

NOAH'S FLOOD IN SOUTHERN AFRICA

First printed 2010

This material is to be updated as new material and research is made available. If you have any information, suggestions or would like to contact me, please do so.

Copyright © Text, Bryan Orford

All rights reserved

No part of this publication may be reproduced, or stored in a retrieval system, or transmitted, in any form by any means, whether electronic, mechanical, photocopying, recording, or otherwise, without written permission from the author.

ISBN 0-7974-3122-5

Bryan Orford e-mail bush@netconnect.co.zw

CONTENTS

❖	Introduction	7
❖ CHAPTER 1	Ancient Man	9
❖ CHAPTER 2	Catastrophe	18
❖ CHAPTER 3	Man & Apes	53
❖ CHAPTER 4	Western Exotics	67
❖ CHAPTER 5	Northern Mix	76
❖ CHAPTER 6	Dinosaur Land	81
❖ CHAPTER 7	The Creatures Before	87
❖ CHAPTER 8	The Recovery	103
❖	References	119

INTRODUCTION

The creation reveals the awesome power of God, His creative talents, wisdom, knowledge and love. Every day we admire the scenery, the mountains, forests, rivers and many geographical features. Without realizing it we are observing a once beautiful world marred by the affects of Noah's flood. The present world lost the glory God had given it before the flood. This book will give you a glimpse of the past, with a strong bias towards Southern Africa. The intention of the research is to show what really happened and help remove some of the confusion in people's minds. Radiometric dating techniques, genetics, the interpretation of fossils and stone tools have been abused and twisted to support evolution. Information can be interpreted in different ways and someone's opinions may not be the truth however popular they may be. Evolutionary science cannot explain many of the natural sciences. Creation science and flood geology best explain the rocks, fossils etc. It is the truth that sets you free and so we will make our best attempt, with limited resources, to show what transpired. This book will be updated at regular intervals as more information flows in. If any person has any interesting facts or contributions, I would be glad to hear what they have to say. I hope that many, who have been tricked and confused by evolution, will see the light and humbly accept the Lord, who is the source of all-true wisdom and knowledge.

The 21st Century starts with a human race brainwashed with evolution, to such an extent that many think it foolish to consider a creating God and Noah's flood. Our scientists and teachers all need a lot of prayer. Remember that they teach our children and convince them that God doesn't exist and that the Bible is unreliable. If your children don't respect and value the Bible, then they are very unlikely to read it or believe what it says. We live in an age of technology and knowledge where many people make rational decisions based on the information they have. Unless we can convince these people of scientific truths, they will continue to turn their backs on the gospel. Have you ever been in a situation when someone says to you, "and what about the dinosaurs?" This is a common response to the Gospel

and one of many excuses for not accepting Jesus. This is an area where Christians get tied up in knots, as they have also been brainwashed in evolutionary thinking. Atheism is the most powerful force in the Western world today arrayed against the gospel. It is also the reason why so many intelligent people refuse to accept Jesus. It teaches people to regard God and the Bible as myths. If the book of Genesis is a myth, then so are the creation, the downfall of man and a need for a savior, the blood covenant; the Flood and ancient history. There is a need for people to know good science, so they can be free of the lies they were taught and serve God. I can't see how anyone can truly praise and worship God, if he believes in evolution. The book of psalms has David and others proclaiming Gods workmanship. How can we do the same and honour God, when we think our great ancestor was an amoeba. If God doesn't exist then how can you put your faith in him? History will show evolution to be one of the most damaging philosophies to have hit this planet. The Flood acts as a warning to us of Gods judgment and we can learn valuable lessons from it. Unless we understand the flood we will never truly understand geology, archaeology, paleontology and other sciences. Many geological mysteries will remain unsolved and many treasures remain hidden beneath the earth. Where does our oil and coal come from, where should we look for minerals and how did fossils form? The great flood best explains all this and many other questions.

Evolution is nothing more than a philosophy, which has been accepted by many as a truth. It is as acceptable today as the flat earth theory was and dare anyone challenge it! The accepted view is that any one who is a renowned scientist won't waste his time believing in the Bible. This is another lie. Many world-renowned scientists and researchers don't believe in evolution. These scientists have the evidence to back up their beliefs and they often started out believing in evolution. There are many educational organizations that now teach in schools, universities and educational establishments the truths found in Genesis. I hope you will enjoy reading this book and that it strengthens your faith.

ANCIENT MAN

Adam and Eve

When we look to the beginning of history we see that the cradle of mankind was the Middle East and not Africa, as this was the place where Adam and Eve first lived. There has only been one human race and the out of Africa theory, for the human race is wrong. Adam and Eve had children and grandchildren and the human population increased and moved to new areas. They lived on a beautiful earth with an incredible variety of plants, birds, animals, dinosaurs and sea creatures. There were more species and a greater genetic diversity at that time. The book of Enoch mentions large creatures living before the flood, which could be a description of dinosaurs.

Our Ancestors

Humans had clothing, kept domestic animals, grew crops, lived in tents, played musical instruments and worked in bronze and iron. Tubal who was an expert in war and very strong, invented the art of making brass. A metal hammer was found in deposits said to be 435 million years old by evolutionists at London in Texas USA. This pre-flood deposit had no carbon in it, which means it was made by a different process from that used today. It was not made from meteorite material. In 1944 Newton Anderson claimed to have found a bell inside a lump of coal that was mined near his house in West Virginia. When Newton dropped the lump it broke, revealing a bell encased inside. What was a brass bell with an iron clapper doing in coal that is supposed to be hundreds of millions of years old? According to Norm Scharbough's book Ammunition (which includes a compilation of many such "coal anecdotes") the bell was extensively analyzed at the University of Oklahoma and it was found to contain an unusual mixture of metals, different from any modern usage. Genesis 4:22 states that Tubal-Cain was "an instructor of every artificer in brass and iron . . ." Perhaps when his civilization came to an end in the flood, this bell was buried with a mass of vegetation that became coal and ended up thousands of years later in Newton Anderson's coal bin. Numerous other such accounts have been recorded, including the intricate gold chain found in coal (Ivan

Sanderson's book *Uninvited Visitors*) and the cast iron pot found in a coal seam at the Municipal Electric Plant in Thomas, OK (archived at Creation Evidence Museum).

Cain

Cain was recorded as the first to plough the ground, while Abel kept domestic livestock. Trade took place between peoples and they used measures and weights. Jubal was the musician who invented the flute and harp. However man was sinful, with Adam's son Cain committing various crimes, including the killing of his brother. As time progressed his descendants became increasingly wicked, as they were involved in warfare and robberies. Eventually Cain died supposedly when the stones from his house fell on him. Seth's family, (the sons of God) were more righteous than Cain's family, but this changed as time progressed and the two groups began to mix. Seth's descendants were experts in astronomy and during this early period there were priests and religious activities. Tablets unearthed in the Middle East mention that there were kings and cities. These tablets mention biblical characters such as Noah and have flood stories showing the authenticity of the event.

Sinful Man

Illicit sexual relationships led to many being strongly influenced by demons. These were the giants of the time, the term giant referring to their fame and influence. Humans though and many creatures living on the planet were generally larger than their descendants are today. Not only were humans corrupted by sin, but the animal kingdom became more and more corrupted. People rebelled against God and were guilty of injustice, sexual immorality, envy, warfare, violence, idolatry, the worshipping of land and sea creatures and the heavenly bodies, sodomy, devil worship and the disrespect of boundaries. God responded by allowing the peoples to fight each other and he locked up the angel watchers who had been responsible for much of this, who are being kept for a future judgment. The Bible states that mankind grieved God and his heart hurt, because mans' thoughts and hearts were continually evil. As a result of the sinful state of this planet, God

decided to bring a catastrophic worldwide flood to destroy everyone. Mankind and most living creatures were to be eliminated.

Noah

Noah was an exceptional man and was righteous and blameless before God. He was born to Lamech and his wife Betenos in the year about 707 AC (After Creation). Under God's instructions Noah began to work on the Ark. The wooden Ark was 450 feet long, 75 feet wide and 45 feet high and was coated with pitch inside and out. It had a door in the side, had lower, middle and upper decks and many rooms. The Ark had firm walls, a roof and was braced with cross beams giving it strength to protect it from strong water currents. He probably had unbelievers helping him build it and was possibly the most mocked man on the planet. Using models of the Ark it was found that it could have withstood 200-foot tidal waves. Its floating, barge-like design, with no steering gear gave it great stability. The Ark would have had approximately the same carrying capacity as the Titanic. Two Christian scientists, Dr. John Whitcomb and Dr. Henry Morris, worked out that the carrying capacity on the Ark was equivalent to about 130500 sheep. This was enough room for the animals living today and for those now extinct. Noah placed provisions in the Ark for his family and the animals. His three sons Shem, Ham and Japheth accompanied him on the Ark with their wives. The wives of the four men were traditionally called 'Emzara, Na'eltamau'k, 'Adataneses and Sedeqetelebab. God ordered Noah to take 7 pairs of each kind of clean animal and 2 of every kind of unclean animal. They also took seven types of every kind of bird. Noah was obedient to Gods instructions.

Variation of Species

The fossil record shows us the earth is a young planet and confirms the reliability of the book of Genesis. Genetics show that there is a tremendous variation within a species. Recent research has shown that every species has a unique genetic blueprint, as does every individual. Genetically it is impossible for evolution to take place. There are many examples of genetic variation within a species. A Sausage Dog and Great Dane are the same species even though they look so

different. Black and white people have the same ancestors and are not different species, as some racists would like us to believe. Animals of different species normally produce hybrids (if they can mate). These hybrids are infertile and will not produce offspring. Great Danes can't evolve into Persian cats and vice versa. A cat can't mate with a dog and produce "dats", as these are different species. Scientists look desperately for elusive missing links to fit their theories of evolution. There are no missing links for the millions of living creatures, linking them to totally different ancestors. Nor will any ever be found. There is a pride in discovering a new species and so there is a temptation to create a new type of animal on slight physical differences. In taxonomy and paleontology many species are 'discovered' when in fact they are simply sub species. If you are a wildlife lover you will find scientific names of mammals, birds, trees etc. continually change. Many similar wild creatures have never been crossbred to find out whether they are the same species. Evolution believes new species are created all the time from common ancestors, so any slight difference between animals, results in them being classified as a different species. This classifying of animals by 'how they look', has led to much confusion. The gazelle, wildebeest and long tail monkey animal families are some examples of this confused animal classification. Instead of one monkey with many variations, we have many monkeys and no one can decide how many of them there are. There are two important reasons why we should understand this confusion. The first is the realization that slight variations within a species are not examples of evolution and secondly Noah didn't have to take as many creatures on the Ark as people speculate. In fact Noah took different 'types' with him of the different animals as God had instructed. This shows that God in giving these instructions to Noah knew there was genetic variety within the animal kingdom. The mention of types of every kind of animal in the Genesis account shows that God doesn't agree with the present classification system. There are fewer species around than we have been taught. Noah didn't have to take every type of dog with him, but a few which then produced the great variety we see in the world today.

Longevity

How is modern man different from those that lived before the flood? The pre flood environment was undamaged by the flood and this meant people lived longer and healthier lives. Many lived hundreds of years before they died. There are clay tablets dug up in the Middle East recording great ages for the ancients, confirming the Biblical account. This baffles scientists, as people are not meant to live that long. The ancient historians such as Josephus are further witnesses to the great ages in our past. After the flood people still lived long lives, but the ages started to decline. When the Israelites left Egypt many were still living to an age greater than 120 years. This explains why Moses and others living with him were so active after their 80th birthdays.

Variation in humans

Human beings show a tremendous diversity in size, shape, colour, hairiness etc. There is a definite genetic variety in the humans of those times, as there is now in the human population. Different names have been given to the different types of ancient human fossil remains. Neanderthals, Homo erectus and Cro-Magnon are some of the names given to these peoples. These are all ancestors of the present human population and all look a little different from us. A study done recently by American researchers has found that Neanderthal; Homo erectus, Cro-Magnon and modern man are all genetically linked.

Neanderthal

The name Neanderthal was given to a badly deformed human fossil found in Germany. This badly deformed person gave people a low opinion of Neanderthal type human remains. The scientific community thought then that Neanderthals were a different species of human being. Since then better specimens have been found in parts of Europe and the Middle East and they have gained more respect. Around the world Neanderthal type features have been found in many pre and post flood human fossils. It has been found that people, who live to great ages, will have skull changes that include a protrusion of the jaw, a retreating frontal, a heavy brow ridge and projecting face, with a longer nose. This meant their skull was different in shape to

that of modern humans. An accompanying sketch shows how the skull grows in elderly people. This would be exaggerated in those people living to hundreds of years and would show the Neanderthal skull features. Due to our short life span, skulls today don't normally take this shape, which is the shape of a Neanderthal skull. With the great ages mentioned in the Bible and other old literature, the people living in early times would have acquired these Neanderthal features. This explains why modern looking people are found alongside the Neanderthals. Human fossils have been found on Mt. Carmel in Israel with a Cro-Magnon Neanderthal mix. Noah and many of his companions probably had Neanderthal features because of their great ages. Abel didn't have these skull features, as he had died young.



GROWTH OF SKULL OF AN 83 YEAR OLD FEMALE & 77 YEAR OLD MALE

Big Cave men

Many of the ancient people were large, although many post-flood European Neanderthals were short. Recent scientific research has shown that these ancient people were 30% bigger than the average modern human being. The skull capacity of these ancients was on average 10% bigger than modern mans. Their skeletons were stronger than the skeletons of modern humans and their bone structure shows extreme strength. Muscle markings on the men, woman and children's

bones - show that they had large muscles and great strength. These ancient humans had bodies similar to world-class athletes in the throwing, wrestling and weight lifting categories. Some of the stone tools they made can be experimentally duplicated, but the wear patterns cannot, as modern humans are not strong enough to do it. The Neanderthal and robust features mentioned above I will now refer to collectively as, 'early man' features. Graves dating back to the time of ancient Egypt and Sumer have been excavated and have shown people with some of the characteristic 'early man' features. Artwork found in Sumer and in the Egyptian Old Kingdom, in paintings and carvings show people with these early man skull shapes. People living in Sumer and Egypt were very civilized, as is shown by the pyramids and other great works of those times. Those living in caves away from civilization were simply backward culturally. We still have people living in caves in some parts of the world, while many people still use stone tools. These modern Stone Age people don't show that we are in the Stone Age and that modern man is uncivilized and primitive. Abraham's family was buried in a cave and this was a custom in those early days. This means many of the people with early man features found in caves were simply burials and had not been living in those caves. The point I am trying to make is that - just because someone has a skull shape different to ours, doesn't mean that they were inferior to us.

Giants

Some of the people of early times were quite large and are by definition giants. Goliath was recorded as being about 2.9m in height. Archaeologists claim they have found the head of Goliath. A mummified head was found in a mountain cave overlooking the ancient valley of Elah, Northwest of Jerusalem. The head was almost 35cm high from jaw to crown and 25cm wide from cheekbone to cheekbone. One member of the American team of archaeologists said the jaws of the giant looked strong enough to bite through one of the bronze swords of that time. From the size of the head this man stood between 2.5m to 2.7m tall and weighed 230kg to 270kg, all bone and muscle. The right side of the skull showed a fracture of the temple where archaeologists believe David struck him with a stone. There

was a population of these giants in the Holy Land with the city of Hebron being one of their strongholds. When the Israelites came out of Egypt and spied on the Promised Land, they saw them. This explains their fears and why they had felt like grasshoppers and ended up 40 years in the desert. Josephus the historian said that these giants had faces that looked different to ours; they were frightening to look at and had loud voices. In 2 Samuel 21:15-22 the Bible records how the Israelites killed the other giants in Goliath's family. David was nearly killed by one of them and was rescued by Abishai. It seems that this particular battle caused the Israelites great concern that David could be killed and he was withdrawn from future battles. Jonathan, David's brother killed one giant who had six fingers on each hand and six toes on each foot.

Dinosaur and Human

A huge stone sarcophagus was found in the state of Arizona in the USA, which held a mummy more than 12 feet tall – with six toes on each foot. At Lampock ranch in Colorado USA, a skeleton of a man 12 feet tall was found. In 1949 the Associated Press reported the finding of a giant human fossil, twice the size of a Gorilla and weighing 1000 pounds. The reference I have doesn't tell us the locality where this person was found. Greek literature is full of mythical giant stories, but there may be some historical truth behind some of the stories. Human footprints measuring 9, 15.5 and 25.5 inches have been found along the Puluxy River near Glen Rose in Texas USA. These prints are found with the prints of a large cat and dinosaur. One human footprint was found only two inches from a dinosaur track, while six were found in conjunction with dinosaur prints. 12 miles from the Paluxy footprints a skeleton of a 7-foot tall woman was found. These giants had lived with dinosaurs in the USA and the prints were found under flood deposited limestone. Other sites with human and dinosaur footprints include a site in Russia and about six other sites in North America.

Other Finds

In the late 1950's, during road construction in the Euphrates Valley of southeast Turkey, many tombs containing the remains of giants were

uncovered. At the sites some leg bones were measured to be 120 cms (47.24 inches). Joe Taylor, Director of Mt. Blanco Fossil Museum, was commissioned to sculpt the human femur. This giant stood some 14-16 ft tall. Deuteronomy 3:11 states that the bed of Og, king of Bashan, was 9 cubits by 4 cubits (approximately 14 ft long by 6 ft wide). In his book *Fossils Facts & Fantasies*, Joe Taylor cites several accounts of giant human skeletons being discovered, from Egypt, Italy, Patagonia in Argentina and the western US. One of the largest humans in recent history was Robert Wadlow of Alton, IL (who was just under 9ft tall) and who died in 1940. Although there is no record in the fossil record of giants having lived in Southern Africa, we do have fossil human remains and some of these people appear to have died in the flood. Some of these fossils appear to have early man features mentioned above and will be covered in later chapters.

The Flood starts

In the year 1307 AC, when Noah was 600, the flood began. The family entered the Ark on the 1st of the 2nd month until the 16th day. The animals entered the Ark with his family. God sealed the Ark from the outside on the evening of the 17th day when the rains came. Not only did heavy rain fall, but God also caused water to come from under the earth. The book of Enoch states that water, darkness and mist accumulated on the earth. It rained for 40 days and 40 nights. The whole earth was covered including the highest of the mountains. Angels were involved in bringing this judgment onto the planet. No humans escaped and they couldn't retreat to higher elevations. The earth was covered for 150 days and then the water began to subside in the 7th month. You will notice there is a lot of historical detail available, showing the Flood is not a myth - rather it is a well-documented event.

CATASTROPHE – THE GEOLOGY OF THE REGION

Coastlines before

It is hard to work out the exact geology of the pre flood era. Many of the original rocks are either covered by sedimentary or igneous formations, or have been metamorphosed during the flood. Looking at the sedimentary rocks, which are not igneous intrusions, especially those carrying fossils we can get a fair idea of what the terrain looked like. It seems that there were no deserts or harsh landscapes. There were no precipitous mountains and frightening gorges. The soils were well balanced and constituted a variety of different coloured sandstones, quartz and jaspers. There were probably mountains, rivers and lakes with a well-designed drainage system to the sea. The rocks deep down under the sandstones may have included some granite. The countryside would have been gentler and higher areas would not have had the steep gradients we now see at high altitudes. The coastline was different from that seen today. Most of Mozambique was under water with the coastline stretching along the east of the Lebombo to Pafuri, to Beira up to Sinja. Zimbabweans would have had their own beaches in Gona re Zhou. The coast may have jutted out a bit in the vicinity of East London and parts of the West Coast. God designed everything for mans' comfort, benefit and pleasure, but this countryside was to change when the torrents of rain fell out of the sky.

Comets

Where did all the rain come from to last 40 days and 40 nights? An estimated 24 000 meteoroids – each weighing more than 3.5 ounces – strike the earth annually. Meteoroids are made up of stone and/or iron. A good example of a meteorite is the Hoba farm meteorite 25 kilometres from Grootfontein in Namibia. This is the world's largest meteorite and weighs approximately 54 tonnes. Comets including the famous Halley's Comet contain large amounts of water in the form of ice. Meteorites and icy comets could have hit the earth releasing large amounts of water and in some case leaving large craters. They could have produced powerful gravitational forces, earthquakes, volcanic eruptions, giant tidal waves, spin axis shifts and other nasty affects on the earth. Mammoths found in the Northern Hemisphere support the

theory of icy comets. They have been found frozen with plant material still in their mouths, meaning that they were killed almost immediately and covered by snow. Over 116 large impact sites have been found that were created or most likely to have been created by meteorites or comets. Most of these crater sites are found in Western Europe, the USA and Australia. Five of these craters are 76km-140km in size, including the 87-mile wide Vredefort dome in South Africa. Just one of these five larger crater sites may have had a collision capable of destroying a large part of the life on earth. The Lake Acraman impact crater in Australia has a 56-mile diameter. It was estimated that the energy released in this impact would probably have been the same as 50 000 to 100 000 hydrogen bombs going off all at once. Most of these impact craters were not formed in recent historical times and probably fell at the same time during the flood. The combined affects of all these meteorites and comets would have been enough to have started flooding, bringing the rain, tidal waves and ruptures in the earth causing volcanic activity.

Water beneath

Recent research has uncovered deep-sea vents, which release water from under the earth. We don't really know how much water there is under the ground. This underground source could have been one of the water sources during the flood and mentioned in the Bible. The underground waters could have been released as the ground developed fractures due to the rising sea.

Sedimentation

If you place soil and water in a glass and shake it, you will find when it settles, that the heavier material settles at the bottom and the lighter towards the top. This is the law of gravity at work. Clays often settle together, while vegetable matter may bunch up and float. Some of the floating vegetation will eventually sink. The flood deposited sediments in much the same way. This is why in Southern Africa and other parts of the world there are heavy boulder beds, conglomerates, shale, ironstones, clays, sandstone, coals etc. 99% of sedimentary rocks in Southern Africa show evidence of having been deposited by a large body of water. In the Molteno sediments in the vicinity of

Lesotho there are coarse-grained grey/buff sediments with well-preserved plants and insects to the virtual exclusion of body fossils. The finer grained red beds in the Elliot area nearby, yield abundant well-preserved body fossils, but not much in the way of plants. This pattern of exclusivity of plant and/or body fossils in certain types of sedimentary rock is common in the fossil record. It has been noted in the Zambezi valley and all over the world. This is a mystery to evolutionists but is easily explained by our simple experiment with the glass. If fossil deposits took place over millions of years, plants would have been deposited with the vertebrates in the same rocks on a regular basis.

Palynology

Sedimentary rocks in Southern Africa show no evidence of having been laid down over millions of years. Rather, they show sediment forming rapidly over a short period of time. Palynology is the study of pollen, spores and their dispersal. These plant microfossils called miospores are smaller than 0.2mm in size. In the Sebungwe district in Northern Zimbabwe a borehole was drilled to a depth of 1200 feet. It was found that the miospores were of the same mixture all the way through the sediments, showing an unbroken sequence of sedimentation upwards. This is would not be the case if the rocks were formed over millions of years and rather shows a deposit created in a short time, such as during Noah's flood.

Physics Laws

For every action there is an equal and opposite reaction – a physical law taught in school. This means that for all the geological formations we see there had to be a 'cause' that formed them. With the removal of this force we have a pretty stable Southern Africa today. What was that force that doesn't react on the landmass today? Why don't we have earthquakes and volcanic activity in areas that had so much in the past?

Earthquakes

Well as the floodwaters rose they covered the highest mountains to a depth of 6 metres. With this depth of water tremendous forces were unleashed which altered the geology and geography of the earth. Cracks developed in the continents, magma oozed up and there were volcanic eruptions. Tremendous earthquakes shook everything. Seismic activity has been measured in Zimbabwe since 1959. The areas that have produced earthquakes of 5 or more in magnitude include Kariba and Hwange. Kariba is particularly unstable due to the volume of water in the dam. Hwange has much mining activity and is fairly close to Kariba, explaining the earthquakes there. Very little earthquake activity takes place in other parts of the country, although mining sometimes causes earthquake activity. If these pressures and disturbances cause earthquakes, how much more would the Flood have caused ruptures in the earth's crust and frightening earthquakes? The floodwaters moved large masses of sedimentary rock in awesome mudslides and deposited the rock causing further instability. Some of these sedimentary deposits are as much as three kilometres deep. Rivers overflowed their banks and caused terrible flooding. The amount of suspended matter passing the Orange River station in recent times has been computed at 50 million tonnes in an average year. At this rate in 1500 years the Southern Africa land surface could be lowered by 30 cm. This modern erosion is nothing compared to that unleashed in the flood.

Rising Seas

The rising seas killed the coral reefs, shellfish and other sea creatures that couldn't swim away. There were strong tidal activities and ocean currents caused further destruction. Since the floodwaters have now subsided there is now little pressure on the surface and less instability. Occasional earthquakes and plenty of hot springs, such as those in Northern Zimbabwe and parts of South Africa, are all that is left of the volcanism of that period. One of the many towns in the region that has benefited from the presence of hot springs is Windhoek, which has used hot springs as a water supply. With the sea levels rising at present, we may see more activity that is volcanic in the near future.

Volcanics

With the large volumes of water covering the land, the instability caused volcanic activity resulting in the formation of dykes, lava flows and cracks in the earth's crust. Igneous rocks formed at the same time as the sedimentary rocks were being deposited. Volcanoes formed such as the Messum crater in Namibia, found about 50km west of the Brandberg. This crater has a 20-kilometre diameter. In Southern Namibia there is a 2 kilometre wide volcanic crater called Brukkaros. The Ongeluk volcanoes of the Transvaal and Griqualand West were formed under water, as denoted by the pillow structures with chert filling between the pillows. The 500 square kilometres Pilanesberg National Park protects a complex of volcanoes and the famous Sun City gambling resort. Volcanic vents or diatremes filled with lava agglomerate, or tuff, have been found in the hundreds in South Africa and Lesotho. Agglomerate is a mass of large volcanic fragments bonded together by heat, while tuff is consolidated volcanic ash. Most volcanic pipes were perforations in the earth's crust and seemed to have only produced gas. Lava, such as that found at Mont-aux-sources is about 4500 feet in thickness. These basaltic volcanics are found up to an altitude of 10000 feet. Sandstone sediments were deposited as lava poured out of these pipes. Some volcanic necks are fairly large and many cover over 100 yards in diameter and can reach a mile wide. Some of the volcanic necks are circular and some elongated. The great Moderfontein volcano near Jamestown covers an area of 5 square miles and is filled with agglomerate. The area of eruption around Roodepoort and Swartfontein is 8 miles long. The Belmore volcano near Barkly East had sedimentation forming as the volcano was erupting. At Tent Kop in Maclear, lava and ashes were ejected before the deposition of the sandstone. Sandstones were washed into volcanic necks, while ash and volcanic bombs ended up in the sandstone showing simultaneous formations. Some of the lava flows in this area covered one or two hundred square miles. As the lavas poured out very little time took place between the flows showing a rapid formation. The large amount of water sedimentation associated with volcanic activity shows that these volcanics were formed during the time of the flood.

