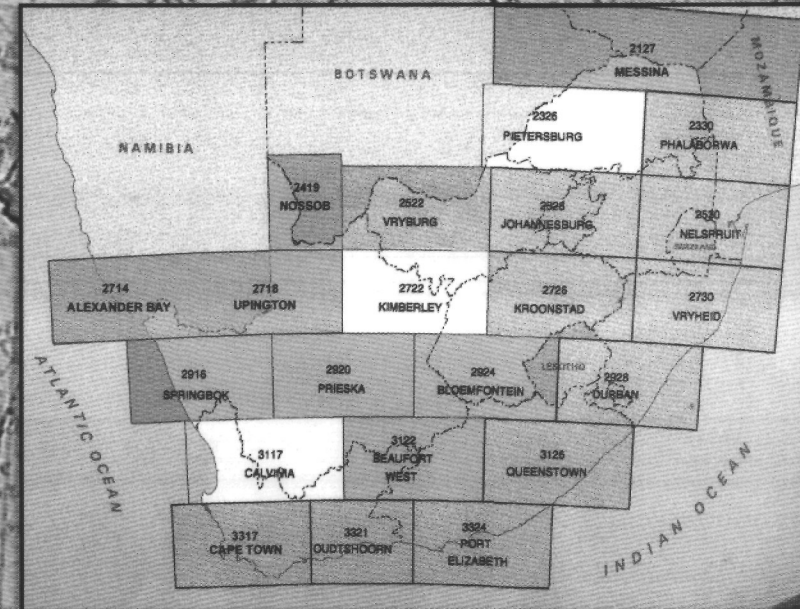
Groundwater occurrence (borehole yields and aquifer type) superimposed on lithological background

Schematic cross-section

A schematic illustration of typical modes of groundwater occurrence.

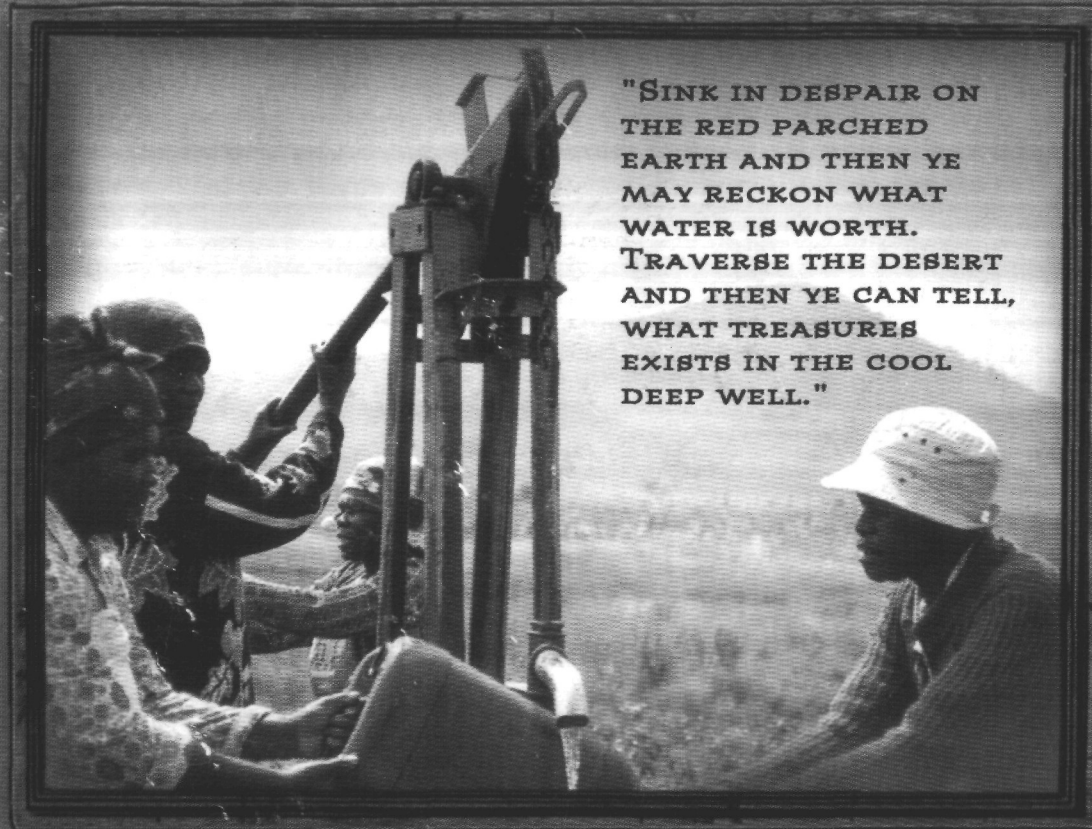
Accompanying brochure

Provides additional information concerning groundwater occurrence and related matters





INTERNATIONAL ASSOCIATION OF
HYDROGEOLOGISTS



"SINK IN DESPAIR ON
THE RED PARCHED
EARTH AND THEN YE
MAY RECKON WHAT
WATER IS WORTH.
TRAVERSE THE DESERT
AND THEN YE CAN TELL,
WHAT TREASURES
EXISTS IN THE COOL
DEEP WELL."

ELISA COOK (SOUTHERN AFRICAN POET 19TH CENTURY)



DEPARTMENT OF WATER AFFAIRS, SOUTH AFRICA