Diamonds

Igneous and metamorphic processes that formed many of our minerals accompanied the formation of volcanoes and lava flows. Tsumeb in Northern Namibia has produced 184 different minerals, 10 of which have not been found anywhere else in the world. The diamond you see sparkling on a woman's finger was most likely formed during the flood. The source rock of most diamonds is a bluish ground called Kimberlite, named after Kimberly in South Africa. Kimberlites are found in Botswana, South Africa and Zimbabwe in Southern Africa. Kimberlites are rich in carbon dioxide and water. Industrial diamonds can be formed at high temperatures and at a pressure of about 90 K bars. Volcanic activity accompanied by water, carbon containing sediment and the pressure of the Flood Sea, provided perfect conditions for the formation of diamonds. Carbon was formed during the flood as a sedimentary deposit in various rocks. The Flood Sea explains the brecciation of much of the kimberlite and the sedimentary material associated with some of these kimberlites. Fossils have been found with the Orapa and South African deposits, showing the kimberlites formed recently. Southern Africa is famous for its diamond deposits. Kimberly in South Africa was one of the prime sources of wealth in the Victorian era and helped finance the development of this region. Diamonds were found here in 1871 and soon there were 50 000 miners working away on the site. The result was the biggest man made hole in the world dug without large machines. The hole is 180 metres deep. About 14.5 million carats of this precious rock have been recovered from that site. The famous Cullinan diamond was found at the Premier mine near Pretoria in 1905. The Orapa, Jwaneng and Letlhakane mines south of the Makgadikgadi Pans and near Gaborone, produce about 85 % of Botswana's exports. In 1925 a young soldier found an attractive stone near Port Nolloth, which is close to the Orange River mouth. As diamond fever gripped the many miners who came here, the South African government and De Beers mining took control. Areas on either side of the Orange River and along the coast became no go areas reserved for diamond mining. Diamonds had been washed down the Orange and Vaal Rivers, with some reaching the sea to be deposited along the coastline. Some deposits were washed inland, as

the ocean was higher during and soon after the flood. Diamonds are mined offshore using suction devices and dredges, while those on land are dug out of the sands. From the Orange River there is a decrease in the mean size of the diamonds both north and south along the coast. These deposits show that the Orange largely brought down the diamonds, from Kimberlite sources in the interior.

Greenstones

The greenstones are basic lavas that cover a large part of Zimbabwe. The greenstones contain amygdaloidal and pillow structures with water laid-down sedimentary rocks. The sedimentary rocks include agglomerates, tuffs, arkoses, greywackes, cherts, banded ironstones, slates and limestones. Algal structures have been recorded to the north of Bulawayo in limestones carrying graphite and they were situated well down in the greenstones. The pillow structures in the greenstone rocks point to a sub aqueous and submarine eruption. These green stones are often regarded as being some of the oldest rocks around, but it is clear that they erupted under the floodwaters.

Granites

The granites of Southern Africa are thought to be millions of years old because they do not have many fossils associated with them. According to evolutionary theory, rocks that have no fossils would have formed before life started to evolve. However, igneous rocks in their formation are unlikely to trap fossils due to their heat, so these are mistakenly labelled as the first rocks. The high temperatures around these rocks as they formed during the flood would have destroyed any fossils, so the lack of fossils does not imply great age. In fact, if these rocks have been around longer than the other rocks, then they should have fossils of many different 'ages' nearby. As this is not the case, the idea that these rocks are so old is laughable. A method used to date igneous rocks is the faulty radiometric dating system. These often give very old readings that 'make' the rocks appear older than they really are. The Hualalei lava flow in Hawaii was dated using the Potassium-Argon method to between 400 000 years to 3.3 billion years old. This is acceptable to those who believe in evolution. The problem with this reading was that the lava flow

was less than 100 years old. Similar readings have been obtained from other young lavas. This shows the unreliability and poor science involved in dating rocks with radiometric dating techniques. The use of some of these radiometric-dating techniques can be likened to using a 30-cm ruler and marking each centimetre as a kilometre. Zimbabwe probably has the best granite formations in Southern Africa, as they stretch across a large part of the country. In the Matobo hills there are plenty of conglomerates mixed in and around the hills, with much of the material having been derived from these same rocks. In some valleys, there are giant boulders that could only have been moved by an incredible power. The fragmentary nature and different crystal structures of the granites that were exposed to water resulted in the strange rock formations we now see today. The Matopos has strange orbicular granite formations that are a mystery to geologists. These were most likely to have fashioned as the granite formed under water. Much of the granite in Zimbabwe, the Cape and Swaziland are intrusive into other rocks, including sedimentary rocks, showing they were formed during the flood. The presence of greenstones and sedimentary rocks show granites were formed in association with water.

Basalt

Basalt is another common hard rock found in Southern Africa, much of it having been formed under water. In Lesotho, the Cape, Swaziland, Lebombo Mountains, Springbok flats, Soutpansberg, Kalahari region and parts of Namibia are found extensive basalt deposits. There is a marked absence of sediments and weathered horizons between the lava flows. A borehole drilled at Victoria Falls to 152 metres was found to have no sediments between the flows and no evidence of weathering before the next flow formed. Rocks called zeolites present around the Victoria Falls gorges are some of the rocks showing these basalts formed under water. The Zambezi valley had a lot of Basalt mixed in with water deposited sandstones. Pillow structures found in the basalt at Kariba and parts of Matabeleland shows that these rocks formed under water. At Kariba, a dinosaur was found associated with pillow lava and water laid down sediments. Basalt rocks North of Bulawayo are found with shale and sandstone

between the flows. The alternating basalt and thin sandstone are further evidence for the formation of these rocks during the flood. Similar alternating deposits have been found elsewhere in the region. All of this shows that Basalts were formed rapidly, with sandstone sometimes being washed in between the lava flows by the floodwaters.

Dykes

Another widespread rock is dolerite. The dolerite dykes of the Karroo were formed during the flood period. Like many of the Basalts, the flows took place soon after each other, following each other rapidly and freely. This is shown by the upper surfaces of previous flows not being exposed for long before a new sheet covered it. A sheet of dolerite North of Hopetown covered approximately 13000 square kilometers. The Great Dyke in Central Zimbabwe is said to be the longest linear mass of rock of its type in the world. This dyke runs roughly 530 kilometres and can reach a width of 11 kilometres. Other intrusive dykes and faults parallel the Great Dyke. The Great Dyke is a source of valuable platinum and chrome reserves. The pressure on the land surface by the Flood Sea caused this dyke and those faults nearby. The Great Dyke was strongly weathered as it formed under the sea. All this evidence indicates that the volcanic activity, granites, basalts, dolerites and other igneous rocks were formed very quickly, in association with water and occasionally fossil formations. The Flood Sea had all the necessary ingredients to cause this and is the best fitting explanation for their formation.

Current Flow

There is much evidence to show that when the floodwaters had reached the maximum height, the currents flowed in a general North South direction with few exceptions. This is independent of the type of sedimentary rock or its depth. The exceptions are explained by tidal and river activity, during and after flooding. In some areas of Botswana and Zimbabwe, the directions were slightly different. If there was an ocean covering Southern Africa during the flood, we should have evidence for the movement of ocean currents across the sub continent. The striated marks on rocks, the dune formations and

rock foldings, all show the current directions during this period. One of the best indicators of the flood current flow is found in the Dwyka or boulder beds, found in parts of Southern Africa. Flood currents have made marks on rocks from the Cape up to the Congo. This shows us the general flow of the Flood Sea at the height of the Deluge. It also explains why we have so much sediment on the Agulhas bank. The continental shelf is from 30 to 45 miles wide on the Atlantic side, but reaches a 150-mile width on the Southern Agulhas bank. There is a rough sketch to show how the main foldings, fractures and faults of Southern African rocks tie in with the flow marks in the rocks. This is probably one of the strongest evidences for the flood in the sub region and helps explain so much of our geology.

Dwyka

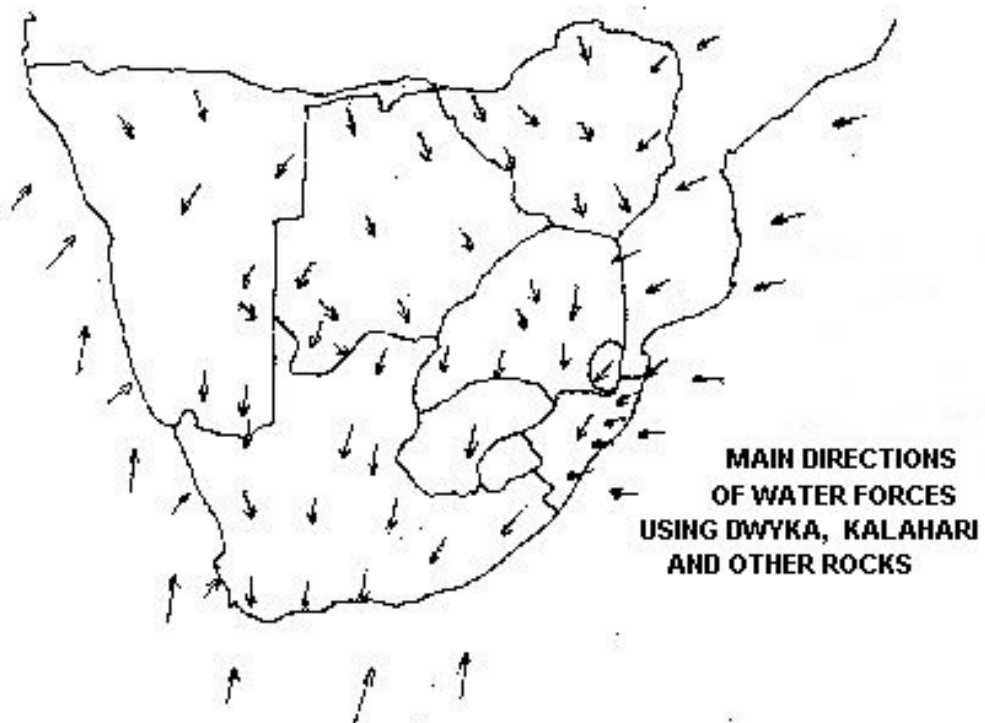
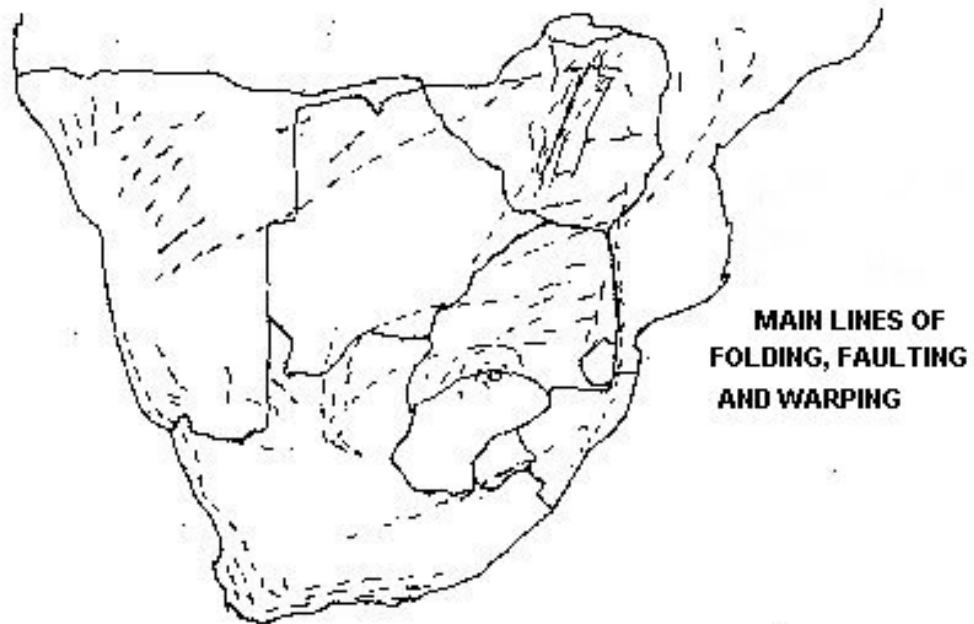
The boulder beds of the Cape Province of South Africa are called the Dwyka and are bluish or greenish in colour, being compacted and fine grained from water action. They contain sand, pebbles and boulders of a great variety of rocks, the majority are recognised as conglomerates, quartzite, sandstone, shale, slates, crystalline limestone, jaspers, banded ironstones, granites, gneiss, diabase and amygdaloidal lava, quartz porphyries, serpentines etc. The smallest fragments are commonly angular and larger ones show some rubbing off the corners. Some specimens reach 10 feet in diameter, though most are normally smaller. Some of these were transported hundreds of miles. The boulders are scattered in the matrix without orientation and in some cases, they are arranged in well-defined layers. Similar large rocks are found in other parts of Southern Africa and have been given this same Dwyka name. Many people have been mistaken in thinking that glaciers formed these large rocks. The only water forces that could have moved rocks of this size are the forces of glaciers, ocean currents or very big rivers. To say it was a sea that caused these formations would be admitting there was a worldwide flood, so glacial processes are often accepted in the scientific community for much of the activity. Research has found that so-called glacial deposits in the Coeriesfontein and Vryburg areas were created in a sub aqueous state. Geologists have found that the so-called Dwyka

shale associated with the boulders, in some areas accumulated under marine or estuarine like conditions. Boulders of the Dwyka have arkose with a content of kaolin, which are unlikely to have been deposited in a glacial formation. In the Southern Karroo, intercalated varves occur within the deposits at Douglas and in the valleys of the Northern Karroo. These varves probably accumulated in fresh water. The development of varves is apparently inhibited by saline conditions, due to the flocculation of clay particles. The Flood Sea would have had more fresh water in it. The deposits though often show no definite marine or freshwater formation, which ties in well with Noah's flood. These boulder beds contain coal bands and plant remains.

Victoria Falls Zimbabwe



CURRENT FLOW



Plants in Glaciers

Plants found in so-called glacial deposits include carbonised plant stems and a frond wedged in between boulders of rhyolite near Strydenberg. At Matjiesfontein plant specimens were found in pseudo boulders of quartzite. Plants were also found on the Riet River near Kimberly in shale, which contained large boulders. These plant remains in the deposits make it very unlikely that glaciers deposited these rocks. Fossil tree trunks have been found in Dwyka deposits. The tropical nature of a large part of Southern and Central Africa makes it unlikely that glaciers ever existed here. In South Africa the Dwyka shales contain the fish *Palaeoniscus capensis* and the aquatic reptile *Mososaurus*. The shale may contain from 12 to 14 % carbonaceous matter, including hydrocarbons and some oil can sometimes be produced. This shows a large amount of living matter was deposited with the boulder beds. The few marine fossils from the inland of Southern Africa shows that the sea covered the land for a short period of time and this is supported by a mix of both salt and fresh water types. Marine fossils in the Dwyka boulder beds kill the theory of an ice formation for these rocks.

Rocks moved

The rock floors, on which the boulder beds rest, are often polished and finely striated, showing the force that moved them. Some of these boulder beds reach a thickness of 600 metres. Many of the rocks were striated or scratched as the sea currents forced them along. Some were flattened or faceted from this and the water pressure. Beautiful striated surfaces are to be found on lavas at Pniel, Douglas and Riverton. From the many striated pavements, it is easy to see the direction of the current flows. This and the inclusion of rocks carried by the current and the knowledge of their origins all help. Some rocks were carried 800 miles. Rocks from the Transvaal can be found at Barkly West and Hopetown. Griquatown jaspers and Matsap conglomerate are found in parts of Namibia and the Western and South Western Karroo. They are not found anywhere to the south or south east of Griqualand west. A good place to see the boulders still resting on the striated rock surfaces is at Nooitgedacht near Riverton in the Kimberly district. At Tafelberg on the Palala River the coal

measure grits rise from a pedestal of granite and where these rocks join, the contact discloses a striated surface directed south 30 degrees west. Coal formed in this striated surface and coal would never be found in a glacier. Glaciers go in the direction gravity takes them. A large glacier heading in a general southerly direction didn't cover the whole of Southern Africa, from tropical Angola down to the Cape, nor were there many small glaciers going in the same direction. The glacial theory is not logical and does not explain things very well. Rather what has happened is that powerful ocean currents of the Flood Sea dragged rocks over rock bases and formed the scouring marks.

Fish River

The mighty Fish River Canyon in Namibia is regarded as one of the world's natural wonders. It is said to be second only to the USA's Grand Canyon in size. It is 160 km long, 30 km wide and 550 m deep. The violent waters of the flood had sufficient force to carve out this Canyon.

Marked Rocks

Some other examples of current marked rocks include: From Zululand to Transkei strips of marine sediments bent down on the southern seaward side indicating a southern flowing current. In Natal, coarse sandstone in the Vryheid area seems to have come from a northeast origin. In Natal, the planes of some rocks dip west or southwest suggesting that the source of the detritus was situated to the east of Zululand. The rock foldings of the Cape and Drakensberg mountains show by their contortions to have been formed while wet, by a current coming from a general Northerly direction. In the Cape the sandstone as a whole becomes finer in grain towards the south, the pebbles smaller and fewer with thinner bands of shale in the south. The Cape Mountains have their largest pebbles in the conglomerates in both the northwest and northeast. The sediments contain jaspers that can be matched with those of the Northern Cape, Vryheid and Zululand. The foldings in the Natal and Cape show the current flow took the sediments in the direction of the Cape. The Bokkeveld shales of the Cape contain blue-grey muds that were laid down in water. The

sediment gets finer to the south indicating a northerly source. There is no doubt that the Bokkeveld beds were deposited in the ocean as is shown by the marine fossils and flow marks in the rocks. The Witteberg rocks like others of the Cape get finer as they go south. The Cape sedimentary rocks are folded with a generally south facing wedge. In the Swellendam Heidelberg basin and in the Oudtshoorn area the dips are almost universally northwards from 10 degrees to 25 degrees and near Uniondale at angles of 45 degrees. Southerly inclines of up to 50 degrees are to be found in the Cape. Nearly all the sedimentary rocks in this area seem to have a Northerly origin. Huge gouges were taken out of the Cape Mountains by waters flowing south, enabling rivers formed on the north side of the mountains to flow into the southern ocean. All the important rivers of the Cape mountain system such as the Gourits, Gamtoos, Sundays, Fish and Kei originate in the interior region behind the mountains and flow south through the mountains, through deep gorges to the sea, defying meteorological and geological barriers.

All carried by Flood Sea

In the Western Cape at Saldanha, rocks were most likely to have come from a Northerly direction. The quartz porphyry and grey granite may have come from a site 8 kilometres to the Northwest. Lydianite, hornfels, dark blue quartzite and flagstones may have come from Saint Helena bay 32 kilometres to the Northwest, while white, blue grey and reddish quartzite could have come from Piketberg 40 kilometres to the northeast, across from the valley of the lower Great Berg River. These deposits were not beach or river deposits. Some of the rocks had been transported to positions higher than their source areas. Only the powerful floodwaters could have done this. A current moving from the northeast to southwest deposited the fossils deposited in this area. Near Niewoudtville, scratched marks on rock surfaces are found aligned in a direction of South 57 degrees east. Jasper gravels found south of the Orange River originate from the Griquatown and Doornberg hills. These rocks are found in the Hopetown area at 3600 feet and were transported here from about 70 miles to the north. Small fragments are found near Hopetown and Britstown up to altitudes of nearly 4 000 feet. These rocks would have

had to have gone downhill and then up again. The flood best explains this geology, as only powerful ocean currents could have taken these rocks uphill. The pebbles become gradually smaller as one goes further to the Southeast. Mariental and Bushmanland have scratched rock floors showing the sediments originated from the north. In Namibia, sediments along the South side of the Windhoek highlands show considerable folding. The trends are northeast to Southwest. In the Great and Little Karas Mountains, we find scraped surfaces showing a general north south direction. You may have been bored with all this, but the geology plainly shows there were ocean currents and they had specific directions of flow.

Gauteng Gold

The Transvaal sedimentary deposits contain boulder beds; conglomerates, pebbles, grits, sandstone and clays all deposited by water. These deposits came from a general northerly location, as is seen from the marks on the rocks and the sediment content. The sediments of the Witwatersrand reach many thousands of metres thick and were moved south by the flood ocean currents. In this area, sedimentary rocks in some places are characteristically contorted. The lack of pattern in these contortions, with no affect on the strata above and below, means that these are not tectonic features. It seems the sediment was moved while still soft by some strong force easily accounted for by strong flood activity. The Witwatersrand area produces a large part of the world's gold supply and has been one of the great sources of South Africa's wealth in the 20th century. The Transvaal contains colossal amounts of platinum, chromite and magnetite in the norite. Valuable deposits of platinum, chrome, tin, vanadium, fluorite and gold are found in the area. It has been estimated that the Gauteng area at one time accounted for 25 % of the gross product of Africa – all this built on the gold fields. The gold found here is irregular, jagged or angular in appearance. If the gold had been deposited in a river, the grains would have been more rounded. The gold is found in huge water laid down fans originating from a general northerly direction. The course material was moved in a high-energy environment. We can safely say that flood currents carried the material and formed the Gauteng gold belt. The source of

the material at the Witwatersrand gold fields was from a west to Northwest source. It is accepted that these deposits were formed in a sea like environment. The contention is as to whether it was formed in a sea, Lake Floor or marine beach delta. The sizes of the conglomerates imply a very strong water flow. The flattening of some rocks and the way they were deposited point to a marine “placer” on a wide scale. The large amount of organic matter found in the Flood Sea could have produced the sulphuretted hydrogen required for the formation of pyrite that is associated with the gold. Increases in pressure and temperature brought about the conversion of iron oxides into ferric sulphate. This then led to the solution of gold particles by the latter. The ferric sulphate was converted to ferrous sulphate and sulphide. The precipitation of the gold was aided by these and hydrocarbons. The iron ores were formed into pyrite and the balance of the hydrocarbons into graphite. This explains the graphite, gold and pyrite found together and shows that a marine environment best explains the Gauteng and many other gold fields.

Ferricrete

Ferricrete in compact beds up to several feet in thickness are found in various parts of South Africa. These consist of a large proportion of clay, sand and angular fragments of quartz or other material, cemented together by hydrated oxides of iron. The Transvaal sediments include water laid down banded ironstone with silica rich sediments, some being rich in soda. These ferruginous rocks require specialised conditions such as a basin or large body of water, with certain oxidising conditions. The flood provided for these conditions.

Kalahari sands & Victoria Falls

The Kalahari sand formations show the current flow of the flood better than many rock formations. Large parts of Southern Africa were swept by flood currents and left behind undulating dunes, which we call Kalahari sand. When the floodwaters subsided, the Cubango, Cuando and Upper-Zambezi systems were left to flow along the same routes that the currents had taken. This explains why the Okavango formed and why the water never reached the Ocean. The Okavango, Makgadikgadi and many smaller pans of this area were like large

puddles left over after the ocean waters subsided. Many have since dried up, as there is insufficient water in their catchment areas to replenish what they lost. The Upper Zambezi has only recently joined the Zambezi below Victoria Falls. The Lower Zambezi has less fish species than the Upper Zambezi, showing the two sections of the river have only recently joined each other. The Lower Zambezi was probably a smaller river before the flood, if it existed. If the Lower Zambezi had been around for millions of years, the number of fishes should be equal or greater than above the falls. Victoria Falls is classified as one of the seven natural wonders of the world. It is 1708 metres wide and has a maximum height of 103 metres. In March 1958 a record flow of 700 000 cubic metres of water per minute plummeted into the gorges. The Victoria Falls area has three main sections. These sections are the Upper Zambezi, Victoria Falls with zigzag gorges and the long 80 kilometres or so Batoka gorge system. The Batoka gorge is surrounded by some of the roughest country in Southern Africa. You can easily see that a huge volume of water gauged out the rough terrain covering this country and the Batoka gorge. There seems to have been no gradual erosion causing the water to cut through the gorges neatly and it appears most of the erosion took place violently under the sea. The Batoka gorge 60 kilometres down river from the falls is no more eroded than the gorge 10 kilometres down river from the falls. This should not be the case if they are millions of years old. The beautiful Masuie Falls a few kilometres down from the falls would have cut back a lot further if it had been flowing there for millions of years. Closer to the falls there are zigzagged gorges that are very different and would have been formed by a slower erosion process since the flood. Above the falls all the way to Kazungula on either side of the river, huge Kalahari sand dunes were formed by the floodwaters. Some of the sand was washed into dunes downstream of the falls. These dunes often have an alignment of 90 degrees to the present river. Some of these dunes are more than 100 metres higher than the surrounding country. Good examples of this are those sand areas found on either side of the river close to the falls. These dunes were formed by powerful water activity. The Zambezi drained a large part of Northern Botswana's 'puddle' that was left over from the

flood. Victoria Falls and the Batoka gorge system were made in a very short period of time and not in millions of years.

Kalahari sands their makeup

The Kalahari sands were deposited by water, the top sections may have been windblown in places since the flood, but the lower sections show definite water deposition. The sands vary from a red to grey colour. The Kalahari sand begins at the Orange River just North of Upington and spreads over the Kalahari Desert through parts of Namibia and Zimbabwe, then into Angola and Zambia. These sands are found in the Northwest Transvaal, north of Pretoria, the lower Olifants valley, the coastal belt of the South West Cape, at Kimberly and the Western Free State. Namibian sands have been found with signs of water deposition as they had water laid down limestone or calcrete formed by the flood. The Kalahari basin consists of various clay, molluscs, calcareous marls, sands and gravel bands with overlying sand. In the western Kalahari there is a fossil Calcium Carbonate horizon of a vertisol-like soil. In the central Namib, a dark grey layer contains organic carbon, charcoal, ash, fossilised plant and animal matter, implying denser vegetation and higher rainfall. The evidence shows the Kalahari was never originally a desert and was devastated by the flood to form the inhospitable environment we find today. Before the flood, it was well watered and rich in vegetation. Linear dune ridges in the North West of Zimbabwe are 0.5km to 2.5km apart and up to 120m high and can stretch unbroken for many tens of kilometres. These dunes have many similarities to the dunes found in Botswana and have mud flats associated with them. The grain size of the sand in Northwest Zimbabwe rarely exceeds 1mm in size and ranges from 0.15mm to 0.4mm. The particles are not well rounded or sorted. Clays are often found between the dunes in Zimbabwe, which are most likely to have been deposited by water. In today's active desert dune fields, the combined silt and clay content are normally very low and do not exceed 5% of the total sediment. In the Zimbabwe Kalahari sands, these figures are exceeded and this contradicts desert deposition theories. If you fly over the dunes, you will see that a current seemed to flow in a general Northwest to Southeast direction. Evolutionist claim winds were the sole cause of

the kalahari sands. Only impossibly powerful winds could have made anything similar to the dune formations we now have. The wind direction would have been different from that of today's winds, to form the alignments of these dunes. To support the ocean current theory we have many non Kalahari sand rock hills in Central Namibia stretching across to the Okavango, aligned in the same direction with the dunes and these couldn't have been made by a wind. To the south of the Kalahari, many of the hills around Kuruman and north of the Orange have the same alignment with the sands. In the Lake Ngami area grey, yellow, red and violet crystalline limestones alternate with calcareous shales and sandstones. The strata of these rocks are dipped southeastwards at moderate angles. The same sort of direction the sand dunes are directed. Minerals such as Kyanite, garnet, epidote, sillimanite and andalusite show the Kalahari sands came from a general northwest direction.

Large Pans

During the flood, some areas were eroded to flat surfaces or into pan country. The Flood formed the 75-mile long Etosha pan in Namibia, while in Botswana the famous Okavango and the pans of Makgadikgadi were the result. The 15000 square kilometre Okavango Delta is one of the worlds largest inland Deltas and probably the most dramatic. Inland pans are found from North Calvinia through Britstown and west of the Free State, with an arm stretching through Gordonia towards Gibeon. Most of these pans are circular or oval but they may be irregular in shape. Some are many miles in width such as Haakshein Vlei and Koppies Kraal pans found in Gordonia, which are 14 miles by 6 miles and 9 miles by 5 miles respectively. Government's pan in Strydenberg is 16 miles by 2 miles in size. Many pans are found in the Transvaal. Some of these pans are many miles in diameter. These are fresh water pans in contrast to the saline Cape pans. Lake Chrissie is a water body that has a length of 6 miles and is surrounded by hundreds of smaller pans, in an area of about 740 square kilometres. Pans are found in the Marico district and on the Kaap plateau. All these pans have bases of water laid down sedimentary rocks, showing they were originally formed by water. Most pan depressions are only slightly below the surrounding

country, though a few are as much as 200 feet beneath the surrounding country. Krans, Vogelstruis and Vogel pans in the Hopetown area are sunk abruptly, with the Northwest rim in each case being cliff capped with calcareous tufa that covers the surrounding countryside. The Kalahari sand areas have thousands of small pans littered between the sands and dunes. Many of the depressions in the northern Kalahari were formed in water drainage lines. An area of light coloured sand, which sometimes forms dunes, bound the southern and southeastern sides of many pans. An example of this is Salt Lake between Belmont and Douglas. These may be from wind action taking place since the flood. The 12000 square kilometres Makgadikgadi depression is covered with a greenish, siliceous saline crust and once covered 80000 square kilometres. After the flood, pans were left behind by the floodwaters and have been progressively shrinking to this day. The reason for this is that the catchment areas are too small to keep them full. The Swartkolkvloer pan in the North West Cape is about 80 square kilometres in size, compared to its previous size of 120 square kilometres after the flood. This pan was linked to other pans that were also larger. The Alexandersfontein pan near Kimberly at 19 metres above its present level was 44 square kilometres in size and its catchment was 390 square kilometres in size after the flood. Where did all the water come from to fill these water bodies at their original size and how did such large pans form by water? The flood explains this drying puddle syndrome, which is not unique to Southern Africa, in which lakes and pans have been drying up since the flood.

Limestone

We build our houses with cement and rock that were formed by the floodwaters. Limestone is used to make cement and often has human or animal remains in it. So we have all benefited from the misfortunes of those dying in the flood. Dolomite prevails over the Transvaal, Northern Free State, Griqualand West and Ovamboland. These areas were covered with a deep, warm sea, which formed these rocks. Much of the limestone in Southern Africa has turned into dolomite. Some deposits had manganese in them recalling the modern deep-sea oozes. Aragonite was directly precipitated from the calcium sulphate

contained in seawater by the action of ammonium carbonate from the decomposition of living organisms. This aragonite was the material from which dolomite and limestone were formed. There is no doubt in the minds of geologists that the dolomite in the Transvaal and Cape is a marine deposit formed in the open sea away from land, but probably at no great depth. The oolitic bands, conglomerates and ripple-marked surfaces point to tidal activity. The Otavi dolomite is estimated to be 7000 to 10000 feet thick and has limestone in it. It is probably the thickest of its type in the world. Sandstone and shale mixed in with it shows it was water deposited. Dolomite normally replaces calcium carbonate and this would take place in a tidal setting or just above the high water mark. Chert may be also mixed in with the dolomite. The siliceous skeletons of sponges and diatoms may have formed cherty matter found in the limestones. Banded ironstone is also found with the dolomite. This would indicate that the dolomite formed under a large body of water. Some limestones and dolomites in Southern Africa are called micrites and were formed in quieter water conditions; others called oolites were formed in violent water. Both conditions were present in the flood. The flood deposited coarse materials, leaves and fossils into limestone breccias, making them ideal for fossil hunting. Limestone is found in the Cape mountain ranges and this would have formed from the tidal activity washing over these formations when the sea was higher.

Stromatolites

With all the vegetation and animal matter in the Flood Sea, there was an ideal environment for the build up of algae. When Lake Kariba filled with water, the troublesome salvinia weed and blue-green algae formed on parts of the lake. This same algal build up would have taken place during Noah's flood. When the floodwaters began to drop, they left these algal deposits on the surface and these were mixed in with other rocks by tidal activity. Stromatolite is the name given to these rocks containing blue-green algae. They are abundant in Zimbabwe and found in the Transvaal, Namibia and Northern Cape. These algal deposits are often thick and may be mixed in with other sediments such as limestone and graphite. Algal deposits of such size could only have been formed with a large volume of water, with lots

of nutrients in the water. Algal structures found in Dolomite north of Kimberly were elongated and mound like, measuring 10 metres across and 60 metres in length. These stromatolites appear to have been formed by marine currents in a deep-water environment, which may have been in a tidal area. The mounds have an East West elongation that would be at right angles to the shoreline. All of this shows some of the Southern African dolomites were formed in marine conditions. Limestone formations, such as the well-known Congo caves of the Southern Cape and the remote Drotzky's caves of Botswana, have attractive stalactites and stalagmites. Most stalagmites and stalactites grow slowly; giving the impression it took them many millions of years to form. We know that cave formations formed in tropical areas grow quicker than those formed in temperate regions. The high rainfall of the tropics causes this difference. Some of these formations would have grown faster with more water present after the flood.

Clay

In Griqualand West and Botswana, fine mud was deposited by the deep floodwaters. There is no break with the dolomite and chert below. Similar muds, of the same reddish and bluish colour, are found in deep parts of the ocean. Shales in Zimbabwe, Malawi and South Africa were formed in deep water and this is shown by the fineness of the grain, even stratification, uniform dark blue or black colour and by phosphatic nodules carrying fish remains in Natal. Kaolin clay is found amongst granites in Zimbabwe and extensive deposits of other clays are found in other parts of this country. Weathering or water processes, here and in other parts of the region, could never have produced the thickness of these clays. A large volume of water had to be involved.

Marine Fossils

There should be very few marine fossils far inland, as the time period was too short for the marine populations to establish themselves there. That is why Zimbabwe and Botswana are almost devoid of marine fossils. The seashell or marine fossil deposits show us where the seacoast was before the flood. Around the coasts of Africa marine deposits show that there was no continental drift as has been taught. If

plates were moving and new land was coming out of the Atlantic Ocean, the African continent would be covered with ancient marine sediments, but this is not the case. There are obvious cracks in the earth's surface caused by the flood and tectonic activity, but no movement like we see in some textbooks. There are a few isolated marine sediments far inland in Southern Africa, which show that the Flood Sea covered the land for a short time. There was though a mass extinction of marine creatures during the flood along the coastlines. How can we explain such densely packed fossil beds along the coastlines? The reason why we have more shellfish fossils than fish fossils in these deposits is that the fish coped with the flood scenario better than the slow moving shellfish. Many of these shellfish died rapidly and were never opened up by predators. Many marine species became extinct during the flood due to the incredibly violent conditions. At Conception Bay in Namibia a conglomerate with molluscs reaches ten miles inland.

Zululand

At Port Durnford in Zululand, oysters, fishes, foraminifera and mammal bones were found together with lignite. This shows how the floodwaters mixed here, as elsewhere, a mixture of marine and terrestrial sediments. Foraminifera are marine protozoans having a perforated shell through which amoeba-like pseudopodia emerge. In Zululand a brachiopod called *Agulhasia* has been found in sediments. A brachiopod (lampshell) is a marine invertebrate having a ciliated feeding arm and a two-valve shell. *Agulhasia* is normally found at depths greater than 240 feet. A violent sea can explain the presence of these creatures deposited so high up on land. In Zululand, the ocean settled marine sediments at the base of the Lebombo, at Komatipoort and also along the Limpopo. In Zululand, deposits reach a depth of 1830 metres. Coccoliths have been found in Zululand marine deposits, which in other parts of the world form chalk. Many of the marine sediments of the East Coast show a resemblance to living forms.

Coelacanth

The Coelacanth was presumed to have become extinct 80 million years ago. It was regarded as a direct ancestor of humans. They suddenly turned up off the Comoros in 1938 and more recently near South Africa and in Indonesia. The find of this fish was mind boggling to evolutionists and had the same affect on them as a dinosaur having suddenly walked down the street. These fish can live at depths of 180m and inhabit submarine caves. They can swim upside down or on their heads and they bear live young. Fossils of this fish showed lobes, which scientists mistook for the beginning of legs. This is why these fish were thought to be the missing link between fish and land creatures. Research has shown that this was nothing more than a scientific myth. Only a serious flood could have killed these creatures and deposited them in land sediments.

Cape marine deposits

There is a uniformity of marine sediments in the Cape deposits showing no evolutionary process. The Cape marine sediments are not found more than 20 miles inland and are usually less than 10 miles from the sea. These sediments are found up to 1200 feet above sea level and the dunes and limestone in the area indicate the sea was higher. Those deposits found between mountain ranges are normally on the seaside of the mountains. The Cape marine sediments contain ammonites, cephalopods, echinoids, brachiopods, ostracods and foraminifera (all different types of shellfish and small sea creatures). Foraminifera are tiny one-celled creatures. Their sensitive shells chemically record the temperature and salinity of the water when they were alive. When they reproduce they discard their shells which lie on the ocean floor, leaving a record of past water conditions. Sedimentary samples taken from the Gulf of Mexico showed that some time in the past there was a dramatic drop in the salinity of the sea by 10%. This can only have been Noah's flood.

The Cape

The Saldanha Bay area, covered in another section of the book has a great variety of mixed marine and terrestrial sediments. The same mixture of deposits is found around Port Elizabeth, where there are

thick marine deposits mixed in with terrestrial deposits. At Douglas cephalopods, brachiopods, fish and fossil wood are found at the same sites. The reason why there are marine deposits many kilometres inland is easily explained by the strong tidal activities of Noah's flood. As the sea rose and then subsided a multitude of creatures were killed. Sediments on the Agulhas bank and on the southwestern Cape were dredged and showed phosphatic concretions, fish teeth, ear bones of whales and shells. These show that much of the flood sediment lies in the ocean.

Freshwater Fish

Freshwater fishes living in our rivers in Southern Africa show there has been a linkage between southerly and northerly water bodies. There is evidence that northerly fishes somehow managed to go south. Did the fishes somehow migrate across land? No! They did not because they swim! However, the floodwaters covering Southern Africa enabled migrations. In parts of the region, there are isolated pans or water bodies with fish in. There is no explanation as to how these fish got there. The beautiful killifishes are found in isolated pans such as those of the Gona re Zhou and Beira area. How did viable populations survive here if evolution is true and how did they get there? In Namibia, the Guinas Tilapia and Cave Catfish are found in very isolated water bodies with no evolutionary explanation as to how they got there. These fish mysteries are easily explained by Noah's flood. These fish have relatives further north from which they could have been derived. The floodwaters may have washed them south, or they may be the remains of a once resident population that lived in a well-watered area before the flood.

Coal

Every time we drive a car, we use fossil fuels derived from organisms that died during Noah's flood. We use coal for farming and for various industrial purposes. Gas made in the flood keeps the braai-vleis burning and many kitchens cooking. Coals in South Africa are found mostly east of the 26th meridian and South Africa has produced up to 29 million tonnes of coal a year. Coalfields are found in Natal up through to Swaziland, the Transvaal then into the Free State. Many

of the fields are linked and cover an enormous area showing there was a large deposition at the same time. These coalfields are found in Botswana, around the Drakensberg, in Karroo deposits, extensively in Zimbabwe and then down into Mozambique. Sediments of the Zambezi valley are thousands of metres thick in places. They contain mudstones, sands, grits, fine sands, siltstones, coals and fossils. In some areas of the Zambezi Valley, pebbly arkose and shale are mixed in with coal seams showing water was involved. The nature of the sediments, show there was a quick deposition, violent in places and a large amount of water involved. The sandstone mixed in with the conglomerate shows that there were periods of high energy flooding.

Hwange

The Hwange coalfield can produce half a million tonnes a year and has been mined for decades. Up to 1975, the Hwange coalfield had not produced spores or pollens. This shows that it was not a peat formation, but formed by a gravity sorting process in water. Other coals in the region did have spores and pollens in them, but were also gravity sorted. Plant remains and impressions have been found in the Hwange coalfield. The coals of Zimbabwe often show a southwest to northeast direction, which would tie in with the prevailing water currents at that time.

South Africa Coal

Coal seams in the South of Southern Africa are thick and reach more than 150 to 300 feet. Coals in parts of Natal were deposited by currents, which seem to have been going in a generally southwesterly direction, indicative of ocean currents. Between Dundee and Ladysmith oval ferruginous concretions, carrying fish remains are abundant in a thin zone in the shales associated with the coal. Coal seams at Witbank include boulders showing they were formed in a violent environment. Glauconite is associated with coals in South Africa and this shows a large water deposition. Some marine fossils were found in South African coals. These include a sponge, a cephalopod and acritarchs. On the Zululand coastal plains there are areas covered with sands, lignite, gravel, laterites, coastal dunes and rocks. North and South of Richards Bay, we find sedimentary rocks,

which contain mammal remains, marine fossils, woody debris, lignite and cross-bedded sandstone. This is strong evidence for the formation of coals during the flood and that they were not formed by peat formations.

Drift Coals

The constant association of coals within shales; their mixing with and passage into shale layers; their microscopic structure; the absence of fireclays and the fragmentary nature of the plant remains, point to many of the Southern Africa coal seams being drift coals. The drift theory, in which plant debris is transported and then eventually sinks as a concentrated organic mass, best explains our coal formations. This also explains why clay is often mixed in with the coals. The way it works is that drifting vegetation collects together and then sinks in water at a certain time causing the formation of coals. In the deposits, we find wood, fossils and all sorts of other objects mixed in. Unfortunately, evolutionists have rejected the drift theory of coal formations. The reason is that the South African coals are too wide in extent and too persistent. This would imply a huge water deposition, which could only be explained by the flood, as no river or lake system could do this. Obviously, this does not fit into evolutionary beliefs and so they will not accept it. South African coal seams show the best coal at the base and the poorest at the top. This is further evidence for a quick deposition rather than formations taking millions of years to form. The drift theory was once accepted but it seemed too catastrophic to have happened and many now believe in peat formations, even though the geological evidence says otherwise. To have a peat formation we should have signs of prolific forest growth in the form of root bearing beds, tree stumps in growing positions etc. Instead, roots and tree stumps have been found above coal seams. At Vereeniging, stumps of trees were found washed into the coal along the Vaal River over an area of two acres. Some of these trees reach a length of 50 feet. These deposits cannot be satisfactorily explained by a peat formation and show the coal must have formed in water. The Deluge would have swept up a tremendous amount of vegetation, which would have floated in huge rafts of decaying trees, leaves etc. with insects, reptiles and other small creatures hanging on. This

vegetation would have sunk at regular intervals, depending on its ability to float and formed the coals we now know. Much of the material in the coals may not have come from that vicinity and could have been transported hundreds or thousands of miles. The presence of ash in the coals shows that it was a time of great volcanic activity. Many of the Southern African coals have bases of conglomerates or sands, with some having settled in more violent moving water and some softer, depending on the currents and water flow.

Botany

Studying botany, we find that there are many linkages between the plants of Southern Africa and those found further north. Some of our modern plants may have been present in the areas where they are now found before the flood, while others may have been moved south with the flooding. Zimbabwe has a Cape element in its vegetation and links with the afro-montane vegetation in Malawi. The high rainfall forest types of Zimbabwe are linked to plants found in the Congo, Angola and other Central African forests. Yet how did populations in Southern Africa cross natural geological barriers to get there or here? Within the region we have many isolated pockets of plant species cut off from their relatives by geographical features. Some plant species have a North South distribution and cross many different types of habitats and yet are not found throughout those habitats. Examples of these can be found by scanning plant distribution maps. All of these botanical mysteries can be very confusing, but flood geology can explain them.

Oil

Canadians have used heat to produce oil in 30 minutes from garbage, showing that it doesn't take long to produce oil. Oil can be made very quickly and doesn't take millions of years to form. Oil shale is derived from algae and terrestrial plants. It is amazing how stagnant pools with plants in them, will sometimes produce oil, giving the impression that there is oil in the vicinity. This may take place within weeks of this vegetation standing in water. The Mkanga formation of Cabora Bassa has carbonaceous mudstones containing a mixture of algal bacterial matter and plant debris, showing that water was

involved in its formation. Oil shales that are similar to coal have been found in various parts of South Africa with oil gas. Some of the oil shales are closely associated with coal and often enclosed by coal. Certain bituminous coals are known to furnish from 10 to 25 gallons of oil per ton on testing. Torbanites or oil shales are found in the Ermelo and Wakkerstroom districts and are closely allied with the coals. Torbanite is a type of oil shale containing oil algae, botrycoccus and colloidal matter. It is found between Breyten, Ermelo, Wakkerstroom and Utrecht. A mine north of Ermelo was mined for its torbanite and yielded oil. Thin carbon rich seams are found in the region and are present as either a mixture of hydrocarbon and uranite or substances resembling bituminous coal. Polymerised hydrocarbons occur in veins in the Fish riverbeds to the North West of Keetmanshoop. In the Karroo rocks small quantities of an oil or tarry material have been found in many parts of the Northern Karroo, and parts of the Free State, usually in cavities or joints in intrusive dolerite or adjoining strata. Coal measures near Dannhauser in Natal have sandstones impregnated with mineral oil. At Barkly East pitch has been found in crevices in the agglomerate filling of a large volcanic neck and in joints in basalt. At Madrid near Bethlehem the basal sheets of lava rest on sandstone and have for a distance, amygdalae filled with calcite and a black glossy hydrocarbon, which is said to be altered pitch. Natural gas is found in northwestern Zimbabwe, South Africa and Mozambique. Torbanite points to a definite marine deposition.

Mountains on coast

As the floodwaters subsided they formed the shapes of our present coastlines. All along the west Coast of the sub-continent, reaching around the south coast to the Lebombo, Eastern Transvaal, through Eastern Zimbabwe to Malawi are mountain ranges. The force of the ocean currents and tidal activity formed these Mountain ranges when the sea was higher. The Atlantic current swept up the west Coast through the Namib Desert and Skeleton coast. The Indian Ocean would have covered most of Mozambique and reached into the Zambezi and Limpopo valleys. At one time the sea washed up against the Eastern Transvaal and Eastern districts of Zimbabwe. When the

floodwaters came down they left these mountains, hills and ocean swept flats as relics. Madagascar is not really covered in this book but has similar Mountain ranges on its eastern side, probably caused by similar forces. The floodwaters would have receded in stages with huge tidal activity over the many months mentioned in the bible. The volcanic Lebombo mountain range is 400 miles long and goes in a north south direction. These and the mountains of Zimbabwe and the Eastern Transvaal were all formed at the same time. The ocean currents and tidal waves folded most of these mountains, but the Lebombo were also formed as a result of faulting caused by the Flood Sea.

Same time

There is no stratigraphical break in the great mass of sediments of the 10000 feet Cape Mountains, even between the Witteberg and Karroo rocks. All the rocks were deposited at the same time as is shown by the intense folding. The folding was not caused by tectonic activity but by water. Rock marks on many of the Cape formations show a violent deposition or movement formed them. A gritty matrix of rocks and scratched inclusions occur on Sneeuwkop and Victoria Peak near Stellenbosch. These rocks and the sandstones beneath to a depth of as much as 200 feet have been locally squeezed into sharp folds. The strata above and below are not disturbed showing a water formation of great magnitude. The rocks in the Congo and Gamtoos areas of the Cape have beds highly folded and sheared and generally inclined southwards at fairly high angles. Even the Cape granites have their long axes set parallel to the Cape Mountain foldings, suggesting their introduction by the same forces that caused the crumpling of the rocks. Some granite intruded the Cape sedimentary rocks as the waters were folding them and causing the metamorphosis of the sedimentary rocks. In the Cape and Pondoland the iron compounds in the sands were reduced to a ferrous state, the feldspar grains decomposed and the clay transported to the ocean. This shows erosion under a tremendous amount of water. Some of the sandstone in the Cape is up to 4000 metres thick. The height of such water borne deposits, with no evidence of earth uplift shows how high the water was. The Cape fold ranges now form a barrier and prevent the winds

bringing moisture to the arid Karroo. Highly folded rocks are found between Luderitz and Bogenfels in Namibia. The rocks were formed under strong pressure directed from the Atlantic side; having become crumpled along axes trending south-southeast. The evidence shows many of the coastal mountain ranges were formed by the large tidal activity present, which deposited the sediments. In some cases this led to some igneous activity.

Wave activity high up

In Namibia marine sandstones, grits and conglomerates containing diamonds are found 500 feet above sea level off the West Coast. The Namib Desert has large dunes such as those at Sossusvlei left over from the flood, showing the huge tidal activity that took place. Many of these coastal dunes are worked on by the wind but they can't hide the fact that they were originally deposited by water. The blood-red dunes reach a height of 150 metres. If you want some fun, dune boarding is now done on some of the bigger dunes. Sea level marks on the Namaqualand coast have been found at 2m, 5m, 7-8m, 17-21m, 29-34m, 45-50m and 75-90m above sea level. In the Cape sea level marks have been found at 5m, 15m, 30m, 60m, 90m, 200m and 240m above sea level. Raised beaches have been found at 300-400 feet at Stellenbosch and near Mossel Bay and about 400 feet at Plettenberg Bay. Some of these raised beaches have rolled pebbles, sand and occasional shells, shelly limestone or phosphated rocks with caves to mark sea cliffs, such as between Gordons Bay and Cape Hangclip, or east of Plettenberg Bay. At Durban there are shells at a height of 415 feet with sands even higher, which were deposited by floodwaters. Raised beaches are found 200-250 feet high in Natal.

Erosion surfaces

Between the shore and the main escarpment and well developed in the south and southeast are relics of former erosion surfaces that become fainter and more fragmentary with height. Some stand at 2000 feet or more. Of such is the inland and coastal plateau of Natal, the coastal terraces of Pondoland falling into steps to the sea, or the benches of the Bredasdorp. Prominent among them are those between False Bay and East London, which are shown by gravels and sands. They are

table-topped hills with sharp edges and pinnacles, all marking the same height. The deposits are generally coarse, though variable, including loose boulder strewn slopes and pebble beds with intensively hard conglomerates. There seems to have been at least two successive stages of planation, deposition and cementation that produced surfaces differing by a few hundreds of feet in height. The lower peneplain stands at 700 feet to 800 feet and begins at Hermanus extending through Bredasdorp, Mossel Bay, George, and Knysna and repeated beyond to Humansdorp and between Gamtoos and Port Elizabeth. East of Alexandria it rises inland 1000 to 1500 feet. The higher peneplain stands at 1000 to 1250 feet and begins West of False Bay. Its remnants dot the Ruggens between Caledon and Heidelberg to reappear in the East at Bellevue at 1600 feet and the Zuurberg ranges, and West of Humansdorp up the Long Kloof and Baviaans Kloof to about 3000 feet at the divides with the Olifants and its tributaries. The terraces are finely developed about Loverwater Poort, Strydberg etc., where they stand at a maximum height of about 900 feet above the Olifants channel. Benches are found in the Ladysmith district. At the base of the Wittenberg the terraces are found between 2000 and 3000 feet above sea level. The fact that there are no marine sediments at the highest heights indicates the short time the flood covered the earth. Erosion surfaces are found at 6500 feet in the Klein Zwartberg and along the Langbergen.

Natal Dunes

Dark red and chocolate sands occur along the coastal areas of Kwazulu–Natal and in Mozambique. The coastal dunes of Natal and Zululand were formed by marine transgressions. The sand possibly came from the continental shelf or was washed from inland by flood currents. The sizes of these enormous dunes, some of which are 500 feet high, show the power that the Flood Sea had. A lot of sand was washed into the sea to be then dumped on land. Table Mountain is made up of sandstone that the sea dumped during the flood. Its odd shape may be due to the meeting of the two oceans at this point.

Lagoons

There are many pans along the coast, which are lagoons cut off from the sea by these huge sand deposits. They are found both along the Atlantic coast and bordering the Indian Ocean. They are either salt or fresh water bodies. Some of these are well known such as St. Lucia and Sibaya Lake.

Undersea marks

A rocky bank about 30 to 40m below sea level and about 10km south east of Cape point has rounded pebbles, cobbles and boulders. This is a possible wave cut terrace caused by the flood tidal activity. Off the coast of Natal banks of sand are found down at 108m below sea level. So the tidal activity left its mark above and below sea level.

Rivers undersea

There is evidence that many rivers flowed at higher levels and carried more sediment with them at one time. Many rivers in Southern Africa have been found to have their bases under thick sediments – implying they were more violent and damaging during the flood period. At Mackay Bridge on the Sundays River, 3 miles from its river mouth bedrock was not reached at minus 112 feet. In the Buffalo River at East London the bedrock was found to lie in the middle of the estuary at 122 feet below water level and overlain by clays, sands and shelly beds. At Port Shepstone the clays and silts were not yet passed through at 140 feet below the low water mark at a point $\frac{3}{4}$ mile from the mouth of the Umzimkulu River. Borings to bedrock under the Tugela River reached –40 metres at 34km from the sea. The former channels of the Breede and Gourits rivers are traceable across the Agulhas bank and submarine canyons are found off Saldanha bay and detected off the Umtata River mouth and Zululand coast. The Orange River has a huge underwater bank offshore showing it must have carried a large amount of sediment. This and its higher gravel beds reaching 80 metres above the present river, show that large volumes of water flowed down this river. The rivers of Southern Africa must have carried large amounts of sediment, during and after Noah's flood. The Mozambique plain seems to be made up of a large amount of sediment carried and deposited by the Indian Ocean. The Zambezi

would have carried down a large amount of this sediment and much of it would have been slumped westwards by the ocean currents. Cave sites along the Cape coast contain sediments in them overlying Flood sea sediments and the indication is that the sea must have formed the caves quite recently.

Drakensberg PHOTO Barrier of Spears 1973



MAN & APE

Transvaal, Free State & Northern Cape fossil sites

Kariba

Enoch an Old Testament prophet saw a vision in which people and/or animals were gathering, sinking, being swallowed up and perishing in the waters of the flood. Have you ever wondered at the terrible fear that took place as animals, people etc. took to high ground? Boats sank, houses were swept away and people held onto their loved ones for the last time. We sometimes see similar things taking place on CNN. In Southern Africa we have a great dam about 2109 square miles in size, called Lake Kariba, which was completed in the early 1960's. While the dam was filling the government authorities decided to save the wild animals living in the area. This operation was called Operation Noah and over 5000 large animals were rescued from the floodwaters. The drowning of animals and the way the animals reacted to the flooding, show us what probably happened during the Deluge.

Animals die at Kariba

As the floodwaters rose on Kariba, islands began to form with the tops of the trees being submerged. The land flooded and large carpets of floating vegetation formed, while there was a rapid build up of aquatic organisms. The *Salvinia* fern eventually covered about 75 square miles of the lake. The fish had a field day and fishing was good on the lake. Insects and spiders were common on the retreating shoreline and in the drowning trees. Amphibians and monitor lizards lived well off the insects. Most reptiles suffered as their habitats were flooded. Snakes and lizards swam to drowning trees and islands where they often fell prey to birds. Tortoises were common, becoming marooned on the islands and many were to drown, although they seemed to swim/float well. They had buoyancy that allowed them to float and they could swim by paddling their legs. A tortoise was recorded eating *salvinia*, which is a plant that grows and floats on water. Terrestrial birds normally flew away, but some Francolin, Guinea fowl and Waxbills were to drown after taking refuge in stranded trees. Mammals could swim but many perished when they

became stranded on the islands. Large mammal species reacted differently to the flooding. A few were intelligent enough to swim to the mainland but many perished in concentrations on the islands. The Game department saved many from the flooding. One island called island 17 with an area of 7.5 square miles had about 18 larger mammal species marooned, amounting to approximately 567 animals. This total doesn't include those that died and those that had escaped off the island. The species trapped together included; Monkey, Baboon, Pangolin, Genet, Aardwolf, Hyena, Antbear, Rhino, Zebra, Bushpig, Warthog, Duiker, Grysbok, Impala, Bushbuck, Kudu, Hare and Porcupine. On another island called Ukubula a herd of about 200 buffalo were marooned. Many of these Buffalo were shot to put them out of their misery, captured or chased off the island. The competition for food amongst the large mammals on the islands was terrible and they lost condition. There was surprisingly little aggression between the crowded species and individuals. The larger mammals associated peacefully in mixed groups. Large predators had an impact on island 17, feeding off the stranded animals, but they normally swam away from the islands when they needed to. Kariba showed the behaviour patterns of the animals and how they would have responded to Noah's flood.

Not all on Ark

Did every creature go on the Ark? Some of the mammal species now extinct from the Americas and possibly some of the large land dinosaurs may have been left out of the Ark. The latter point is open to debate, as there are historical and biblical records of large dinosaurs living after the flood. Some freshwater creatures, many amphibians, sea creatures, the crocodiles and turtles, whales, insects, small reptiles and possibly some sea birds survived out of the Ark. There would have been large masses of floating vegetation and driftwood on which many creatures could have survived. Insects, amphibians and reptiles would have been the most likely beneficiaries of the masses of floating vegetation. Reptiles can go a long time without eating. One reptile like creature, which was in Southern Africa called the Tuatara, is now found only on islands off New Zealand. This species may have ended up there after being washed on to the newly formed New

Zealand from drifting plants, with no family members having survived in Africa. It is a so-called living fossil and its survival is as amazing to evolutionists as finding a living dinosaur. Many marine molluscs died in the catastrophe and many are now extinct. They can be found in fossil beds where the former coastlines once were. A good place to see this is in parts of Kwazulu-Natal. Over 90% of all creatures that once lived are said to be extinct today, showing the devastation caused by that flood. A world wide catastrophe best explains the death of the dinosaurs and many other creatures. Even evolutionary scientists are now saying that something catastrophic must have caused the extinction of all those amazing creatures.

How they were deposited

The animals and people who died in the flood, died like those at Kariba. They gathered on gradually diminishing islands to eventually perish together. In some cases, they died on their own or with family members. The corpses were collected into floating masses to eventually sink together or in many cases on their own. Do we have flood fossil sites in Southern Africa? Yes, we do and Southern Africa has some of the best fossil sites in the world. There are many large and small fossil sites of mixed assemblages of animals, which died together. The numbers and mixed content have confused palaeontologists who still do not understand how these fossils formed. Many are found in limestone formations in which the bones are badly damaged, as rocks and currents had battered them around before the floodwaters subsided. One theory as to how this happens is that calcium carbonate will develop around corpses due to anaerobic decomposition where there is a localised concentration of ammonia or amines. This would increase the pH, sufficient to precipitate the carbonate and would explain the formation of bone beds in limestone. Fossils normally need to form under special conditions. These include an oxygen free environment with enough sediment to prevent anything eating the remains. The flood produced the ideal conditions for this and very few fossils have formed since then.

The still missing link

Was Africa the Eden we now find in popular thinking, or was there an African eve? No this is all a big mistake. The Garden of Eden was in the Middle East as described in the Bible. Over the years, many forged missing links have been created to strengthen the lie that man evolved from the apes. In other cases, fossil material is misinterpreted, with incomplete skeletons being used as evidence. A good example is the fossil from East Africa called Lucy, which was mistakenly used to give the impression that Australopithecus walked upright. The large evolutionary community persists in trying to find the Holy Grail of evolution i.e. the missing link. Southern Africa is important in this field as we have many ape and human fossils. The human fossils are often ignored while the ape fossils of Australopithecus/Paranthropus have been used to try to prove evolution. The Australopithecus fossils (meant to have been the missing link) are now thought by some to be a 'failed attempt' at human evolution. There are many 'die hards' that continue to believe that this is the missing link, even though the evidence shows that these were not our ancestors. There is some difficulty in interpreting deformed, broken fossils and it is very tempting for someone to 'make' a fossil older, or create a missing link because of the prestige it brings. It is easy to make mistakes and at one time paleontologists thought a thighbone found in the Transvaal, was from an Australopithecus. This later turned out to be from a leopard. One of the mistakes made about the apes of Southern Africa is the assumption that they lived in caves. This would imply that they were different from existing apes and that they were more civilized. The limestone breccia deposits they are found in were formed in the flood and some have eroded to form caves. The fossils often have to be blasted out of the breccia and in some cases are at sites which have yet to be eroded into caves. The millions of granite and other igneous rock caves in Southern Africa have never produced an Australopithecus. Many theories have been drummed up to try to understand why this is so. The only explanation that fits all these facts is the Flood and no fossils would have survived the igneous activity to be left behind in a granite cave. Unfortunately, the flood is not

acceptable to many scientists and they would rather speculate and leave the mystery unsolved.

Old or recent

How can we tell whether human and other fossil remains are from a pre or post flood fossil site? Normally any proper human burial or feeding sites will be post flood. Fossil remains found in breccias (especially limestone) or at great depths in the ground, are most likely to be flood deposits. Fossilised or scattered animal remains are strong candidates for a flood deposit.

Breccia

The Transvaal area especially north of Krugersdorp is full of limestone breccias and other water laid down rocks, often eroded into caves, some being small holes in the ground. Many deposits have yet to be exposed. Some of the well-known flood sites in the Transvaal and Free State include Kalkbank, Taung, Blaubank valley (Sterkfontein, Swartkrans and Kromdraai), Makapansgat valley, Vlakplaats, Gondolin, Cornelia, Florisbad and the deposits of the Vaal River.

Old skulls

The Rhodesian man fossil was found at Broken Hill near Kabwe in Zambia in 1921. This famous skull was found about 60 feet underground in a hill containing breccia, lead and zinc. The skull was found with the remains of two or possibly three other individuals. The upper jaw of one of the other individuals looks similar to modern humans. These humans do not have the same racial features as any of the groups of people who have recently moved into Southern Africa. Why does the Rhodesian man look different from the others found with him? He has a low cranial doming and a very heavy brow bridge. This is easily explained by the changing of peoples' skulls when they reach a great age, as mentioned in a previous chapter. A strange hole was found in the Rhodesian man's skull. This hole pierces right through the skull and looks like a bullet hole, adding some mystery to this site. The site had many mammals and other fossils including an elephant and what was called a brontosaurus. It was also found that

there was no natural entry to the cave containing the fossils. For some reason this site was never properly studied and many specimens disappeared. The Rhodesian man skull is similar to many of the older skulls found in Southern Africa. Dolomite deposits south of Lusaka were blasted in 1959 for the building of Lake Kariba. At Shimabala, a mass burial was found while the mining was in progress and this contained pottery similar to that found at Broken Hill. The human remains were exposed from a depth of 3m to about 5.5m. There were about 33 individuals recorded at the site, with shell beads, blue glass beads and copper bangles, copper bracelets and some fauna. The miners blew up the site so destroying the fossils before the archaeologists could study the site properly. The few bits and pieces retrieved were taken to the Congo for research and seem to have disappeared. Half a mile away from this site at a dolomite site, the Chipongwe skull was found. This skull was different from racial types now found in Southern Africa and had features in common with the Rhodesian Man. The Transvaal has produced fossilised skulls showing similar features to the famous Rhodesian man showing their antiquity. All the fossil sites mentioned below are likely to have been the result of Noah's flood. However skulls described as Boskop include some people that may have been post flood. The Boskop skull was an important skull found in the Transvaal near Potchefstroom in 1913. It was embedded at a depth of 4.5 feet, at the top of lateritic ironstone. The skull was completely fossilised. A stone implement was found in association with it. This stone tool is different from other tools found in Southern African caves of more recent times. The skull is said to be one of the largest found, with a length of 212mm and its greatest width reaching at least 153mm. The bone varied in thickness and the prominent brow was very narrow. This person had a large brain, with a brain case of 1900cc, or possibly larger. This is bigger than the skulls of most modern human beings. R.Broom probably one of the greatest palaeontologists to have lived - had this to say about the response by the scientific community to this find: "Prejudice has played a considerable part in anthropology. Since the belief in evolution became accepted, all old human skulls are expected to be ape-like and if not ape-like are regarded with suspicion. Doubts have been thrown on the Galley Hill skull because

it is not sufficiently anthropoid. When in 1855 a human jaw was found in the Red Crag it was submitted to Owen, Huxley, Lyell and all the leaders of the day. As it was not like an ape's jaw they all shook their heads and said it was an interesting curiosity and as no one recognised its value the jaw got lost. The Boskop skull has been threatened with a similar fate. It has an enormous brain and is not at all ape like and therefore according to some, it cannot be old and in any case cannot be interesting." Broom scorns the unfortunate attitude taken by many palaeontologists that has prevented proper palaeontological work from being done.

Springbok flats

The Springbok Flats skull was found in 1929, about 80 miles North of Pretoria in the Transvaal. It was retrieved while gravel excavations were taking place at a depth of about 4 feet below the surface, in a surface-limestone deposit. It was not a burial and was found with the remains of a large buffalo, which is larger than the buffaloes that live today. The skull and skeleton belonged to a large and powerful man. The bones were badly broken. Most of the skull was broken into small coin size pieces, but the jawbone was well preserved. Fitting the bones together posed problems. Some pieces were missing and so impregnated by lime that it was difficult to get them to fit. The skull was found to look like a modern man with a large brain. The skulls maximum length was about 195mm and the breadth about 144mm. It had a well-developed brow. The jawbone was unusually long and very massive. Its size was said to be larger than that of any known living human. The limb bones were large and powerful. The arm bone was estimated to be 330mm long. The missing ends make it difficult to be sure of its true length. The arm bones were those of a powerfully built man. The thighbone is similar to that of the Rhodesian man, being long and massive. The bones show a tall robust individual and estimates put the height of this person over 6 feet. In summary the Springbok flats man was thought to be tall and strong with a big brain, a long and wide head, a drawn out face, big jawbone and small teeth. This person cannot be fitted in with any racial type living in Southern Africa today and shows his antiquity. In 1957 and only about 16km from the Springbok Flats skull, a rhino was exposed by a

storm in calcareous soil. About 250m from this rhino some earth removing equipment revealed a man who had died with his hands and arms outstretched, the base of his skull missing and the ribs on his left side crushed.

Kopje Enkel

There was a report in 1935 of a fossilised human jawbone having been found at Kopje Enkel, on the Western border of the Transvaal. The bones were found 4 feet deep in a limestone formation. Some other skeletal remains found by the road working party disappeared. The large shape of the jawbone shows it does not belong to the modern humans living here today and had similarities to the Springbok Flats man.

Swartkrans and nearby sites

The Swartkrans site produced in the region of 59488 bones of many different large and small animals. Human remains have been found at Swartkrans. This includes skeletal fragments, thumbs, some skull and a human tooth. Australopithecus/Paranthropus (discussed below) remains are also found at this site. Studying the teeth it appeared the humans were omnivorous, while the ape was an herbivore feeding on nuts, seeds and other vegetable matter. The Sterkfontein site found just over a kilometre to the East of Swartkrans yielded an Australopithecus and bits of a human skull. Kromdraai is just over a kilometre to the east of Sterkfontein and has yielded about 5000 fossil specimens. Found in the deposits were small rodents, barn owls, quails, button quails, crakes, sandpipers, ruffs, lovebirds, starlings, pipits, waxbills, grass warblers, sparrows, red bishops, weavers, swallows, various large mammals, crocodile, girdled lizard and tortoise. The fossils were damaged like those at other sites with crushing, distortion, scratches, disintegration, dissociation etc. this being expected from the powerful currents and pressure of the Flood Sea. Crocodiles, hippo, reptiles, birds, rodents and mammals found together show the unusual nature of their deaths. Bones had been weakened from standing in water for a long time, with many deformed. At Kromdraai about 70% of the recovered remains had been crushed in some way and this was not from carnivore action, as

the separated pieces were found together. Many fossils are amazingly complete at this site, including the small animals. This is in contrast to the left over carcasses of the existing large carnivores and consequently large carnivore activity is ruled out here. Colobus monkeys, which are found here and at other Transvaal sites, are arboreal specialist leaf eaters, who rarely descend to the ground. The presence of a chimp like creature called Australopithecus/Paranthropus and the colobus before the flood in this region showed the habitat was very different from what it is today. Both species have similar habitats in the forests of Central and East Africa. The maintenance of a population of hippo in the Kromdraai area today, with the present rainfall is not possible. Parrots generally come from areas with large trees. A juvenile parrot was found which shows a breeding population. This parrot and other fossils of juvenile birds etc. show there was a summer deluge. April/May is the time of year that the Jewish books say the flood started, so this ties in with the summer deaths of many of our fossils. Parrots still breed in South Africa during these months.

Gondolin

Gondolin is a fossil site near Broederstroom in the Transvaal. This is a breccia; travertine site yielded 90,000 odd bones. About 27 species were found, with reedbuck and klipspringer being abundant. A human tooth was found in this assemblage.

Vlakplaats

The Vlakplaats limestone breccia near Pretoria contained fossils, which included hares, bats, rodents, shrews, small birds, land snails and larger mammalian bones. The bones that were found were covered with sinews at the time of fracturing and deposition. This is evidence the animals drowned and that predators did not kill them.

Cave of hearths

In 1947 some blasted breccia from the cave of Hearths, Makapansgat in the Transvaal produced a human jawbone. The remains were embedded in lime-consolidated red earth. The fossil jawbone

appeared to belong to an adolescent of 12 years and from a well-built race of people. An arm fragment has been found at this site.

Stone tools

Some stone artefacts found in Southern Africa may have been from before the flood. A polished stone pendant was found in the Makapansgat Valley, which may be from these early people. Some spearheads made of a mixture of soapstone and quartzite with polished stone rings, were found at a depth of 12 feet near Regina in the Western Transvaal. The depth of these tools makes it likely that they were from before the flood. Stone bowls have been found in Botswana and Namibia, some at a depth of 6 feet in red alluvial sands. Stone bowls were quite common in ancient times. There could be sites in Southern Africa where the remains of a town or habitation remain undiscovered under sediment. If they had built their houses with clay the chances of finding something seems unlikely. These ancient people may have done some of the strange rock engraving sites now found in Southern Africa.

Free State

The Free State area has some interesting fossil sites, which include Florisbad, Cornelia and the Vaal River gravels. The Vaal River gravels have produced over 1000 plus fossils from its sediments. Most of these fossils were found by diamond diggers and are yet to be fully studied. The Canteen Kop skull was found near Kimberly in a deposit on the Vaal River near Barkly West. The skull was found in a deep alluvial bank. The fragmentary nature of the remains means it is unlikely to have been a burial. No jaws or teeth were found. A few fragments of the limb bones were acquired. The bones were mineralised. The large skull had a length of 205mm and a breadth of 140mm. This like other ancient skulls differs from the Bushman and other peoples of recent times. In 1932, a human skull was found at Florisbad. This was found with a possible throwing stick and the fragmentary remains of large and small animals. It appears these were all victims of the flood and were roughly handled by the floodwaters. This large brained person looks similar to modern man but was larger and similar to the Saldanha man found in the Cape. The fossils were

found in an accumulation of coal, sands, clay and dolerite rubble. The presence of coal shows that these fossils formed at the same time as the coalfields were deposited, which would have been at the time of the Flood. Students of fossil man ignored the Florisbad skull for about 30 years. This may be due to it having had a mix of Neanderthal and modern features, which could not be explained by the evolutionary theories of ancient man.

Taung and chimps

The Buxton lime works at Taung include at least 17 sites that contain fossils. The black earth cave contained human teeth. The Tobias cave produced fauna with the remains of part of a human skull. There are remains of lizards, crabs and a tortoise. Also found in red sandy limestone were baboon, small antelope, shrews, rodents, small carnivores, bats and hyrax. There were some fragments found here thought to be a missing link, which were later found to be from a baboon. This site had baboons showing minor structural changes from those living today. These were similar to other fossil contemporaries of the other Transvaal skulls. The animals found were similar to those found with the Rhodesian man skull from Broken Hill in Zambia, Saldanha man and Florisbad man. In 1924, Professor Raymond Dart acquired an incomplete skull that had been blasted out of the Taung lime works. After cleaning and studying it he announced to the world that he had discovered mans' missing link. It was named *Australopithecus africanus*, which means Southern Ape. At first, his claim was regarded as a joke. Later on, however with the Piltdown man being found to be a hoax, it became accepted by the world that this was the missing link. Over the years this fossil and other *Australopithecus* specimens have gone through phases of being the missing link and then not being it. In 1977, Richard Leakey removed *Australopithecus* from the ape-man chart and it ceased to be a human ancestor. The Taung skull was depicted once at Wembley with an evolutionary bias. The skull was made up with the ears of a chimpanzee and a smooth, rounded forehead. The hair of the scalp was sleek and parted. The bushy eyebrows were those of a man of the age of 55 or 60. The neck was fat and thick. The nose was modelled along gorilla lines, whereas the nasal part of the skull imitated that of

a chimpanzee. The mouth was wide with a smile at each corner. So with this and many other fossils done up in museums we find artistic fantasy. Often racism is shown by depicting these artistic pieces to be black implying that black people are lower down on the evolutionary ladder. Professor Dart claimed the brain of this specimen showed certain human like traits. The parallel fissure has to be correctly identified for this to be proven and Professor Dart guessed the position of the parallel fissure in the skull. By doing this, he made it seem more human. Some experts such as a well-known scientist named Zuckerman examined the skull and found it to be like the present day African apes. Without giving too much technical detail, the skull was found to be from a young anthropoid ape in its fourth year of growth. It had similarities in the skull and teeth with gorillas and chimpanzees. The upper permanent canines show these were of an ape type. The shape of the deformed face, broken nasals and brain case showed similarities with a gorilla. The Taung skull was presumed to be millions of years old. It supposedly would take millions of years for these apes to have evolved into a human. Using evolutionary dating techniques, which give readings to support evolutionary ideas, the deposits in which the Taung skull was found, were formed less than 870 thousand years ago. Here the evolutionists using their own techniques prove that even if evolution had been true, there was not enough time for this creature to turn into a human. All of a sudden the prime missing link of the world was looking shaky and the excuse was; 'One point that needs investigation at the outset, however, is the question of the identification of the Taung skull as *Australopithecus africanus*. The possibility that the Taung skull might represent *Homo habilis* or a more advanced creature than *A. africanus* ... certainly deserves some consideration in view of this younger date'. Phillip Tobias, who had worked at the University of Witwatersrand, announced that this skull had not been fully analysed and described after 50 years. Amazing! And for all those years the world has been deceived into believing that there was a missing link, with this being one of the prime specimens and many still believe there is a missing link.

Other chimplike apes

Since the Taung skull Australopithecus/Paranthropus skulls and bones have been found in South and Eastern Africa. The Transvaal sites have produced many of these fossils. The more complete skulls and bones recently discovered have confirmed what Christians have been saying all along. They are nothing more than apes. Because of their incomplete nature, the Lucy and Taung skulls were mistakenly interpreted. As more fossils have been found, we now have a better picture of what these apes were like. Australopithecus have wear patterns on their teeth like the chimpanzee, which are very different from those of humans and the teeth are unlike human teeth. They had epiphyses on their finger bones showing an adaptation to knuckle walking – which is an indication that they did not walk upright like man. This is further supported by the pelvis, which shows that it was more likely that they walked like chimpanzees. They seemed to reach a size smaller than a Gorilla, but bigger than a chimpanzee. Pre flood chimps may have been bigger due to better environmental conditions, so falling into this size bracket. Dr. Broom a famous paleontologist in Southern Africa, maintained that one of the most important features proving the affinity of the Australopithecus and man was the fact that the lateral incisors of the upper jaw and the canines meet, a feature which he thought didn't occur in apes. This may be true in normal chimps and gorillas. This is not true in the pygmy chimp called the Bonobo where the teeth have become very small indeed. This animal presents a case homologous with Australopithecus. The small size, the dome shaped forehead, the shortness of the face that is responsible for the crowding together of the teeth, are the same in both. It is therefore probable that Australopithecus was a chimp. There are 5 types of chimpanzees in Africa showing a great deal of genetic variation. This means that a pre flood chimp could easily have looked like Australopithecus/Paranthropus. The Drimolen site in the Krugersdorp area of South Africa has recently produced 79 new fossil hominids. This site has conclusively shown that man and Australopithecus lived side by side, as different creatures and has confirmed what Christians have said for many years.

Just a chimp

The Australopithecus could not be our ancestor. Just as chimps and gorillas live with humans today, so man lived with apes (Australopithecus etc.) before the flood. The fossils do tell us that there was a race of people who looked different to us and were wiped out by the flood. The fossils show these people lived all over Southern Africa, with a possibility of large populations along the coastlines and in the Transvaal. They also died in desperate attempts to reach higher ground, surrounded by their animal contemporaries. If Australopithecus was our ancestor then how come humans were already evolved and living side by side with them? Australopithecus was simply an ape, which happened to be living in Southern and East Africa before the flood.

What was it like?

Trying to work out the environment before the flood in an area is difficult and requires a lot of detective work. We can study endemic trees, current flow, pollens, plant families, plant fossils and animal fossils to get an idea of which plants existed. Once we know what sort of animals and plants lived, we can guess the climate and environment that existed. The Vereeniging area has produced fossil plants with fern like characters. There are similarities between these plants and those found at the Hwange coalfields. A fossilised forest was once found in the bed of the Vaal River near the Vereeniging coalfield. The Harrismith area produced a 29.3m long tree that was put on display at the Harrismith town hall. Using this information and other data available, it seems the Transvaal was a well-watered area with grasslands, broadleaf forests, rivers, savannah, woodland and hilly areas. The northern areas probably had thicker vegetation than the Southern Free State area, while it became more open with grassland areas as one went into the Northern Cape.

WESTERN EXOTICS

The Western Cape & Namibia fossil sites

Saldanha

There are many fossil sites along the West Coast of Southern Africa, stretching from Cape Town up through Namibia. The Saldanha Bay area is particularly rich in fossils, with the well-known fossil sites of Langebaanweg, Elandsfontein and Hopefield nearby. The important site called Langebaanweg has a mixture of sedimentary rock, containing marine and terrestrial deposits, with phosphate rock and gravel. One of the most productive quarries at Saldanha was the 'E' quarry at Langebaanweg, which at its widest is about a kilometre in diameter. I would like to list the fauna to show you the incredible variety of species that were deposited in one place. This site does not include nearby quarries, which are also very productive. There is no way that such a diversity of species could die at one spot unless the flood was involved. Even the evolutionary palaeontologists agree that there must have been some sort of flooding here. The amounts in brackets give the amount of species, and not the incredible numbers of individuals e.g. over 500 short-necked giraffes.

Invertebrates

At least 32 species including the following types:

Foraminifera (6), ostracods (5), top shells (2), periwinkle, snails (7), dove shell, plough shells (6), marginellid shell, chiton, sand mussel and false cockle. The small invertebrates included freshwater specimens now found only in tropical areas. There were high concentrations of land snails found with fragments of mammal fossils. These land snails were found with tortoises and calcareous (chalky) structures, built around the remains of vegetation.

Lower Invertebrates

The fishes, amphibians and reptiles have been largely unstudied, but more than a dozen species of the following types are represented:

Sharks, rays, catfish, other bony fish, frogs, tortoise, turtles, chameleon, gecko, monitor lizard, other lizards and snakes. Fishes destroyed included a six or seven gilled shark, grey or black tipped

sharks, oil shark, great blue shark, lemon shark, sand sharks, giant white shark, mako shark, dogfish, angel sharks, skate, sting ray, eagle ray, catfish, various bony fishes, mussel cracker and others.

In one place an unusually large numbers of frog bones were found together, showing even they were sometimes not spared by flooding. An angulate tortoise found at the site is similar to ones found today in the region.

Birds

At Langebaanweg bird bones were found making this possibly the largest fossil site for birds in the world. These Varswater deposits in the Cape have produced more than 10,000 avian bones of at least 61 species. This is one of the largest bird accumulations found from the flood.

At least 61 species of the following types were recorded at the preliminary stage of study:

Ostrich, penguin (2), grebe, petrel (3), cormorant etc. (3), gannet, stork, ibis, ducks (3), goose, falcon, hawks (3), a possible vulture, eagle, francolin, quail, crane, rail, bustard, plovers and other shore birds (10), sandgrouse, pigeons and doves (2), parrots (2), owls (2), mousebird, rollers etc. (3), woodpeckers etc. (2), swift, and song birds (9).

Other bird deposit sites in the Cape include Klein Zee, Ysterplaats air force base near Cape Town and Duinefontein, which is the site of the Nuclear power reactor plant. There are also some deposits, which are classified as middens, which appear to fall into the flood category. Interestingly fledgling chicks that died in these deposits are normally at the same age found in the region between December to April, which fits in with the historical date of April/May for the start of the flood.

Bird fossils from the many Western Cape Flood sites include; ostrich, francolin, ducks, geese, grebes, oystercatchers, petrels, pelicans, cormorants, gannets, storks, ibises and spoonbills, a possible vulture, falcons, hawks or eagles. There are also cranes, rails, bustards, shorebirds, sandgrouse, pigeons, parrots, owls, mousebirds, rollers, kingfishers, woodpeckers, swifts, songbirds, penguins, albatrosses, prions, shearwaters, booby, gulls, terns, fulmar and puffins. Parrots no

longer occur in the southwestern Cape, being found in tropical wooded areas further north. Ostriches were larger than those found today. Many francolins were found at Langebaanweg and in some sections many dead ducks. Water birds were not spared by the devastating floodwaters. One of the penguins found in the Cape deposits was quite large and almost as big as the biggest penguins today. One prion was a giant and larger than any existing today. Many of the birds were the same size as their modern counterparts.

Mammals

At least 83 species of the following types are recorded:

Golden mole, shrews (2), elephant shrew, bat, baboon or monkey, pangolin, aardvark, foxes (2), bear, wolverine, honey badger, otter, seal, civets (2), genet, mongooses (5), hyenas (5), sabre tooth cats (2), false sabre tooth cat, lynxes (2), wildcat, unidentified carnivores (4), gomphothere, elephant, hyrax, hipparion, white rhino, peccary, pigs (2), hippo, sivathere, okapi, giraffe, nyala (2), boselaphine antelope, buffalo, waterbuck (2), alcelaphine antelopes (2), steenbok, gazelle, muskox (2), hare, rodent moles (2), porcupines (2), several rats and mice, gerbil, dormouse, and a few whales and dolphins.

In one occurrence of no more than a meter square and a few meters thick, the remains of thousands of small vertebrates were found. These included up to 800 golden moles. In another area, there were an uncounted number of broken bones and teeth belonging to animals ranging in size from mice to whales. Cats included the sabre tooth cat, of which there are leopard and lion sized ones. The high number of carnivores and tortoises show how these creatures were taking to the higher ground. The carnivores probably did well off the many animals collected together, before they drowned. There were a variety of hyenas. The Civets were larger than those found today and so was the wolverine. Agriotherium was a large bear as big as the Kodiak bear. This bear was similar to the Panda in some ways. It had long legs and was possibly a fast runner. There was a giant pig much larger than the modern bushpig. Many fossilised seals were found in the area, which are similar to the monk seals of the Caribbean, Mediterranean and Hawaii. Some of the seals were still young when they died. The peccary, which is a small pig no longer found in Africa; was present.

The site yielded Giraffes of a great genetic diversity and many were short-necked forms. The Langebaanweg deposit had the remains of about 500 short-necked giraffes. One short-necked giraffe was found deposited with its limb bones in a vertical position showing a quick deposition. The Elephants were larger than their modern counterparts. The boselaphine antelope found is similar to the blue cow or Nilgai of India. Complete skulls of mammals were rare and no entire skeletons were found, showing the violence of the floodwaters. Predators on the islands, or the process of deposition would have largely damaged the bones in these deposits.

All sorts

You can see the amazing mixture of invertebrates, which include fresh water, salt water and terrestrial types. These are mixed in with fishes, whales, terrestrial animals, reptiles and birds. In one place a sharks tooth, sabre-tooth skull, penguin bone and pig skeleton were found together. Terrestrial vertebrates are found with foraminifera and fish teeth. Bird eggshells were found with seashells. The Flood is the only explanation for the mixing of so many species, from so many habitats at one place. The way the fossils were deposited by the water shows a sea current flowing from the Northeast to the Southwest. Some of the fossils may have been burnt by the volcanic activity that took place nearby.

Saldanha skull

In 1953 a farmer found a human skull north of Cape Town at the Elandsfontein/Hopefield site. This skull was later named the 'Saldanha skull' and was taken to the South African Museum. The scientist working there was not impressed or interested in the skull and dumped it in a storage hut. Luckily a scientist named Ronald Singer retrieved it and noticed the value it had in human ancestry. It consisted of a large skullcap and jawbone of a robust physical person, with a heavy brow ridge. This skull was in deposits of ferricrete and limestone, with fossils of a giant buffalo, a giant warthog like pig, a large elephant/mammoth, small mammals, birds, reptiles and a short-necked giraffe. It appears to be the remains of a young adult male who had similarities with the Rhodesian man.

Elandsfontein

The Elandsfontein fossil site had calcareous floors that were heavily encrusted with ferricrete and contained about 20,000 mostly mammalian fossils. In one case six large antelope vertebrae were found in an articulated position showing the animal was rapidly covered with sand. The flesh and sinew were still around the vertebrae. The waters deposited the corpses at Elandsfontein so they formed bone circles. One of the palaeontologists, who had excavated at Elandsfontein, had this to say about the site, “Large accumulations of fossil bones over a vast area are freaks: it is not enough to have the right soil conditions to preserve bone; it has to be buried fairly quickly. If these and other conditions can be met, chance alone will not concentrate large numbers of dead animals in the right place. Even in places suitable for fossilisation, only a small proportion of the dead animals are likely to become fossilised after predators and scavengers claim their share and scatter the remains. So many factors are involved that, like winning the football pools, if it should occur it is not likely to happen again. What could have happened at ‘Elandsfontein’?”

Sea Harvest

Sea Harvest is a site near Saldanha bay, which yielded large and small mammalian fossils. Included in this were a human finger or toe and a tooth. This site is one of many flood deposits found in this area.

Ancient Ship

There have been many reports given of a 70-foot long wooden ship that was found 10 miles from the sea on the Cape Flats. This ship had a mast and metal pieces and was found in sediment. Over many years, it was broken up for firewood that was carted off to Cape Town. Unfortunately, the ship has now disappeared, so we do not have any wood specimens to confirm the find. There is a possibility that this was a ship deposited by the flood in sediments at the Cape Flats.

Melkbos

The Melkbos site in the Western Cape had calcareous sandstone and sand yielding various large and small mammal fossils. Of about 600 specimens found, there were hyena, panthera (lion/leopard), rhino, equines, hippo, buffalo, large tragelaphus (kudu/bushbuck), reedbuck, hippotragus (sable/roan), wildebeest, steenbok, gazelle, mole, tortoise, ostrich, dog and a possible seal.

Paternoster

A site at Paternoster in the Western Cape is interesting as it shows us the fallibility of carbon dating. This is just one example of the many fossil sites excavated over the years, which have produced faulty readings with carbon dating. Six different types of deposits were found one on top of the other. Levels 1, 5 and 6 were carbon-dated. The top level was dated at 870 \pm 50 yrs BP using charcoal. The fifth layer was dated using seashells at 3510 \pm 60 yrs BP. The bottom layer was dated using tortoise shell and was 1000 \pm 70 yrs BP. The lower level date was just too young and the scientist in trying to make carbon dating work stated that it must have been contaminated by younger material. This word 'contamination' is used frequently as an excuse for young carbon dating dates. This gives evolutionists an excuse to throw out any 'young' dates in their readings and to excuse any discrepancies, like that mentioned above. Another interesting thing done was the subtraction of 400 years from reading 5, as he was told shellfish give readings older than what they really are. This shows how fickle the system is and how easy it is to add or subtract years to get the readings you want. Sometimes carbon dating will produce dates very unacceptable to evolutionists. A survey of the 15,000-radiocarbon dates published through the year of 1969 in the publication "Radiocarbon" of ancient specimens, it revealed some interesting facts. Of 9,671 specimens of trees, animals and man, only 12 % yielded a date greater than 12,530 years. If evolution was true, there should be many older readings. Only 3 of 15,000 specimens dated yielded ages as infinite. If evolution is true there should be thousands of infinite readings, showing the age of an object is older than 50,000 years. Samples of coal, oil and natural gas had radiocarbon in them, showing they are less than 50,000 years old.

They were meant to be millions of years old. Deep ocean deposits with supposedly the oldest life forms were dated to 40,000 years of age or less. A small cave west of the Rossing Mountains near Swakopmund in Namibia had its cave sinter dated. Using Carbon-14, dates obtained at this Rossing site were; 26,530 \pm 920 yrs BP, 26,680 \pm 540 yrs BP and 29,680 \pm 1480 – 1250 yrs BP. Using the Thorium to Uranium radiometric dating system this same sinter was dated to over 300,000 years.

Namaqualand

Dinosaur bones of an Ornithischia were obtained in a well, which was sunk over 100 feet deep 30 miles northeast of Steinkopf in Namaqualand. It was found in a material of clayey sand with calcareous concretions, with some calcified and silicified wood and streaks of lignite. The thick sediments here show that many fossils were deposited at great depths during the flood. Mammals were also deposited in calcareous concretions in this region.

Arrisdrift

Most of the Namibian fossil sites contain only a few fossils. The Arrisdrift fossil beds are found near the mouth of the Orange River and this is the richest fossil site found so far in the country. The fossils were transported by water in a high-energy environment before final deposition. Only one instance is recorded of skeletal remains occurring in articulation. Most of the skeletal remains are disarticulated, fragmented, abraded and distorted. Encrustations of gypsum have etched and destroyed parts of the specimens. The Arrisdrift fossils include a fish, frog, snakes, crocodile, tortoise, birds and mammals. The bird fossils include francolin, sandgrouse and an eagle. Some interesting mammal fossils include the pika, chevrotain and a bear dog. A ruminant which seemed to be have been common in Namibia was the climacoceras, which was a deer-like ruminant that had similarities with the giraffes.

Human cranium

In 1964 at Otjiseva in Namibia 26 miles north west of Windhoek, a human cranium was dug out of an alluvial deposit. As a contract-

labourer was fixing a road, he damaged a skull with his pick. The skull was about 30cm down, although a thicker covering of soil had covered the skull in the past. The position of the cranium and jawbone showed that the skull and possibly the shoulder region were deposited in an upright position. Also found with the cranium were some teeth, a well-developed chin and the right side of the lower jaw, with one tooth. Some of the strongest bones of the skeleton show fractures indicating that the skeleton was subject to heavy earth pressure. In the same area, a similar heavily fossilised skull was found while digging a well at a depth of more than 10 metres. Unfortunately, it was thrown away. The Otjiseva skull had similarities to the Boskop remains.

Fossil wood

Namibia has an abundance of fossil wood indicating that it was probably covered with forests before the flood. These forests would have been suitable for elephants and some of the exotics that were living in this region. There is a Petrified Forest 40 kilometres west of Khorixas. Some of the tree trunks here reach a length of 34 metres and have a 6-metre circumference. These plants were in the cone bearing family, which includes the conifers. Fossil plants found along the West Coast of Southern Africa have been studied and showed that there were tropical to sub tropical conditions along the West Coast. Some fossilised wood has been taken out of ocean sediment off the Namaqualand coast. The wood appears to have been washed offshore by the flood.

Fynbos

The Cape floral kingdom is one of the 'hotspots' of biodiversity in the world. It is home to about 8500 species of plants. Much of this vegetation has been called Fynbos. The Cape Floral kingdom can only be matched for species by some rain forests. It is a mystery why there are so many species found in the Cape, which are not found elsewhere and various theories have been suggested. Personally, I think the best explanation is that when the Cape Mountain ranges formed during the flood, they captured sediment that was going to be swept south into the Indian Ocean. In the sediment were plants and seeds that were preserved and were to re-establish themselves here after the flood.

Many of the Fynbos plants would have grown further north before the Flood.

What was it like before?

Pollens and plant deposits around the Saldanha area show it had a warm temperate, mixed conifer forest with subtropical palm dominated vegetation. The soil samples found at some sites in the Saldanha area contained many plants common to the area today, such as the Fynbos. *Chenopodiaceae*, *Metrosideros* and *Podocarpus* are some of the interesting plants that used to grow here. The former plant likes to live near saltpans and marshes. The second is a streamside plant always growing next to fresh running water, which is not found at Elandsfontein presently. *Podocarpus* suggests a higher rainfall than the present. *Acacia* pollen was found at Elandsfontein and the nearest site where acacias now grow is 80 miles to the north, on the other side of a mountain range. The floodwaters may have brought the pollen to Elandsfontein, or they may have grown there. *Marula* trees that produce very tasty fruits grow about 1000 miles to the Northwest. Did they grow here or was the pollen found at Elandsfontein washed up there? Bushmanland appeared to have been cooler and wetter at that time with well-defined seasons. It was heavily wooded with tall 'Christmas tree' shaped pines called *Araucaria*. These trees are related to the monkey-puzzle trees and Norfolk Island pines that are common in South African gardens today. So what did the Cape look like before the flood? From the living endemics and fossils of the flora and fauna, we can guess what the environment was like. There probably weren't any large mountain ranges found along the coast, like we see today. This may have allowed the interior to be wetter. There was a higher rainfall with hills containing clear running streams. There were thick bush areas, open grassy country and conifer forests. There would have been plenty of Fynbos and the Karroo would not have been the dry barren area it is today. Going up the West Coast to Namibia there would have been a wetter area containing forests and possibly some mountains. There were probably few dinosaurs in the Western Cape. As one went into the Karroo there would have been more dinosaurs and central Namibia would also have had some.

NORTHERN MIX

Zimbabwe & Botswana fossils

The far North

In the Northern part of Zimbabwe near Kariba, dinosaur fossils have been found in an area with fossil plants, non-marine molluscs and fossil wood. It seems this particular area had habitats similar to some parts of the present Congo. There were probably lakes and forests, with many plants supplying food for the large herbivores. The fossil plants found in the northern part of the country would indicate a more forested or well-watered environment. There is plenty of fossilised wood in the Zambezi valley. Many of the plants found in Zimbabwe's fossil deposits are now extinct. The Madumabisa shales of the Zambezi valley have evidence of the presence of cycads or conifers. Near Hwange *Glossopteris* and *Gangamopteris* floras have been found. They are some of the common plants found in Southern African coal formations. Near Chirundu fossil wood of the genus *Dadoxylon* was found. *Dadoxylon* trees were tall and possibly formed big forests in this area. The floral assemblage of *dadoxylon* and various ferns is typical of a wet climate, and would have suited large sauropods. In some areas of the Zambezi valley we have heavier woody trees in lower sedimentary rocks and lighter ferns in higher sedimentary rocks. This shows the affects of gravity on the fossils while they were being deposited by water.

Dinosaurs

There have been a number of dinosaur remains found in the northern part of Zimbabwe. At least 20 dinocephalians died at the same site in the Binga district, showing how they collected into a herd before drowning. An interesting fossil site was found on an island on Lake Kariba. Here the bones of a large sauropod dinosaur were found in water laid down sandstone. It is interesting that the dinosaur was found sandwiched between lava flows, showing the basalt was being deposited as the flood was in progress.

Fossil wood

Fossil wood is found in various localities in Zimbabwe with a good fossil forest in Hwange National Park. At Deteema Pan a single tree trunk was 1.2 metre thick at the base and at least 18m in length. At the other end the tree has a 0.3 metre diameter. The preservation of the wood varies with some being in excellent condition while others have become structureless masses of silica. Some have bark while one had what appeared to be insect borings. Stumps with roots still in the ground in Zimbabwe are rare, but there is an example at the Charama plateau. Some of the Zimbabwe fossilised woods were silicified in their positions of growth or seem to have been transported by water before silification. The preservation of bark on some specimens, its absence in others, and the apparently rotten interiors of some logs, seem to show the onset of silicification varied from almost immediately after the death of the tree, to some time later. This meant that rotting did start in some specimens, but silification prevented complete rotting. The early date for alteration is supported by the fact that most logs are uncrushed, almost circular in cross section and have radial shrinkage cracks filled with amorphous silica. The alteration cannot then have taken place under deep earth sediments, but seems to have taken place in water. When Lake Kariba filled with water in the early 1960's; many Mopane trees drowned in the lake and were left standing in the water. These trees have shown that many trees resist decay under warm freshwater for many years. In Noah's Flood the silification of the fossil trees took place after the floodwaters covered them. Chemical changes took place in the water changing the original tissues to silica. The sediments in which these logs are now deposited show it was not an ordinary lake in which these fossils formed. Fossil trees in this region have growth rings, showing seasonal variations and that the region was well watered and the trees healthy before the flood.

Dinosaurs & mammals together

The Nyamandlovu area just north of Bulawayo has some flood sites that produced both dinosaurs and mammals. The four sites where this is the case, are named Southcote, Chelmer Spruit, Spring Grange Farm and Dovenby ranch.

1. Chelmer Spruit produced a sauropod, large equid (horse/zebra), pig, hippo, tragelaphus (eland/kudu), large buffalo, gazelle, large wildebeest and large hartebeest.
2. Spring Grange farm produced a sauropod, dinosaur tracks and an equid (horse/zebra).
3. Dovenby ranch produced an unidentified dinosaur, equid (horse/zebra) and buffalo.
4. Southcote had two types of dinosaurs, these being the syntarsus and a sauropod, and an equid (zebra/horse). This site yielded about 22 partial sauropod dinosaur skeletons from sandstone. These specimens show the limbs being dismembered while the flesh was still on them showing a rapid burial. Some bones were crushed and this is evidence of there being some violence in the destruction of these creatures. The syntarsus was found in good condition with perfect articulation, the bones looking fresh and lacked the cracked and baked appearance of bones that lie on the surface. It appears that this creature was deposited quickly. It even had the remains of an unidentified creature in its stomach.

This shows dinosaurs lived with buffaloes, hippos and other animals before the flood. The dinosaurs found in this area seem to be limited to two species, although more may be found later. The two dinosaurs present included the huge vegetarian Sauropods and a smaller carnivorous dinosaur called Syntarsus. Unfortunately some of the mammal and dinosaur remains from this area have not been studied properly and the documentation has been poor. There has been very little collecting in the last 40 years in the Nyamandhlovu district and many fossils await discovery. Both the dinosaurs and mammals were found in sandstone or calcareous material. The evolutionary view is that even if you find these creatures together then somehow there must have been some later mixing of the mammals. The Nyamandlovu mammal deposits are conveniently labelled as alluvial deposits, even though they come from identical rocks to the dinosaurs and often in the same locality. These fossils are not dated by any scientific method - rather they are used to date the rocks in which they lie. As a result the rocks with mammals in are classified as younger than similar dinosaur bearing rocks. It is a well-known fact that fossils are used to date rocks in Southern Africa and elsewhere. The public

has been brainwashed into believing a myth, which is that carbon dating or some other dating method shows fossils are from a particular age. This is how evolutionary logic works – if the fossil looks old then so the rock must be old. An appropriate date is found based on how old the fossil must be according to an evolutionary (theoretical) time scale and voila you have a date for the fossil and rock. Now if you find a fossil down the road in a similar rock formation, then the fossil is judged to be of the same age as the first fossil by looking at the rock type. If a fossil is found in this same rock type, from a different ‘evolutionary’ age, then this rock type will be given a different age – even though it is identical to the first rocks mentioned. This shows that circular reasoning is used, based on a theory about the past and this is not good science. With other fossil sites in Southern Africa we can now see that dinosaurs, mammals, Australopithecus and humans all lived at the same time.

Redcliff

In Zimbabwe the Redcliff limestone deposits held many different fossils. One section of the limestone was rich in bones to a depth of roughly 10 meters. Apart from the mammal bones found, there were the remains of an ostrich, tortoise, snakes and a monitor lizard. Smaller remains of shrews, rodents and bats were found. This site appears to be a flood deposit and many of the Zimbabwe limestone formations may also contain an abundance of fossils.

Orapa

The Orapa diamond mine of Botswana appears to be a volcano that erupted as flooding took place. It has been extensively studied and yielded a unique assemblage of fossils, which include flowering plants, and whole-bodied insects. These were found in sediments within a crater and were deposited rapidly in mass flows. The collections from the site number almost 6000 macrofossils of which 44% are plant remains and 51% insects. The formation of the crater took place in watery conditions. The folding, slumping, faulting and catastrophic nature of much of the deposits indicates highly unstable conditions. About 50 to 100m of sediment may have been eroded from the top of the pipe. Some of the shales in the deposits had rain-

pitted surfaces. One rain-pitted surface was found to be rich in evaporite crystals and insect remains, many of which were complete and had wings outstretched. The latter may have been accumulated through wave action. There were also mud cracks and evaporite on one of the rain pitted surfaces, which may indicate there were temporary stops in the 40-day 40-night rainfall or a drying by the volcanic activity. The sedimentary deposits at Orapa formed quickly and cockroaches that were found here were buried rapidly. Of the insect fossils found, some are now extinct but many are still found today in the region. The presence of plant eating insects and insects requiring decaying organic matter at some time in their life cycle, suggests a continuous vegetation cover. Other insects indicate a seasonal, forested environment with high humidity and close proximity to water. Relatives of almost all the identified insects found in the deposit favour wet forest habitats today. Leaves found at the site are from deciduous plants, showing that there was a seasonal climate. 29 leaf types are described. The plants are different from those now found in the area. One of these plants may be placed in an existing genus. Ferns, flowering plants, fruits and seeds were found. The flowers show both wind and insect pollination. Plant groups included Pteridophytes and angiosperms. Some charcoal shows the volcanic activity may have burnt some of the plants. The leaves of the plants were mostly small, which shows there may have been cool temperatures or a wet montane climate. Entire margined leaves show a warm temperate and moist climate. We can say the climate here was temperate, seasonal and wet and the surrounding area was forested. This vegetation would probably have suited the fossil assemblages found around Bulawayo and Nyamandlovu.

What it was like

The grazing mammals and dinosaurs such as the Sauropods show that parts of Zimbabwe were fairly open or well forested. There were probably lots of forested areas over Botswana and Zimbabwe, with lush woodlands and some higher ground. The animals found attest to there being some rocky terrain, open country and woodland. The lowland glossopteris forests may have been very thick and particularly suitable to large plant eating dinosaurs.

DINOSAUR LAND

Eastern Cape, Lesotho & Natal fossil sites

Terrible lizard

Sir Richard Owen created the word dinosaur in 1841. The word was derived from Greek and means terrible lizard. True dinosaurs are those that have a hip joint enabling them to walk upright. In most peoples minds though, the word dinosaur is associated with large extinct lizard-like reptiles that included creatures that walked on four legs. So do they still exist? Yes depending on what your definition of a dinosaur is. If your definition is a 'large extinct reptile-looking creature that was meant to have lived millions of years ago' - then they are still around. The quickest way to find a 'dinosaur' is to go swimming in the Zambezi River, where you would probably meet a large crocodile. Why have the crocodiles and alligators survived, while some of the other 'dinosaurs' died out? The reason for this is that water-loving crocodiles would have survived the flood quite easily, while their land counterparts would have been obliterated. The Komodo dragon is a large reptile that lives on the Indonesian Island of Komodo. When these lizards were first found they were rightly described as dinosaurs - having a length of 7 feet and being dangerous to man and beast. Smaller reptiles such as the Iguanas of South America and the Galapagos Islands could also be fitted into the dinosaur category. Reptiles grow until they die and as the conditions were better before the flood, the size of some of the dinosaurs and reptiles would have been larger.

Karoo Fossils

The Karroo rocks and rocks of similar nature in Southern Africa are often divided into a series to support evolution. The problem for evolutionists is that the rocks blend into each other showing one catastrophe, rather than the rocks being deposited over millions of years. Fossils of supposedly different ages are found in similar rocks showing there were no different time periods like the Jurassic etc. In the Cape Province there is no stratigraphical break anywhere within the mass of sediments, which reach thousands of feet in thickness in some places. This includes no break between these and the Karroo

rocks. The evidence shows that there was a violent deposition in a short period of time. Mudstones, sandstone, shale etc. were deposited showing a formation by water. Many creatures called mammal-like reptiles and dinosaurs have been dug up in the Karroo, Eastern Cape and Lesotho areas. Most of the reptilian remains are found in the area lying between Prince Albert and Beaufort West and from around Graaff Reinet. The fossils are often crushed and distorted, while some were rapidly buried in sediment when they died. The Pareiasaurians are heavy built reptiles with a length reaching 9 feet. Quite a number of complete skeletons have been found upside down and with the limbs still articulated. This suggests that the animals had died where they were found by being rapidly covered in silt. These creatures show that they died no ordinary deaths and were buried rapidly by floodwaters. There has been some confusion with many of the fossils dug up in this region, as almost every fossil dug up was given a different scientific name. With more complete fossils it has now been found that there are fewer dinosaurs than originally thought. Many specimens had been built up on incomplete fossil material. Arthur Cruikshank one of the best Palaeontologists working in the sub region in recent times, had this to say about the ageing of dinosaurs and fossils: 'The quoted age of any particular tetrapod or plant-bearing formation is often based more on tradition than any secure framework of correlation. The ages of the Molteno and Elliot formations are by no means fixed.' In other words dinosaur and other fossils are not dated with any scientific method, but are assumed to be so many years old, according to evolutionary beliefs. You won't find experts using carbon dating on a dinosaur, as they wouldn't accept a young age for the specimen.

Molteno

The Molteno/Elliot deposits are found in Western Natal, around Lesotho, South Free State and the Eastern Cape. The Molteno deposits cover a rough area of 1500km by 750km. There are many similarities between these deposits and those found in the Karroo and parts of Zimbabwe. These deposits are incredibly rich and include 56 genera with 206 plant species, and 117 genera with 335 insect species found so far. There are in this region some 300,000 vegetative

specimens included in the flora. Flooding destroyed all of these specimens and the vertebrate fossils found. Some fossils were deposited in violent conditions and were damaged, while others were rapidly and safely encased in sediment - like some of the insects. Of the many plants found there were horsetails, conifers, seed ferns, ginkgoes, taeniopteris (shrub to small tree) and Halleyocteris (cycad-like) as some of the more common plants. Ferns, mosses, liverworts, herbs and cycads are some of the less common plants found. The flora shows riverine forest and floodplain wetlands, thickets, woodlands and Lake Margins. The small freshwater crustaceans found may have lived in lakes and rivers. The plants possibly grew in mountainous areas, with cold wet winters. The insect orders include many found today and some now extinct. The cockroaches were abundant indicating a closed-canopy terrestrial habitat where they could live on the leaf litter.

Molteno dinosaurs

Associated with this unique ecosystem are many vertebrates that are now extinct. An unusual carnivorous amphibian called a Capitosaur was present. This 4 metre long creature probably fed on fish found in rivers or lakes. The fragmentary nature of the Capitosaur fossils showed they died in a high-energy flow system. A large tortoise roamed the forests and woodlands and fed on plants. This animal had a shell that was greater than half a metre in diameter. A large 3 metre long Komodo dragon like creature called a Thecodont hunted in the area. The theropod was a small bipedal dinosaur, which would have fed on small creatures like insects. The Sauropods were large dinosaurs that appeared to be common and could reach a length of 10 metres. These giants may have browsed at a 7-metre height. Some remains of these large dinosaurs were fragmentary, while others were fully articulated. The latter were entombed rapidly in sand or mud by the floodwaters. The former had their bones destroyed by the great forces of rock and water. The 2-3 metre long dicynodont was fairly common in Southern Africa. It was a creature that looked like a large fat pig, with a strange dentition allowing it to pulp vegetation. Diademodon was a small bear like creature, which may have been an omnivore. Small crocodilians lived in the lakes or streams. The

Ornithischia dinosaur reached a length of 1.5 metres and ate vegetable matter. Small creatures similar to elephant shrews and giant rodent-types, were some of the smaller creatures found here. Nocturnal mammalian tree shrews were also found to have lived in the ecosystem.

Tracks

This region has many dinosaur and other tracks. These and those dinosaur tracks in Zimbabwe and Namibia, human tracks in the Cape and possibly in Angola may have been made during the flood. The Waterberg rocks have produced shale containing raindrop impressions, which could have been made by the rain in the flood. Tidal activity, mudslides etc. would have covered the tracks of the fleeing animals and preserved the spoor. A dinosaur track-way in the Zambezi Valley showed a large dinosaur was moving in an unstable manner and possibly walking in shallow water leaving its tracks behind. It may have been desperately trying to find higher ground.

Natal

Natal has not produced as many terrestrial fossils as the Cape, but it has produced an amazing amount of marine fossils and has abundant coal. There are a few mammal and dinosaur remains. Port Durnford along the coast has produced animal and other deposits. It seems that marshland; grassland, syzgium, myrica, ficus, Podocarpus elements and some Fynbos were present in Natal before the flood. Some podocarpus still survive in Natal. The Fynbos present included ericaceae and anthospermum. An elephant tusk was found in sand south of Durban. Studies indicate that this elephant, which may have died in the flood, ate a lot of grass. Near the Durban Country Club a human skull was found at a depth of 20 feet in sand dunes. The skull was incomplete, considerably distorted and partially mineralised. The sex was uncertain and was possibly a juvenile. The nature of the deposit makes it likely this person died in the flood.

Bivalve

A bivalve *Panopea glycymeris* is a clam that is remarkable for the size of its shell - usually about 20 centimetres long, sometimes reaching 30 cm in length. Fossils have been found in raised beaches at Velddrif, Mossel Bay and Port Elizabeth. It lives today along the Mediterranean and West African coasts where the water temperature is usually above 20⁰C, but it no longer occurs in southern Africa. Its presence in the raised beaches is evidence for warmer waters around the southern Cape.

Cradock

At Cradock 25 feet below the ground, in coarse grey, green sand, which was on some shale, a pig was found, a possible (kudu/bushbuck), possible large reedbuck, (zebra/horse), giant buffalo, giant hartebeest, wildebeest, gemsbok, gazelle and steenbok. The type of animals found here show that there was more open country in the vicinity. It is interesting that in Aliwal North a Thecodont and Tuatara were found in greenish grey sandstone, which was highly calcareous. Both fossil sites mentioned above were deposited in very similar rocks and using evolutionary theory, this would imply that the mammals and dinosaur relatives were deposited in the same time period.

Eastern Cape

Dr. P.W.Lardler found a human thighbone at the base of a consolidated boulder bed in 1933. The locality was the Blind River site close to East London. This boulder bed was about 8 feet thick and covered by about 25 feet of other deposits. The person was thought to be a female with an estimated height of 160.6cm. This person may have died in the flood. A fossil of a plesiosaur has been retrieved near Port Elizabeth, where it was dug out of the cliffs of the Zwartkops River.

What it was like

In summary there was probably a specialised habitat of very wet forests and woodlands with ferns, conifers and swamps in areas around Lesotho. It was an ideal habitat for plant eating dinosaurs

because of the amount and type of vegetation. The altitude and specialised conditions may be the reason why few mammals have been found here. The Natal side of the Molteno would have been less wooded. As we go into the Northern Cape and Free State there would have been less of this vegetation and the country more suitable for Wildebeest etc. and animals we are more familiar with.

Even Kilimanjaro is a product of the flood PHOTO Animal Migration
1978



THE CREATURES BEFORE

I have compiled a list of large animals found in Southern Africa before the flood. This list is far from complete as many species are not well known, distributions are unclear and there are possibly many new creatures still to be found. There are sketches to show roughly what many of these creatures looked like.

Large Animals Present before the Flood still found in the Sub-region

1. Aardwolf.
2. Antbear.
3. Baboons – Some were giants, as big as gorillas and showed great genetic variation.
4. Buffalo - A large buffalo found with molar teeth half as big again as those of the Cape buffalo. The horns reached 9 feet from tip to tip showing that it was a real giant.
5. Cheetah - Some large.
6. Civet - Which was larger than the modern ones.
7. Crocodile.
8. Dog (jackal/wolves) - There were many varieties including a large hunting dog type.
9. Duiker - A type 1.5 times bigger than the common duiker.
10. Elephants (mammoth) - Showing a great genetic variety and some bigger than the modern. Seem to have been common and widespread in the region.
11. Equine (zebra/horse) - Some bigger than modern horses.
12. Felis (most small cats) - Some looked like Lynxes or servals.
13. Fox – The fox resembles the European fox.
14. Gazelle (springbok).
15. Giraffe – There seemed to be both short and long-necked types. The short necked are classified as Okapis and Sivatheriums.
16. Hares.
17. Hartebeest - Some large and one specimen had horns growing sideways rather than upwards.
18. Hippo – Large and seemed to have been common.
19. Honeybadger - About the same size as the modern ones.

20. Hyena - The hyenas varied in size showing genetic variety.
21. Hyrax - Some 1.5 times bigger than the modern ones.
22. Impala – Similar to the modern.
23. Klipspringer – Some large.
24. Kudu (tragelaphus/bushbuck/nyala and eland) - Some had bones more robust than the modern eland.
25. Mongooses – They came in a variety of sizes.
26. Oribi.
27. Oryx.
28. Ostrich.
29. Clawless Otter - bigger than modern.
30. Pangolin.
31. Panthera (lion/leopard/tiger) - Some seem to have had sabre teeth and some were bigger than the modern lion.
32. Pigs - Showing great genetic variation. One looks like the warthog with jaws as big as a rhino. Pigs included one like the giant forest hog. These pigs appeared to be widespread and probably lived throughout Southern Africa.
33. Porcupine - Some bigger than the present South African ones.
34. Reedbuck - A large reedbuck, which seemed to have been common in places.
35. Rhino – Found in the Transvaal and Cape and were similar to the modern black and white rhinos.
36. Rodents.
37. Sable (roan/hippotragus).
38. Steenbok (grysbok types) - These were common in parts of the Transvaal.
39. Springhare - This may have been small.
40. Topi (bontebok/tsessebe) – Some large. Many of these may have been confused with the hartebeest.
41. Waterbuck (kobus/lechwe) – A Waterbuck with horns that were set further apart than the modern ones and which were more robust than the modern ones.
42. Whales & Dolphins.
43. Wildebeest - Some were large.

Large Animals Now Extinct in the Sub-region (similar animals sometimes put together as they may be sub-species)

44. *Abriotosaurus* - (awake lizard) an ornithischian bipedal plant eating dinosaur 1.2 metres long and about 45kg. It had high crowned teeth. Found in Lesotho.
45. *Allosaurus* – 5m long carnivorous dinosaur which was in the Zambezi valley
46. *Amphicyon*– (two dog) this extinct mammal was about the size of a modern grizzly bear, about 2 m long. (Although it looked like a bear with wolf's teeth, it was not a bear). It walked on four, sturdy, legs, had a short tail and thick neck. *Amphicyon* ate meat and plants. Fossils of *Amphicyon* have been found in Europe (France and Germany) and North America, Nebraska, USA. This carnivore lived in Southern Namibia.
47. *Anchisaurus* - (near lizard) A plant eater about 2.5 metres long. It could walk on four legs. It had serrated leaf-shaped teeth, a small head, a long neck, a long body, long, thin feet, and a long tail. Almost complete fossils have been found in Connecticut and Massachusetts, USA.
48. *Australopithecus/Paranthropus* - This is possibly a chimpanzee and it lived in the forests of the Transvaal and Northern Cape. It has many similarities with the Bonobo (lowland chimpanzee).
49. Bear- A large bear called *Agriotherium Africanum* said to have been as big as the Kodiak bear and having long legs. It has similarities to the Panda bear, which is now found in China. It lived on the coastal areas of the Western Cape.
50. *Brachyopother* – A mammal that looked a bit like a large hippo-like hornless rhino, with short powerful legs and lived like a hippo. A specimen was found in Namibia.
51. *Chalicother* – A large, mostly grass eating herbivore, as big as a rhino, with a long neck and its front legs longer than the back legs. It had large, clawed feet (instead of hooves). It may have been able to rear up on its hind legs to eat leaves high up in trees. It lived in the Transvaal. Fossils have been found in Kazakhstan.
52. *Chevrotain* – This is a rabbit sized, hornless omnivorous ruminant. An antelope-like animal with large canines. It is still

- found in the forests of Central Africa and found in Western North America. It likes water, forest and thick undergrowth.
53. Climacoceras - This is a deer-like ruminant with non-deciduous antlers that lived in Southern Namibia. It appears to be in the giraffe family.
 54. Colobus monkey – Found in forested parts south of the Sahara and is a specialist leaf eater. It lived in the Transvaal before the flood.
 55. Creodont– Hyaenodon. A large carnivore and possible placental. It seems to have lived in the Cape. They lived in Asia, Europe, Africa and North America. Creodonts were quadrupeds with clawed feet, a small brain, large jaws and many sharp teeth.
 56. Diademodon - A plant eating mammal-like reptile reaching about 1.5 metres long.
 57. Dicynodon – (two dog teeth) these were pig-like, herbivorous therapsids with two large tusks in the upper jaw. Some herbivorous dicynodonts included Boreogomphodon, Lystrosaurus, Kannemeyeria, Estemmenosuchus and Ischigualastia. Lystrosaurus ("shovel lizard") was a plant eater reaching 3 metres long, as big as a hippo, but fatter and having a bigger head. It had tusks and had jaw edges like a turtle. A slow heavily built animal that probably lived in water. There appears to have been a tremendous genetic variety within Dicynodon. Fossils of Lystrosaurus had been found in South Africa, India, Europe, Asia and Antarctica. Some carnivorous dicynodonts included Cynognathus, Probainognathus, and Thrinaxodon
 58. Cynognathus (meaning "dog jaw") was a cynodont the size of a wolf. This was a fast-moving carnivore (meat-eater) that had four legs and a short tail. It was about 1.5 m long and lived on open plains. It was probably warm-blooded and gave birth to live young. This reptile had dog-like teeth and hunted herbivores. Fossils have been found in South Africa and Argentina.
 59. Erythrosuchus – (meaning "red crocodile") A 4.5 metre crocodile looking reptile. Erythrosuchus had long, strong jaws and ate plant-eaters. Fossils were found in South Africa.
 60. Eosuchians (meaning "early crocodile") were reptiles and lizard-like diapsids. They walked on four sprawling legs and had a very

long tail - some lived in the water (like Hovasaurus). Fossils of Eosuchians have been found in Southern and southeastern Africa and Madagascar.

61. Eunotosaurus - A tortoise-like reptile (not a dinosaur). This amniote was found as poorly preserved fossils showing that it had 8 ribs and some shell (the lower shell was not found and the damaged skull yielded few details). Its fossil was found in South Africa.
62. Euparkeria - Euparkeria was a small, land-dwelling archosauriform. This fast-running quadruped had a semi-erect posture; it could walk on four legs, the front limbs were much shorter than the hind limbs, indicating that it may have been able to run bipedally for short distances. This carnivore (meat-eater) had a long tail, four-fingered hands, large, flexible jaws and many sharp, serrated teeth in sockets. It was about 1.5-ft (0.5 m) long. Fossils have been found only in southern Africa.
63. Euskelosaurus (meaning "good-limbed lizard") was a plant-eating dinosaur named for its 3-ft (1 m) long thighbone. This enormous browser was about 30-40 ft (9-12 m) long and may have weighed about 1.8 tonnes. A plateosaurid prosauropod, it lived in what are now Lesotho, South Africa and Zimbabwe. Hundreds of fossilized bones have been found.
64. Geosaurus- (rock lizard) A 2.5 metre aquatic crocodilian creature that looked like a cross between a crocodile and dolphin. This streamlined fish-eater had a long, pointed jaw with sharp teeth, four fleshy flippers (the rear flippers were considerably longer than the front flippers) and a long tail with a tail fin. Geosaurus was not a dinosaur, but was a reptile. Geosaurus fossils have been found in Europe (an especially nice specimen was found in southern Germany) and South Africa.
65. Gomphothere - This is an extinct elephant like animal that has tusks in the top and bottom jaws.
66. Gorgonopsid (meaning "Gorgon arch," Gorgon was a beast in Greek mythology whose gaze could turn you to stone, and arch refers to synapsid skull holes) was a synapsid. They had large, powerful, square-shaped jaws with huge, sabre-like canine and interlaced socket-like teeth. Fossils have been found in South

Africa. The Gorgonopsidae are divided into 2 sub-families, the Rubidginae, which had large, broad skulls, and the Gorgonopsinae, which comprised most of the gorgonopsid genera.

67. Heterodontosaurus a small, lightly built dinosaur with three different kinds of teeth (hence its name) and a beak. The sharp, cutting front, upper teeth were used for biting against the horny beak, the cheek teeth were for grinding food, and it also had two pairs of long, canine-like teeth that fit into sockets. They may have stored food in cheek pouches. It had five-fingered hands with claws, and three-toed feet with claws. Its back legs were longer than its front legs. It had a long, stiff tail. Heterodontosaurus was about the size of a turkey, 1.3 m long and 50 cm tall. It weighed about 19 kg. Heterodontosaurus was a relatively fast, bipedal (two-legged), dinosaur. It may have run on two legs and walked on four.
68. Hipparion – This is the three-toed horse. This horse was probably common in Southern Africa and found in the Western Cape and Transvaal.
69. Ibex – This may have lived in Southern Africa before the flood. More fossil sites are needed to confirm this, as it may be a mistaken identity.
70. Lesothosaurus - was a small, lightly built dinosaur. It was an herbivore (plant-eater) and a fast, agile runner. It was small and lizard-like, about (1 m long. It walked on two, long, legs, had four-toed feet, five-fingered hands, short arms, a long pointed tail, a flexible neck, and a small head. Its head was short and flat with large eyes. It had sharp, pointed front teeth and arrow-like cheek teeth, but its lower jaw ended in toothless bone. Two Lesothosaurus fossils were found together in Lesotho, South Africa. Many extra, ground-down teeth were found in the vicinity. The two were found curled up and seem to have died together in the floodwaters. Fabrosaurus may be a sub-species
71. Lycaenops (meaning, "wolf face") was a small therapsid. It was about 3.25 feet (1 m) long, having walked on 4 long legs and had a pointed tail. It was about 16 feet (5 m) long. This meat-eater may have hunted in packs. It had long, deep-rooted canine teeth (fangs); its skull was deeper in front to hold these large teeth. Fossils have been found in South Africa and Europe.

72. *Massospondylus*. This herbivore was about 4 m long and 1 m tall. It had a long neck, very long tail, a small head, peg-like teeth and large, five-fingered hands with a large thumb claw. *Massospondylus* may have been able to use its hand for grasping in addition to walking. Its back legs were only a little bit larger than its front legs. It was a very common dinosaur. It swallowed pebbles and small stones to help in the digestion of the tough leaves and other plant material that it ate. These gizzard stones (gastroliths) would help grind up the food in the stomach. *Massospondylus* walked on four muscular legs and was a relatively fast runner. It may have also run on two legs. Fossils have been found in Namibia, Zimbabwe, South Africa and North America (Arizona).
73. *Megazostrodon*- it was a tiny quadruped with a long tail, a long body, and a long snout. This mammal was about 10 cm long and weighed only a few ounces. It may have eaten insects. A complete fossilized skeleton was found in Lesotho.
74. *Melanorosaurus* (meaning "black mountain lizard") was another type of sauropod. It was a large, heavy prosauropod, plant-eating saurischian dinosaur. It walked on four sturdy legs, was about 12 m long, and had a long neck, long tail, thick bones, a bulky body, five-toed feet, and a small head. Its rear legs were longer than its front legs. Its fossils have been found in South Africa.
75. *Mesosaurus*– (middle lizard) A small to large odd, fresh-water dwelling reptile (not a dinosaur) that lived in the Northern Cape and parts of Namibia. It was probably a fish eater. It was a lightly built, four-legged animal with an elongated head and snout with nostrils near its eyes. It had a flattened tail that was probably used for swimming. It was about 45 cm long. This carnivore probably ate fish and shrimp, catching them with its mouth. It may have reached a size of 15 metres, but appears to have been smaller in Southern Africa. It has some features common with monitor lizards. Fossils have been found in South Africa and South America.
76. *Moschops* - was a large therapsid. It walked on 4 legs; the front legs were sprawling but the rear legs were more column-like. It was about 5 m long. This possible herding animal had a massive skull and may have engaged in head butting (like modern-day

- rams). This plant-eater had chisel-like teeth. Fossils have been found in South Africa
77. Muskox – Found in North America and Central Asia, but extinct in Africa. It looks a bit like a shaggy, skinny buffalo with small horns. It appeared to have been present in the Western Cape and Transvaal
 78. Nilgai – The short-horned Boselaphine antelope, which is now found only in Southern Asia. It is called the blue cow or Nilgai.
 79. Nqwebasaurus – A chicken sized dinosaur found in the Eastern Cape. It was a meat-eating dinosaur theropod with a very large claw on the first digit (finger). Seventy percent of a skeleton (nicknamed 'Kirky') was found in the Kirkwood Formation in the Algoa Basin, Eastern Cape, South Africa. Kirkwood is a small citrus farming village in the Sundays River valley about 30 miles (50 km) north of the coastal city of Port Elizabeth.
 80. Nodosaur – A fairly large creature that was heavily built.
 81. Nothosaurus – A fish-eating reptile reaching a length of 6 metres.
 82. Okapi – Found in Central African forests. It lived in the Western Cape and may have been confused with the Sivathere.
 83. Orthosuchus – this and Erythrochampsia were small crocodilian type creatures
 84. Pareiasauria – Reaching 10 feet in length and stood about 3-4 feet high. It seemed to be slow and heavily built. These herbivores (plant-eaters) had polygonal bony scales (scutes) on their body that acted as armor. They had iguana-like teeth, a bulky body, four short legs, a box-like skull, and a short, pointed tail. Pareiasaurs include Scutosaurus and Bradysaurus. Bradysaurus was about 2.5 meters long. It was quadrupedal (it walked on four legs) and had thin bony armor, a short tail, and claws on its stubby toes. Fossils have been found in the Karoo Basin of South Africa.
 85. Another type of sauropod was Plateosaurus. A sauropod may be one of the creatures mentioned in the book of Job, in the Old Testament. Plateosaurus was a large, herbivore that was about 8 m long and weighed about 700 kg. It had a long neck, very long tail, a small head with a long snout, and large, five-fingered hands with a large thumb claw (and smaller claws on the other fingers).

Plateosaurus may have been able to use its hand for grasping in addition to walking. Its back legs were larger than its front legs. It was a very common dinosaur in Europe. It has been found in over 50 European locations. It was probably able to rear up on its back legs in order to graze on tall vegetation, like conifers and cycads. Its sharp teeth let it tear these tough leaves from the plants. It may have swallowed pebbles and small stones to help in the digestion of the tough leaves and other plant material that it ate. These gizzard stones (gastroliths) would help grind up the food in the stomach. Plateosaurus was a sauropodomorpha, whose intelligence (as measured by its relative brain to body weight or EQ) was the lowest among the dinosaurs. Its short claws on its front and rear limbs, and weak, leaf-shaped teeth were probably not very effective against large predators, which had bigger claws, sharper teeth, and were stronger overall. Its best defense was to run away.

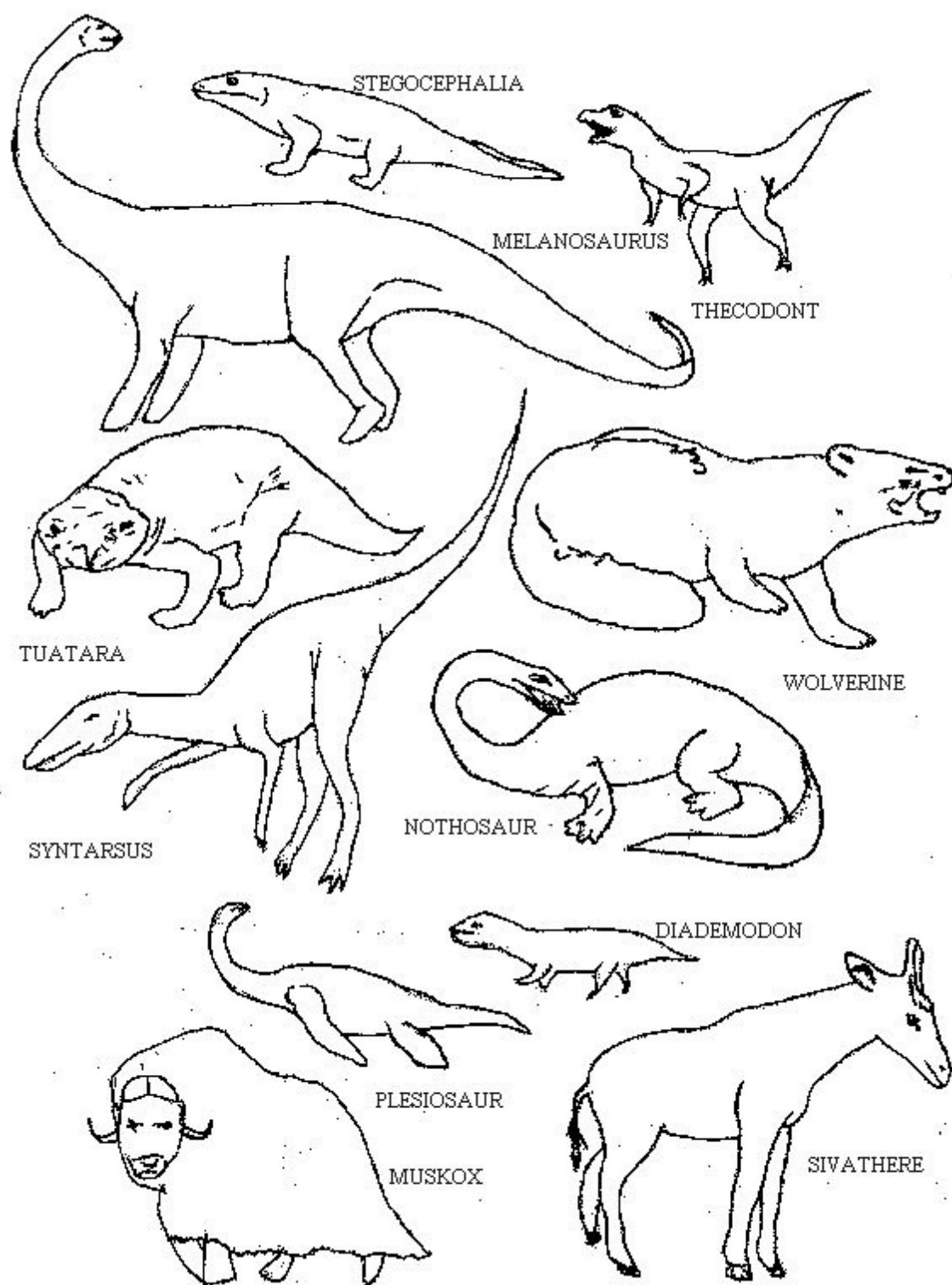
86. Plesiosaur – “Loch Ness monster”? May still be alive in the oceans as the Japanese caught one in the 1970’s.
87. Peccary - A small pig-like mammal which is now found only in the Southern United States, Central America and South America.
88. Pika– The mouse-hare that is now found in colder parts of Northern Asia and Western North America. This small rabbit-like mammal has short legs, small ears and a short tail. This animal lived in Southern Namibia.
89. Procolophonids had turtle-like skull. Fossils have been found in South Africa and Russia.
90. Proburnetia- the animal was a carnivore about the size of a collie dog. It lived on the Karoo floodplains, and was probably a scavenger.
91. Sabre-tooths –There was possibly a few different varieties living in the Transvaal and Western Cape. The teeth were elongated to form dagger like weapons 3 to 4 inches long. Sabre-tooths had large front legs and relatively feeble hindquarters. They came in lion and leopard sizes. A sabre tooth from Bolts farm in the Transvaal was about 175kg, but they varied in size.
92. Seal - A true seal that is not the same as the fur seals found in the Cape today. It is similar to the monk seals of the Mediterranean, Caribbean, Hawaii and seals of the Antarctica, such

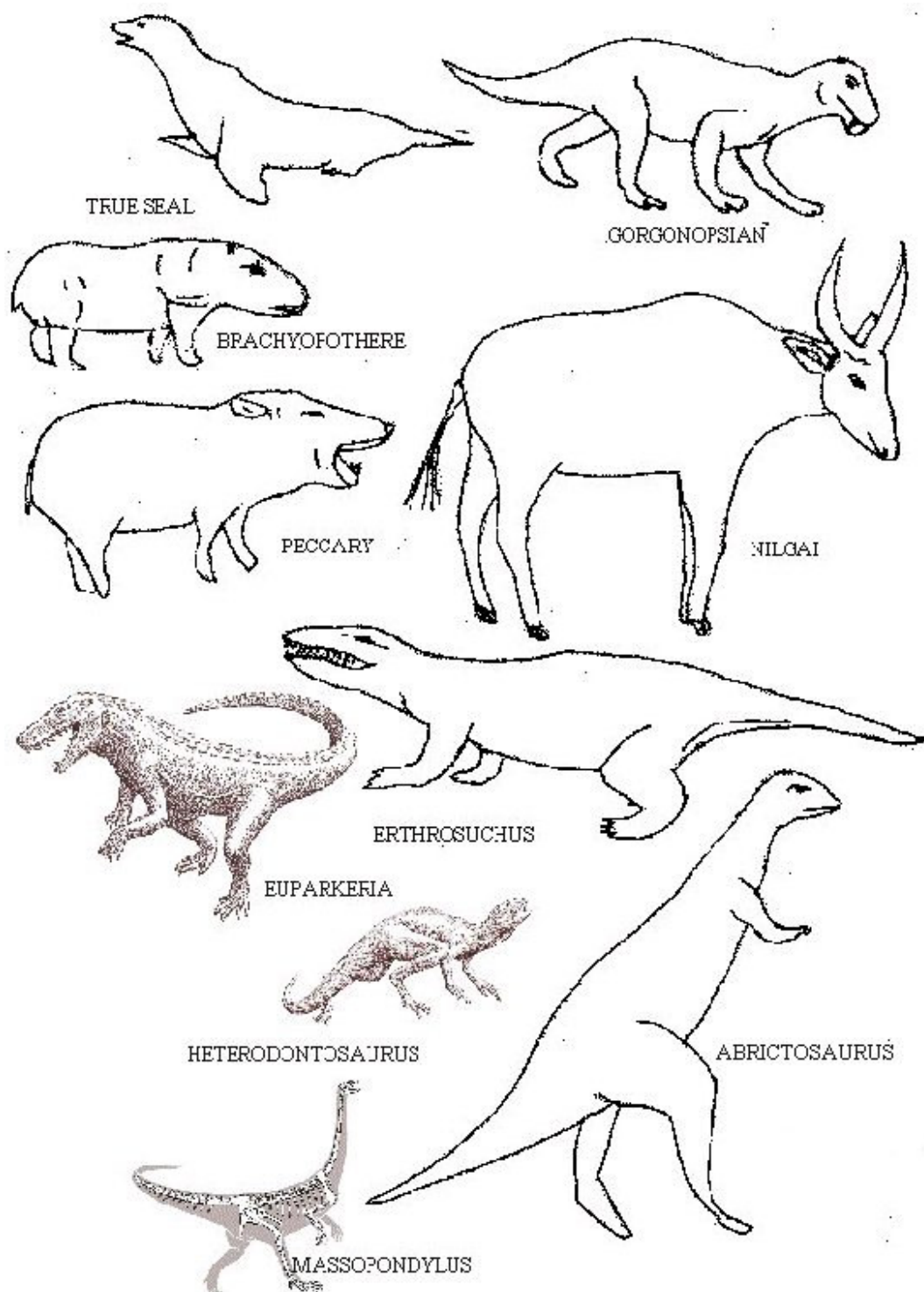
as the Weddell and Ross seals. True seals are rare visitors to Southern Africa.

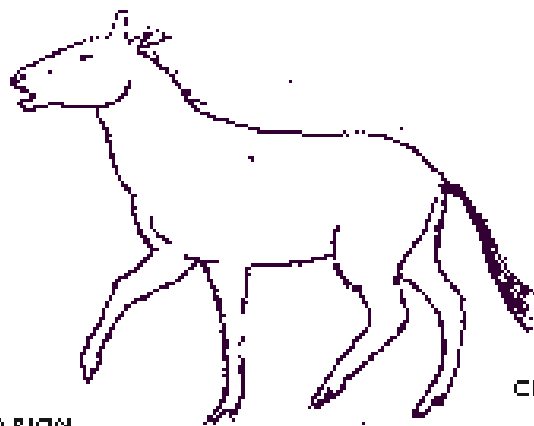
93. Sivathere - A short-necked giraffe found in the Western Cape and it seems to have been in the Transvaal. Its lower body was heavily built. An engraving from the Middle East is evidence that it was still alive in Sumerian times so it must have come off the Ark.
94. Stegocephalia – These were large amphibians such as the Capitosaur. One was called Rhinesuchus and was found at Senekal in South Africa. It had a length of 7 feet. These huge crocodile-like amphibians fed on fish.
95. Syntarsus- "Fused or Flat Ankle". Syntarsus was a small, lightly built dinosaur that walked on two long legs. This predator was about 3 m long and weighed about 25 kg. It had light, hollow bones, a long, pointed head with dozens of small, serrated teeth, and a long neck. Syntarsus had large, four-fingered hands with sharp claws. In a bonebed in Zimbabwe, about 30 fossils were found together. Two types of Syntarsus were found; the more abundant type was about 15% bigger than the less abundant types. Paleontologists think that the larger, more numerous fossils were females; the smaller, less numerous fossils were males. A Syntarsus found in North America had a double crest. The species found in Zimbabwe had no crest. It was reconstructed in the National Museum of Zimbabwe (Bulawayo), with feathers on its head, as some scientists wanted to prove this dinosaur was a missing link between birds and reptiles. However there is no evidence for this. Syntarsus was a carnivore, a meat eater. It may also have been a scavenger. Fossilized stomach contents have been found, containing small vertebrates. Syntarsus' footprint is about 3 cm long and the stride length is roughly 0.75 m. Many Syntarsus fossils have been found in Zimbabwe and Arizona, USA.
96. Thecodont – These looked a bit like a cross between a crocodile and dinosaur and were small meat eaters, about 0.5 metres long. The hind legs were slightly longer than the front. An example being Chasmatosaurus (formerly known as Proterosuchus). This socket-toothed, carnivorous reptile had a low-slung body, long jaws with backwards-facing teeth, a sprawling gait, four short legs with five toes on each foot, and a long tail. Its upper jaw turned

down at the tip. It had teeth on its palate. It was about 2 m long. Chasmatosaurus may have hunted herbivorous Dicynodonts like on land but may have also hunted fish in the water. Fossils have been found in China and South Africa.

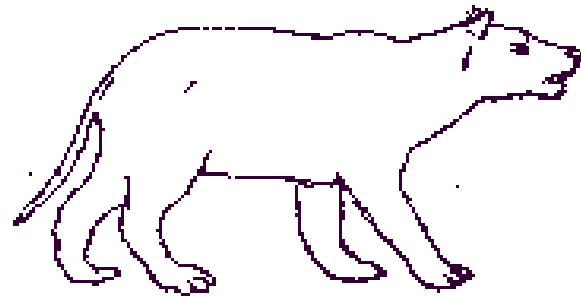
97. Therocephalian – (wild beast head) they could reach the size of a lion. This creature was very mammal like. It appears to have been carnivorous.
98. Thrinaxodon was a cat-sized cynodont. Thrinaxodon was not a dinosaur. Small holes in the snout bones suggest that it may have had whiskers, a mammalian characteristic. Its teeth were also similar to those of mammals. The skull was about 1.5 inches (3.8 cm) long. Fossils have been found in South Africa.
99. Titanosuchus (meaning "titanic crocodile") was a therapsid (it was not a dinosaur). Titanosuchus walked on four short, sprawling legs. It has a long tail and a huge skull with many sharp teeth (including fang-like canines, sharp incisors, and shearing-type teeth toward the back of the jaw). Titanosuchus was about 8-ft (2.5 m) long. Fossils have been found in South Africa.
100. Tritylodon – a mammal like reptile
101. Vulcanodon (meaning "Vulcan, the Roman god of fire, tooth" because fossilized teeth [probably not belonging to Vulcanodon] were found in volcanic material). Was about (6.5 m) long. It was a long-necked, long-tailed plant-eater with a small head, thick legs, and a bulky body. It had nail-like claws on its feet and an enlarged claw on each big toe. Its front legs were relatively long. A partial fossil has been found in Mashonaland North, Zimbabwe.
102. Tuatara – (Mesosuchus-Rhyncocephalia) a lizard like reptile that could reach 2 metres in length now only found on islands off New Zealand. It has a beak for collecting a variety of plants and then cuts them up with powerful jaws.
103. Wolverines – The wolverine is a fierce animal that lives in North America. It lived in the Western Cape where it reached the size of a small bear.



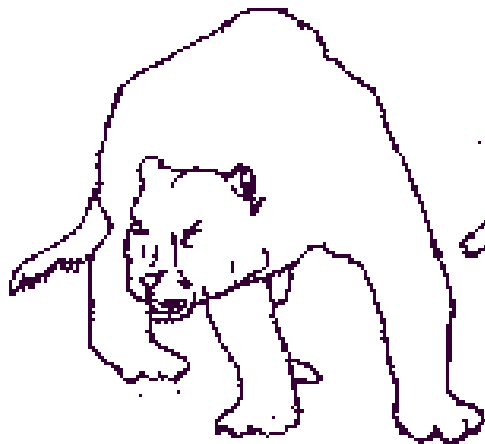




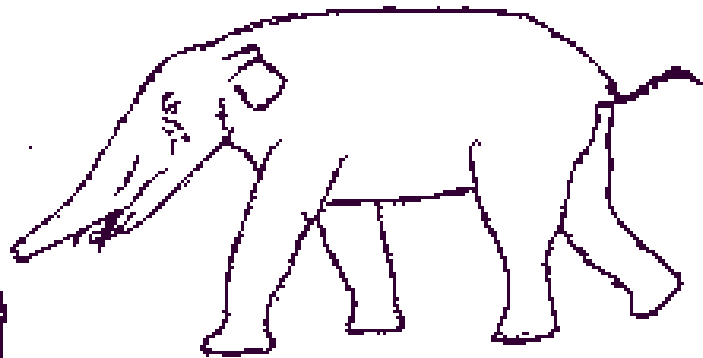
HIPPARION



CREODONT

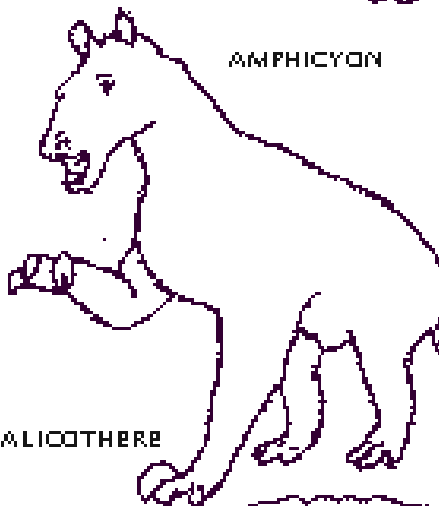


AMPHICYON

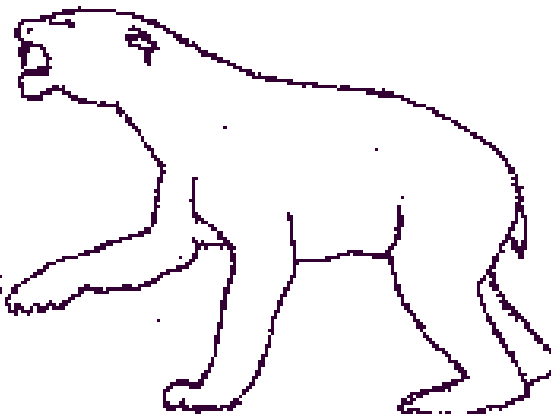


GOMPHOTHERE

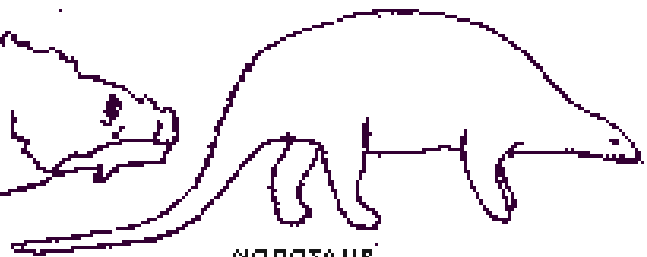
SABRE TOOTH



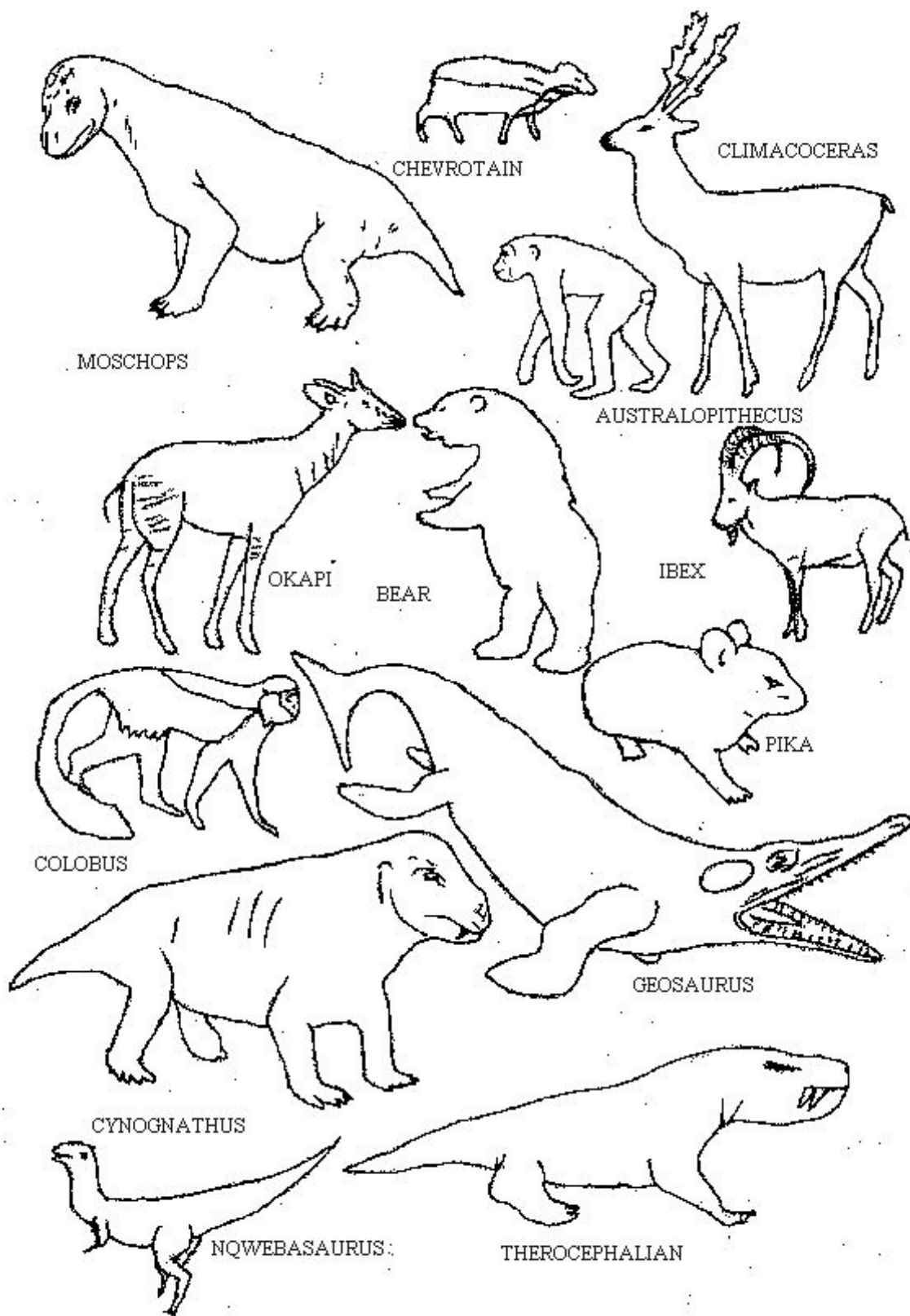
CHALICOTHERE

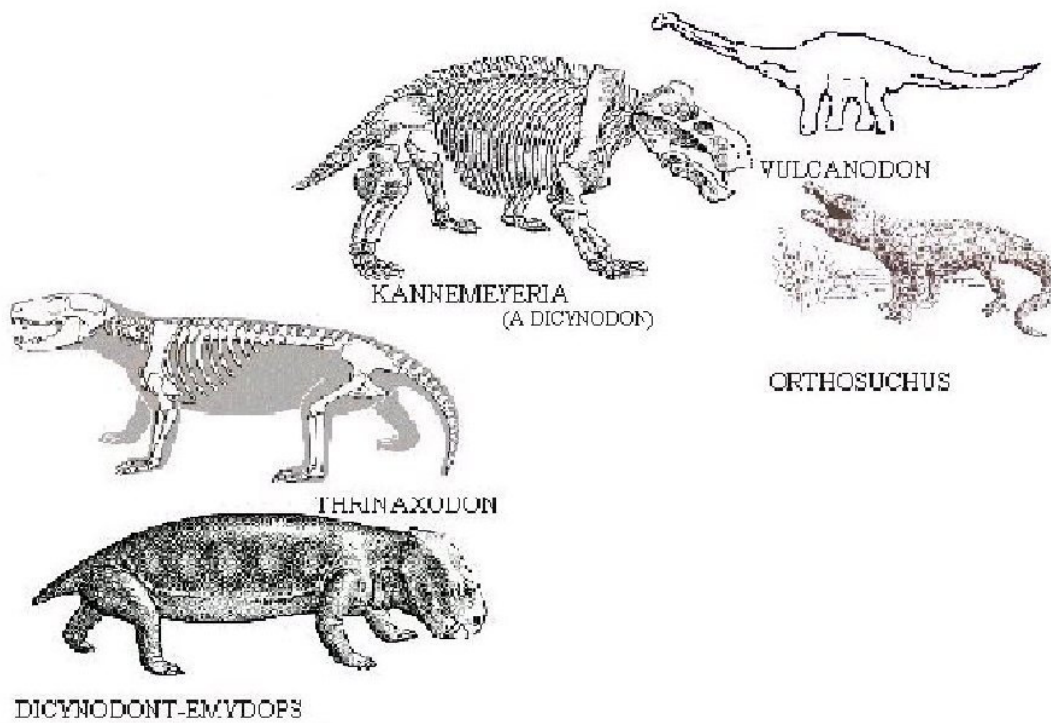


PARIASAURIA



NODOSAUR





Will they become humans, should they vote?



THE RECOVERY

Ark settles

At the end of 150 days the waters had gone down far enough so that on the 17th day of the 7th month the Ark came to rest on the tops of the mountains of Ararat in Armenia. According to history the waters drained into the depths of the earth and no doubt much of it ended up in the polar ice caps. The water formed into large ice sheets and lakes that are still receding, particularly from the Northern Hemisphere. On the 1st of the 10th month the mountain peaks appeared. 40 days after this Noah opened a window he had made and sent out a raven, but it kept flying around because it couldn't land. Everything was still too wet. A dove was then released and it came back. 7 days after this he sent the dove out again and it returned covered in mud carrying a freshly plucked olive leaf. This shows that not everything was eliminated by the devastating floodwaters. After another 7 days he sent the dove out again and it did not return. In Noah's 601st year or about 1308AC or about 2634BC, on the 1st day of the 1st month he removed the Arks covering and found the earth dry in the vicinity. On the 27th of the 2nd month it was dry enough to release the animals and God ordered Noah out of the Ark. The animals were then released and moved away as they wished. On the 1st of the 3rd month Noah and his family then came out of the Ark.

Feast of weeks

On embarking from the Ark Noah made a sacrifice called the feast of Shebout. This is called the feast of weeks and oaths. God made a covenant with Noah in which he promised not to destroy the world again in the way he had. He formed a rainbow in the sky as a sign of a covenant with Noah. It wasn't necessarily the first rainbow seen. This feast was kept by Noah's family until the days of Abraham and was then later revived with Moses. The Jews called this feast the festival of Atzeret meaning "conclusion", and to the Greeks it was known as Pentecost. Pentecost was to be kept as a time of rejoicing to remember Gods deliverance. It was a time of rejoicing, to celebrate deliverance and new beginnings with God. It represented not only the events of the flood but also the deliverance of the Israelites from Pharaoh. Both

of these events had prophetic implications for the future and have many similarities. Pentecost spoke of deliverance and a new start with rejoicing. The blood sacrifices associated with this feast speak of Jesus. The feast was prophetically fulfilled in the New Testament in Acts 2 when the Holy Spirit filled the disciples. Pentecost took place 50 days after the feast of first fruits and marked the beginning of the spring barley harvest. The spring barley harvest represented the beginning of the spreading of the gospel with the power of the Holy Spirit: this taking place straight after the infilling of the disciples. Noah, his family and the surviving animals were also types of the early church moving away from the site of sacrifice to spread life to the world.

Spread of man

The family of Noah settled in the region of Armenia. They built cities that were named after Noah's daughter in laws. Noah's family were the Ubaidians who later became the Sumerians. The family eventually moved down to the area of present day Iraq, known to us as Sumer where they built cities and got involved with the infamous tower of Babel. The Sumerian people are regarded as having formed the first known human civilisation. From History and archaeology we know that these people spread from here to eventually migrate to all parts of the planet. The pyramid type buildings built in Sumer were to be built by these people as they migrated to Central America, Egypt, China and Indonesia. The story of human culture can only be reliably traced back about 5000 years. This and the world population statistics show that humans have recent origins. If we had been around for millions of years, there would be evidence in the rocks and on the ground to show it. The world's population would be much larger than it has been if evolution was correct.

Spread animals

The animals, birds and other creatures that disembarked from the Ark spread to various parts of the globe. Man has transported some creatures over the centuries to new lands, but most would have spread naturally. Due to the Caucasus and Himalayan Mountains the best migration routes were to Africa and South East Asia. As a result most

animals ended up in these areas. Very few mammals reached across the land bridge to the Americas. Australia either had animals brought there by man or there was a land bridge linking Australia to Asia. There is a possibility that animals were supernaturally moved to certain areas or they returned by instinct to areas where they had lived before the flood.

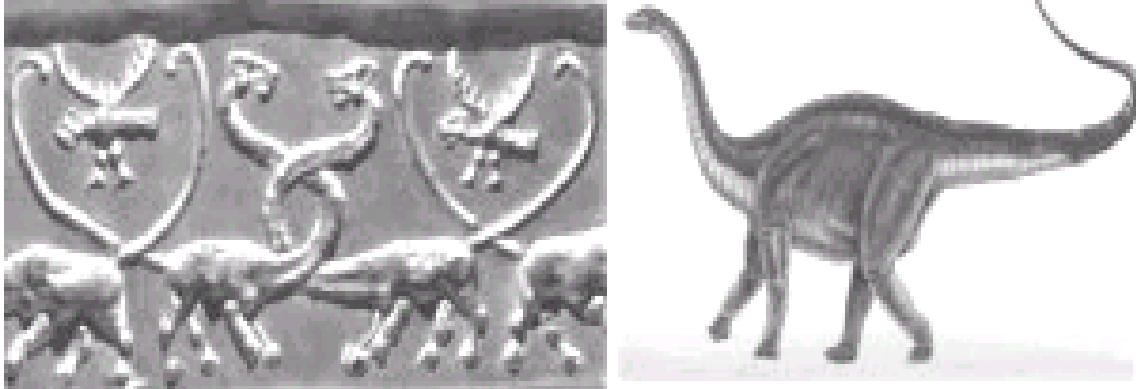
Dinosaur Dilemma

Changed climatic conditions and water bodies left over from the flood caused an ice age directly after the flood. This would have made life extremely difficult for dinosaurs and possibly other species that had survived in the Ark. The incubation of eggs in cold temperatures would not have been easy. This may have prevented egg-laying dinosaurs from increasing to large numbers after the flood. Many of the dinosaurs were herbivores and the post flood environment did not have the same quantity of vegetation available to them - a further cause of their demise. Dinosaurs were recorded after the flood. They are mentioned in the literature of the Babylonians, Chinese and Europeans. The book of Job in the bible describes dinosaurs living after the flood. The fire-breathing dragon mentioned in Job was probably the Hadrosaur that had a possible fire-producing crest on its head. This could have worked in a similar fashion to the chemical like reaction used by the bombardier beetles to chase away their enemies. The Ishtar gate at Babylon has pictures of various animals including what looks like a Hadrosaur. Dragons are featured in the ancient Gilgamesh Epic, a Sumerian story from about 2300 BC. Daniel was said to have killed a dragon in the apocryphal chapters of the Bible. After Alexander the Great invaded India he brought back reports of great hissing monsters in caves.

Dinosaurs were after flood

Below is a Mesopotamian cylinder seal dated at about 2300 BC. The animal on the far right is an artist's conception from a skeleton of an Apatasaurus. There are many striking similarities between these two depictions. The legs and feet on the Egyptian art clearly fit the saurapods better than any other type of animal. The biggest difference is at the head. Cartilage forming the shape of a frill or ears may be

stylized or accurate (since there is no way to know from the skeletons we have today). As for the musculature, the Egyptian artist draws with stunning realism.



Migration mammals and others

Animals mentioned in the Bible and found in the Middle East in Old Testament times include; the bear, wild boars, hyrax, deer, dogs, jackals, foxes, lions, leopards, gazelle, ostrich and wolves. David had to fend off lions and bears while he was tending sheep. There were a variety of animals in the Holy Land, with many of these species now no longer present. Many of these animals migrated westwards into the Nile valley. From the pre dynastic period of Egypt ca 2300BC, pictures and carvings have been obtained showing the various animals living in the vicinity of the Nile. The Narmer palette that records the joining of upper and Lower Egypt has two possible dinosaurs shown in captivity. The Okapi became the Egyptian god Set and this animal is now only found in the forests of central Africa. It was not that many years ago that this elusive creature we now call the Okapi was only known to science through the stories of tribal peoples. The two-dog palette from Hierakonpolis along the Nile is an exceptional piece of art showing some of the creatures present (shown below). One of the dinosaurs mentioned in the book of Job seems to be a large Sauropod and a picture of this same dinosaur is shown on the palette. The palette has impala, gazelle, hartebeest, wildebeest, lions, dogs, giraffe, leopard and ibex. There is also a picture of what looks like a kangaroo and these may have migrated unsuccessfully in this direction from the Ark. In the book of Isaiah it twice mentions the "fiery flying serpent."

Egypt is called the place of the "lion, the viper and fiery flying serpent," (30:6). This may be the flying creature shown on the palette. This fits with classical authors describing pterosaur populations in Egypt and Arabia. It was possible that nimble flying snakes (pterosaurs) killed many of the children of Israel rather than them being surprised and killed by snakes on the ground. The pterosaur becoming a type of Christ (John 3:14) seems more appropriate than the snake, which from Genesis to Revelation is a symbol of Satan. In addition, the spread wings on the top of the pole would form a cross. In fact, a plate found with Sennacherib's booty at Calah (from the conquest of Palestine) depicts such a winged serpent on a pole that would seem to match the Nehushtan or brazen saraph of Moses that had become a symbol of worship by Hezekiah's reign (II Kings 18:4). Egyptian seals continued to show now extinct animals and this continued to the Roman period. Ancient explorers and historians told of small flying reptiles in ancient Egypt and Arabia and described their predators, the ibis, stopping their invasion into Egypt. The well-respected Greek researcher Herodotus wrote, "There is a place in Arabia, situated very near the city of Buto, to which I went, on hearing of some winged serpents; and when I arrived there, I saw bones and spines of serpents, in such quantities as it would be impossible to describe. The form of the serpent is like that of the water snake; but he has wings without feathers, and as like as possible to the wings of a bat." Reliable witness reports of "flying dragons" (pterosaur-like creatures) in Europe are recorded as recently as 1649.

Coelacanth

Are dinosaurs still alive? The Komodo dragon, Coelacanth and Tuatara are some of the creatures that were meant to have been extinct for millions of years. They caused much surprise when they were found, as the finds did not fit in with evolutionary philosophy. These are just a few of the living organisms discovered in the last few hundred years that were supposed to have been dead for millions of years. The coelacanth was supposed to have been extinct for 70 million years until a fisherman caught one in 1939. In the last decade new species of deer, lemur and marmoset have been found.

TWO DOG PALETTE



**ANCIENT
EGYPT**

Lake Monsters

Recently there have been many reports of Lake Monsters in parts of North America and Europe and unconfirmed dinosaur reports from Central Africa. In April of 1977 a Japanese fishing vessel named the Zuiyo-Maru was traveling off the coast of New Zealand, when a large carcass became snarled in its nets. The rotting remains, weighing about 4,000 pounds, were hoisted up above the deck. Several pictures were taken and a fin was preserved before it was cast back into the sea, so the mackerel catch would not be spoilt. The drawing by an observer depicts a plesiosaur, as does a commemorative Japanese stamp that was issued in 1977. A 1978 study led many scientists to conclude that it was merely a decayed basking shark. But questions remain, including the observed large hind fins, the small, hard head with the nares (nostrils) at the front of the head, the existence of the decaying fat, and the presence of red flesh so that many still believe it was a plesiosaur. The Western Scientists don't believe their Japanese counterparts made this discovery, as they believe there is no way an animal like that can still be alive.

Central Africa

In Cameroon the Baka pygmies identify pictures of a Triceratops with an animal they call the Ngoubu. They report it being big as an ox, possessing a neck frill, and sporting from one to four horns. Apparently the mature male has the largest frill. Perhaps this is the same species as the Emela-ntouka in the Congo and the observers there merely saw the single-horned variety or younger creatures. The Ngoubu is said to inhabit the savannas along the Boumba and Sanga River where it is known to fight with elephants. In December 1919, the London Daily Mail published a letter from C.G. James, who had lived in what is now Zambia. He reported on an enormous beast with a single ivory horn living in the waters of Lakes Bangweulu and the surrounding lakes and swamps. James said the natives called this animal "Chipekwe". The same creature is also mentioned in both Millais' 1924 book *Far Away up the Nile*, and Hughes' 1933 volume *Eighteen Years on Lake Bangweulu*. The latter describes Wa-Ushi tribesmen actually killing such a creature along the Luapula River that

leads to Lake Bangweulu. They detailed how its smooth body was armed with a single horn fixed like that of a rhinoceros, but composed of smooth white, highly-polished ivory. Indigenous peoples near Lake Edward in Zaire call this same creature "Irizima" and refer to it as a "gigantic hippopotamus with the horns of a rhinoceros on its head."

In 1981 Dr. Roy Mackal traveled to the Congo searching for the rumored sauropod dinosaur Mokele-mbembe. But he was surprised to hear reports of another mysterious animal called the Emela-ntouka or "killer of elephants". The natives in the northwest region of the Likoula swamp told how it would gore elephants with its single horn. Mackal's theory that it was a ceratopsian was cast in doubt by the pygmies, who did not recollect seeing a neck frill. The description, however, does not fit a rhinoceros, which has a short tail, does not have a true horn composed of bone or ivory. It is fused keratin (hair) and it seldom comes out a winner in a confrontation with elephants. Mackal left open the possibility that the Emela-ntouka was a Centrosaurus ("pointed lizard").

Mokele-Mbembe

In the swampy jungles of western Africa, reports persist of an elephant-sized creature with smooth, brownish-gray skin, a long, flexible neck, a very long tail as powerful as a crocodile's, and three-clawed feet the size of frying pans. Over the past three centuries, native Pygmies and Western explorers have told how the animals feed on the nutlike fruit of a riverbank plant and keep to the deep pools and subsurface caves of waters in this largely unexplored region. After a recent expedition there, two American researchers conclude that these stories refer to a real animal, not a myth. Fantastic as it seems, Roy Mackal [University of Chicago] and James Powell believe that this creature, called 'Mokele-Mbembe' by the natives, may actually be a dinosaur, perhaps one resembling brontosaurus, which is thought to have died out 70 million years ago (Anonymous, "Living Dinosaurs," Science-80, vol. 1, November 1980, pp. 6-7). The forbidding Likouala swamp region, located in the northern part of the Congo, is about the size of the state of Arkansas. It was not until missionaries showed natives a sauropod dinosaur that they identified this mysterious animal living along the rivers and deep swamp pools. A vegetarian,

the creature will fight with hippos over a territory rich in molombo plants. The Sunday Times of London reported in May of 1999 that members of the Kabonga tribe actually killed a mokele-mbembe! In the fall of 1981 Herman Regusters led a team into Lake Tele and returned with droppings, footprint casts and a sound recording unlike any animal known in the Congo Basin area. Reports of Mokele Mbembe go back to the eighteenth century and in 1919, the Smithsonian sent a team to investigate. Since 1980, over 20 such expeditions have searched the region of the Likouala swamp.

N'yamala

In Gabon, a group of African natives known as the Fang people tell of an animal called N'yamala, identifying it with a picture of Diplodocus. In 1913, Capt. Von Stein was sent by the German government to explore the Cameroon. Von Stein wrote of an animal sized between a hippopotamus and an elephant with a long and very flexible neck and a long muscular tail like that of an alligator. Von Stein was even shown a path said to have been made by this animal in order to get at its food. On p. 257 of his 1927 book *Trader Horn*, Horn writes, "Aye, and behind the Cameroons there's things living we know nothing about. I could 'a' made books about many things. The Jago-Nini they say is still in the swamps and rivers. Giant diver it means. Comes out of the water and devours people. Old men'll tell you what their grandfather's saw, but they still believe it's there. Same as the Amali I've always taken it to be. I've seen the Amali's footprint. About the size of a good frying pan in circumference and three claws instead o' five." The drawing, shown in *Claws, Jaws, and Dinosaurs*, illustrates the monstrous creature as a Scottish explorer reported seeing it in 1932, while canoeing on the Cross River in the Cameroons. In the fall of 2000 an expedition led by Genesis Park staff pioneered research in southeastern Cameroon by slogging through nasty swamps, floating jungle rivers, trekking virgin rain forests and interviewing pygmy forest peoples who had never before talked to an outside explorer. From village to village informants recognized this creature from a lineup of various animals. The name was always the same, "Li'kela-bembe." Eyewitnesses led them to places where it had been seen, in some cases quite recently.

Mammals move down to South Africa

Many of the animals living along the Nile moved south and west or became extinct and are now no longer found in Egypt. People in North Africa and the Middle East hunted lions and the wild ox with their bows and arrows, while on the Nile the crocodile and hippos were hunted with harpoons and lances from boats. In early Egyptian days there was an abundance of elephant ivory. The Sahara had hippo, giraffe, elephants, zebra and antelopes after the flood. The people who had left the Middle East and moved into North Africa left paintings in the Sahara showing how they lived in these more fertile times and which animals lived with them. Some of these people may have been the ancestors of the Khoisans that later lived in Southern Africa. Animals painted included long tailed monkeys, rhino, buffalo/cattle with large horns, sable, wild ass, warthog, and leopard. The Atlas Mountains have paintings of leopard and elephant. Large bodies of water such as that of Lake Chad and the Caspian Sea are like large puddles left over from the flood. These have been drying out over time, as would a puddle left in the sun. The catchment areas are too small to replenish these water-bodies and others left over from the flood. Lake Chad continues to dry up to this day. There was a great 750-mile long waterway emptying into Lake Chad called the Tafeeasset - one of many now dry watercourses. The Tassili highlands of the Sahara have had isolated water bodies left containing fish, crocodiles and batrachians. Stunted crocodiles left behind in the desert in remote areas are the descendants of larger populations in the distant past. The Tassili after the flood had conifers (such as the Aleppo pines and cypress), vines, nettle trees, holm oaks, lentiscus, maple alders, limes and olives. The flora was similar to that now found around the Mediterranean. It later dried out to a savannah type of vegetation. The animals living in these once fertile North African regions moved down into East Africa and finally some reached the Southern part of the continent. Zambia was probably the main corridor for many animals on their migration to Southern Africa. The growth of thicker vegetation may have become a hindrance in Zambia to further migrations between East and Southern Africa later on. Animals such as the Dikdik, Oryx etc. in Southern Africa were isolated from their East African counterparts. An interesting find in the Wonderwerk

cave in the Northern Cape was a possible ibex. There is no explanation for this. There is a possibility that this is a pre-flood fossil site or that a small population of these animals found their way down into Southern Africa after the flood. How did animals such as the klipspringer and hyrax, found on isolated rocky areas, migrate to South Africa without being eaten? The best explanation for this is that predators need a certain amount of prey to survive on. As the populations of game were still increasing the predators would have been restricted to the more populated game areas. Herbivores could migrate into flood-depopulated areas without much chance of being eaten. This would give them time to reach their new homes.

Vegetation change

Rose Cottage archaeological site in the Eastern Free State shows how the vegetation varied in this area after the flood. Charcoal analysis shows the presence of alpine maccia elements, with species such as the protea surviving for a while in this area. Large zebra, warthog, wildebeest, giant hartebeest, blesbok, springbok, blue buck and reedbuck lived in the vicinity. Like the Sahara this area appears to have had more vegetation soon after the flood before it dried out. Elands Bay cave site found in the Western Cape had fossils telling us something of the history of this area. The humans living in the cave left marine and terrestrial deposits behind. Remains from the cave show this region was less vegetated, having lots of grass and how it had been badly damaged by the worldwide flood. Trees and many other plants would have taken a while to recover and establish themselves. This allowed grass to thrive for a period. Grazers migrated down through east and central Africa and as there was little forest they did really well in Southern Africa. As the grazing was good after the flood in Southern Africa, so a lot of the grazers such as wildebeest, zebra and hartebeest were generally bigger than those found today. Some of the Southern African caves have evidence that some animals were later arrivals to the region as they are only found in more recent deposits. The Klasies River in the Cape Province had the remains of some modern and 'archaic' human remains. This showed that humans arrived on the South African coast probably before or about the time of Abraham. The archaic skull indicates that

some of them reached a very great age. The flood deposit is recorded on bedrock at Klasies Cave. By analysing the overlying sediments it was found that the grazers, wildebeest, bontebok and zebra were proportionally more abundant after the flood. Grazers dominated due to the environment being rich in grass. Another interesting site in the Cape is the Nelson Bay cave that showed the presence of Grysbok, bushbuck, Cape buffalo, bushpig, reedbuck, roan and Vaal Reebok. The last three became increasingly rare as time progressed and then eventually the blue duiker made its appearance. This shows that as time progressed the area became more forested. Spring deposits in the Transvaal show that the vegetation suffered badly after the flood and many areas were very grassy, trees taking a bit of time to re-establish themselves. In some areas of Southern Africa flood laid down sands would have been almost devoid of vegetation for a period before the vegetation re-established itself. Some dunes in Namibia and Botswana may never have had vegetation growing on them after the flood due to the changed climatic conditions.

People begin arrive in the south

People still lived to fairly great ages right up to the time of the Israelite departure from Egypt. The approximate date of the main dispersal of people from the Middle East is about 2300BC. This means the first people to colonise this area may have arrived here as far back as about 2300BC. The Bushmen/San are considered to be the first arrivals in Southern Africa after the flood. I believe though that they are more recent than we realize. There were though Egyptian, Phoenicians and others in the distant past who may have reached here before the Khoisans, by sailing down the East coast. Recently we have evidence that this may have been the case. The Hottentots and others are thought to have arrived later. This does not mean we haven't had other different peoples living here in the sub region - that may have died out. Some of the earlier post flood inhabitants in Southern Africa buried their dead with ochre. Burials with ochre were common in pre-dynastic Egypt; post flood Europe and the Middle East.

Khoisan

The origin of the Bushman/San has been a controversial one. The recent arrival of the Bantu in the last 1000 years or so and then of the Europeans, displaced them in many areas. It is likely they migrated down through Africa and then mixed with many eastern migrants who landed on the east coast. There are people in Tanzania just to the south of Ngorongoro crater with a language similar to the Bushman, suggesting they more likely moved down through Africa. The Bushman painted many of our paintings in Southern Africa. The age given to these painting sites is laughable. First of all, most sites have never been dated and tour guides give unjustifiably old dates for them. Secondly some sites are dated using faulty radiometric dating techniques, which often give old dates. It sounds good to tell a tourist a site is 40,000 years old rather than an unromantic 1000 years old. The Bushman never used paints that lasted tens of thousands of years – if they did I'm sure all the paint companies would be interested. If you visit painting sites on a regular basis you will find after a few years the paintings have visibly deteriorated. This is normally caused by the natural exfoliation of the rock. This shows that they have not been around for as long as some people have expressed. Those who came before the Europeans brought domestic animals into Southern Africa. These animals include creatures such as dogs, cattle and sheep. Europeans brought other creatures that include the now wild populations of fallow deer and Himalayan Tahr. Civilisation has brought great changes to Southern Africa leading to the extinction of the Blue buck and Quagga, which are probably subspecies of animals still living today. Some animals such as the White Rhino have recovered from the brink of extinction. We can congratulate Southern African conservationists for the tremendous job done over the years in protecting wildlife. Bird species are still increasing in numbers in this region as they gradually infiltrate the area. This means that animals are still migrating from the Ark to new areas of the planet including Southern Africa.

Flood a historical fact

The flood was an accepted historical event, until the last few hundred years. Suddenly a new religion called evolution, with a belief and

masquerading as science jumped in. They hijacked science and made the new theories look so good, that you are now regarded as a fool if you don't believe in evolution. The Bible says that the man who doesn't believe in God is a fool. Who's right? The flood was no regional event, but a worldwide disaster. Archaeology, taxonomy, palaeontology and all the sciences prove there is a God and that there was a catastrophic worldwide flood. Many world-renowned scientists past and present don't believe in evolution and as more knowledge reveals the past to us, so these numbers will increase. All over the Middle East the ancients left clay tablets, which were used much as we use paper today. These archives record politics, everyday life and history. Many of these confirm the Genesis account even though some stories have myth mixed in. The flood is an historical event with names; dates and places all faithfully recorded for us. There are at least 100 different flood traditions around the world, showing all peoples originated in the last 5000 years from the Middle East. Tradition, ancient tablets, Jewish and other literatures all record the event, much as a newspaper does today. Archaeology, palaeontology and geology confirm the event took place. The Armenians called the place where the Ark came to rest "the place of descent", and at the time of the Roman Empire the remains of the Ark were still visible. Joseph the historian mentions various historians who had records of the flood. These included a Chaldean named Berosus, Hieronymus the Egyptian, Mnaseas, and Nicolaus of Damascus and others. Recent explorations in the Mt.Ararat area have confirmed traditions concerning the Ark. Bits of the Ark are still found to this day in the mountains of Ararat in the Middle East. Unfortunately politics and the extremely hostile physical environment have made it impossible to locate the exact site and to substantiate previous observations and photographs.

A warning

Will there be flooding again? Well God promised there would never be a worldwide flood again. We have had flooding throughout history but only one worldwide flood. With global warming and various prophecies we can expect flooding on a large scale around the world, but nothing as large as Noah's flood. The next time God destroys the

world He will probably use fire rather than water. We should respond to the Bible message by repenting and serving Jesus Christ. God is a God of Justice as well as Mercy, and the rock formations we see every day remind us of this. Noah is a type of Christ. Those who rejected Noah's message laughed at his words of mercy and judgement and thought the building of the Ark was a waste of time. Only later did they realise their mistake, when it was too late. They had been living lives of sin and going about their everyday lives in ignorance, not knowing that in a few days they would be wiped off the face of the earth. Today people still live and think like this. We need to join Jesus on the Ark of salvation, go through the floodwaters with him, not seeing clearly, but walking in faith and finally joining him on the other side with a new beginning, like Noah's family did.

Offer for salvation

Do you know Jesus? If you don't, would you like to meet him? Turn your face to heaven right now and repeat this simple prayer to the King of Kings. 'Lord Jesus Christ I ask that you come into my life. I repent of my sins and ask that you can take over my life and change me. I put all my affairs in your hands.' With this simple prayer you have started a new life with the Saviour of mankind. You now need to find a bible believing church, with the power of God present and keep on praying!



Predynastic Photos Francesco Raffaele

REFERENCES

- Annals of the Transvaal Museum Vol. 20 (1939-1946) R.Broom. Bushmen, Koranas and Hottentots.
- Annals of the Transvaal Museum Vole 22 C.Churcher. Coopers and Bolts in Transvaal.
- Annals of the Transvaal Museum Vol. 31 (1978) I.Suzman. A fossil felid femur formerly considered to be a hominid.
- Annals of the Transvaal Museum Vol. 31 E.Vrba & D.Panagos. Listing of Kromdraai birds and animals.
- Nature (1925) Vol. 116. The Boskop skull. R.Broom
- Nature (1925) Vol. 116. The Taungs skull. A.Kieth.
- Nature (1929) Vole 123. The Transvaal Fossil human skeleton. R.Broom.
- Nature (1936) The Sterkfontein ape. E.Schwarz.
- Nature (1950) Vol. 165. Saldanha skull. M.Drennan.
- Nature 172:791 (1953) M.R.Drennan. The Saldanha skull and its associations.
- Nature 243:328-330 (1973)K.W.Butzer. Palaeo-hydrology of a late Pleistocene lake, Alexandersfontein, Kimberly, South Africa.
- Nature Vol. 394 (1998) P.Bahn. Neanderthals emancipated.
- Nature Vol. 387 (1997) G.Rhightmire. Deep roots for the Neanderthals.
- Nature Vol. 395 (1998) P.Forey. A home from home for Coelacanth.
- Annals of the South African Museum Vol. 52. M.Cluver. Therocephalian in soft, green mudstone.
- Palaeontology Africa Vol. 2 (1954) S.H.Haughton & A.S.Brink. A bibliographical list of reptilia from the Karroo beds of Africa.
- Palaeontology Africa Vole 15:37-64. I.R.Mclachlan & A.Anderson. A review of the evidence for marine conditions in Southern Africa during Dwyka times.
- Palaeontology Africa Vol. 19:31-42 A.Anderson & I.R.Mclachlan. The plant record in the Dwyka and Eccu series (Permian) of the southwestern half of the Great Karroo basin, South Africa.
- Palaeontology Africa Vol. 30:35-42 (1993). V.Watson. Glimpses from Gondolin: A faunal analysis of a fossil site near Broederstroom, Transvaal, South Africa.

Palaeontology Africa Vol. 31:73-81 (1994) J.K.McKee. Catalogue of fossil sites at the Buxton limeworks, Taung.

Palaeontology Africa Vol. 32:11-16. J.M.McKee. Further chronological seriations of Southern African Pliocene and Pleistocene faunal assemblages.

Palaeontology Africa Vol. 36:119-138. Claude Guerin. The Neogene Rhinoceroses of Namibia.

Proceeding Rhodesian scientific Association- Vol. 162. D.S.G. Thomas. Linear dune ridges of Wankie.

Proceeding Rhodesian scientific Association- Vol. 31. (1915) A.E.Phaup. Fossil reptilian remains from Chelmer farm Nyamandhlovu district.

Palaeontology Vol. 41, part 3 (1998) 387-421 J.M.Anderson & H.M.Anderson & A.R.I.Cruikshank. Late Triassic ecosystems of the Molteno/lower Elliot biome of Southern Africa.

Proceeding Transactions Rhodesian Science Association 15:5-16 A.E.V. Zealley. A breccia of mammalian bones at Bulawayo Waterworks reserve.

Palaeoecology of Africa (15) – K. Heine. The Main Stages of the Late Quaternary evolution of the Kalahari region, Southern Africa.

South African Journal of Science Vol. 32 (1935) G.W.Shepers. A fossilised human mandible from Kopje Enkel, Western Transvaal.

South African Journal of Science Vol. 32 (1935) M.R.Drennan. The Florisbad skull.

South African Journal of Science Vol. 37:300-312 (1940) H.B.S.Cooke A preliminary account of the Wonderwerk Cave Kuruman.

South African Journal of Science Vol. 40 (1943) B.D.Malan & L.H.Wells. A further report on the Wonderwerk cave Kuruman.

South African Journal of Science Vol. 52 (1955) M.J.Torien & A.R.Hughes. The limb bones of Springbok flats man.

South African Journal of Science (1963) J.Attridge. The upper Triassic Karroo deposits and fauna of Southern Rhodesia.

South African Journal of Science (1964) L.H.Wells. The Vaal river “Younger gravels” faunal assemblage: a revised list.

South African Journal of Science (1969) W.Sydow. The discovery of a Boskop skull at Otjiseva near Windhoek S.W.A.

South African Journal of Science Vol. 74 (1978) B.R.Turner. Palaeohydraulics of Clast Transport during deposition of the upper Triassic Molteno formation in the main Karroo basin of South Africa.

South African Journal of Science Vol. 76 (1980) P.V.Rich. Preliminary report on the fossil avian remains from the late tertiary sediments at Langebaanweg (Cape Province), South Africa.

South African Journal of Science Vol. 77 (1981) R.Tavener-Smith. Mode of origin of a middle Ecca coal seam near Durban.

South African Journal of Science Vol. 79 (1983) S.L.Olson. Fossil Seabirds and changing marine environments in the late tertiary of South Africa.

South African Journal of Science Vol. 77 (1981) J.A.Coetzee. A Palynological record of very primitive angiosperms in tertiary deposits of the South-western Cape Province.

South African Journal of Science Vol. 81 (1985) L.E.Kent & K.H.Gribnitz. Freshwater shell deposits in the North Western Cape Province: further evidence for a widespread wet phase during the late Pleistocene in Southern Africa.

South African Journal of Science Vol. 82 (1986) J.A.Coetzee. Palynological evidence for major vegetation and climatic change in the Miocene and Pliocene of the South Western Cape.

South African Journal of Science Vol. 86 (1990) A.D.M. Christie. Origin, classification and utilisation of oil shales in South Africa.

South African Journal of Science Vol. 88 (1992) P.A.Bender & J.S.Brink. Preliminary report on new large-mammal fossil finds from the Cornelia-Uitzoek site, in the North-eastern Orange Free State.

South African Journal of Science Vol. 89(2) 71-72 (1993) A.Sillen. Was *Australopithecus robustus* an omnivore?

South African Journal of Science Vol. 89(4) 165 (1993) P.J.Ramsay, A.M.Smith, J.C.Lee-Thorp, J.C.Vogel, M.Tyldsley, W.Kidwell. 130 000year old fossil elephant found near Durban, South Africa: preliminary report.

South African Journal of Science Vol. 89(3) 145-152 (1993) F.Egrine & R.G.Klein. Late Pleistocene human remains from the Sea Harvest site, Saldanha Bay, South Africa.

South African Journal of Science Vol. 92 (1996) L.R.Berger & J.Brink. Riet river, Free State mammalian assemblage including human patella, equid, carnivore and antelope.

South African Journal of Science Vol. 96 (1996) A.W.Keyser & R.J.Clarke. Drimolen: a new hominid-bearing site in Gauteng, South Africa.

Transactions Royal society South Africa Vol. 1. A.L.Du Toit. Gravels.

Transactions Royal society South Africa Vol. 29. L.H.Wells & H.B.S Cooke. Fauna and flora of the Vlakkraal thermal springs, O.F.S.

Transactions Royal society South Africa Vol. 35. J.A.Mabbut. Physiography and surface geology of the Hopefield fossil site.

Transactions Royal society South Africa Vol. 42. (1977) Q.B.Hendey & H.J.Deacon. Studies in Palaeontology and archaeology in the Saldanha region.

South African Archaeological Bulletin (1948). H.F.Sampson. Phoenician shipwreck on the Cape Flats.

South African Archaeological Bulletin 3:96-98 (1948) R.A.Dart. The first human mandible from the cave of Hearths, Makapansgat.

South African Archaeological Bulletin (1960) J. Fichardt. Skeletal, cultural and faunal material from the Springbok flats.

South African Archaeological Bulletin (1961) F.V.Anderson. The Shimabala mass burial

South African Archaeological Bulletin (1949) R.Dart. A polished stone pendant from the Makapansgat Valley.

South African Archaeological Bulletin (1962) H.R. MacCalman. A further stone Bowl from South West Africa.

South African Archaeological Bulletin 25:63-74 (1968) R.Singer & J.Wymer. Archaeological investigations at the Saldanha skull site in South Africa.

South African Archaeological Bulletin 32:63-73 (1977) P.T.Robertshaw. Excavations at Paternoster, South West Cape.

South African Archaeological Bulletin – Vol. 158 (1998) R.Singer. Mythical African ‘Australoids’ and triangular bricks. The Cape Flats skull in retrospect.

Langebaanweg - (1982) Q.B.Hendey. South African Museum, Cape Town.

Behaviour of Large Mammals during the formation of Lake Kariba – G.Child (1968)

Memoirs National Museum Bloemfontein (1987) J.S.Brink. Archaeozoology of Florisbad, Orange Free State.

Mem. Bern. Price Ins. Palaeontology 1:1-131 (1977) J.W.Kitching. The distribution of the Karroo vertebrate fauna.

Rhodesian Geological Survey Bulletin (G.Bond) & Palynology of the Middle Zambezi Basin. (R.Falcon).1973.

The Old Testament Pseudepigrapha Vol. 1 & 2. James H. Charlesworth.

Natural History Vol. 77 Ridiculed, rejected, but still our ancestor.

Natural History Vol. 90 V.Geist. Neanderthal the hunter.

Natural History Vol. 93. C.Stringer. Fate of the Neanderthal.

Science 190:265-267 (1975) R.G Klein. Middle stone age man-animal relationships in Southern Africa: Evidence from Die Kelder and Klasies river mouth sites, Southern Cape Province, South Africa.

Kirkia Vol. VI Part 2 (1968) H.Wild. The Phytogeography in South Central Africa

South African Science No 8 L.Wells. Canteen Kop skull.

An ice age caused by the Genesis flood. M.J.Oard

Buried alive. Jack Cuozzo. (1998)

Bones of Contention. Marvin L.Lubenow. (1998)

Botswana Notes and records, Vol. 25. R.J.Rayner. The Fossils from the Orapa Diamond Mine: A review

The Complete Works of Josephus-Flavius Josephus- Kregal Publications.

A Complete Guide to the Freshwater Fishes of Southern Africa – Paul Skelton

Trees of Southern Africa – Kieth Coates Palgrave

Preliminary Analysis of the Mammalian fauna from the Redcliff Stone Age Cave site, Rhodesia – R.G.Klein

The Canopied Earth that was, Vol. 4 – D.G.Lindsay

The Genesis Flood: Continents in Collision, Vol. 5 – D.G.Lindsay

The Original Star wars and the age of Ice, Vol. 6 – D.G.Lindsay

The Dinosaur Dilemma: Fact or Fantasy, Vol. 7 – D.G.Lindsay

The Birth of Planet Earth and the age of the Universe, Vol. 8 – D.G.Lindsay

The Dismantling of Evolutionism's Sacred Cow: RMD, Vol. 9 – D.G.Lindsay
The ABCs of Evolutionism, Vol. 10 – D.G.Lindsay
Arnoldia – Description of the first Dinosaur trackway found in Zimbabwe – D.Munyikwa
Geology of South Africa – (1966) Alex Du Toit
The Age of Reptiles – (1965) E H Colbert
The Age of Mammals – (1971) B. Kurten
The Life of Vertebrates – Young
A Natural History of Dinosaurs – (1977) R.Moody
National Geographic (1986) K.Weaver. Invaders from Space-meteorites
Christian Living Today – Issue 47
Egypt Before the Pharaohs – (1979) M.Hoffman
Gone Down the years – (1947) G.H Wilson
Creation Science website
South African Museum website
Animal Migration 1978 – J.Cloudsley-Thompson
Barrier of Spears 1973 and Rhodesia Calls 1965

Mother and child rock formation in the Matobo Hills Zimbabwe



