

## CANGO CAVES, SOUTH AFRICA

- Hein Gerstner\*

A view inside the Cango Caves Interpretive Area in its Visitor's Centre



Africa is the cradle of humankind. If it were not for the protective matrix of the Malmani (Transvaal) dolomites and the canopies of caves, the Australopithecus (Southern ape) fossils would have remained the missing link.

Sub-Saharan Africa is rather poor when it comes to carbonate rocks conducive for the formation of cave systems.

It is nevertheless riddled with thousands of shallow caves or rock overhangs. The emphasis is however focused more on the contents of caves (archaeology and palaeontology) rather than the cave itself. The exception is Cango, a true limestone cave system and the biggest show cave operation in Africa.

'Cango' meaning 'place of water between hills', is an ancient Khoi/san word. Cango Caves is situated in the Southern Cape Intermontane basin, called the Little Karoo. 'Karoo' means dry, which it is, with an annual rainfall of 340mm p.a. The refill of underground water from the ring of surrounding mountain (the Swartberg, Kamanassie, Outeniqua and Red Mountain) retains the region as a 'green' desert. The Swartberg Mountain, the range to the north, was recently declared an international Heritage site.

The depositional history of the Kango formation lime stones date back to Pre-Cambrian times (100 million years go) when stromatolite deposits along a shallow shoreline formed the lowest member of the Cape Supergroup stratigraphy, known as the Kango member.

The presence of a well developed fault line that runs parallel to the Swartberg Mountain range caused the orogenetic pressure from the drifting Falkland Plate to squeeze the limestone lense from the lower strata to the surface in a north/south tilted orientation. Numerous hot springs accompany the fault line and it is one of the reasons the effects of the 1969 great quake were felt in Oudtshoorn. I also note older deposits in relation to, e.g. the Witwatersrand gold deposits and the Vredefort Dome site and the existence of the 3500 million year old Greenstone occurring in Africa and Australia.

The limestone member lay submerged in the water table 15 million years ago, due to a period

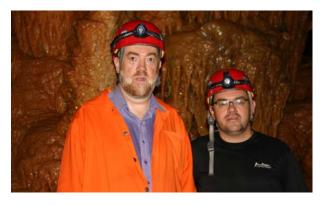
of exceptionally high rainfall. This resulted in a phreatic, low energy system of 7.2 km of which the first 1.2 km is designated tourist cave. Cango II was discovered in 1972 and remains pristine. It has been visited by the late Mr. Roy Skinner, the first non-South African and by Kent Henderson of ACKMA in 2008.



The Candle - a noted feature in Cango 2

Wild caves in the lime stone belt tallies to 26 of which 2 are infrequently used by adventure operators in the schools and teambuilding market. Significant is the adventure route option at Cango. It is probably one of a kind in the world and does quench the need for the adventure seeker, although it is pretty commercial.

A Dutch ensign, Isaac Schrijver entered the secret realm of the Little Karoo through a canyon like feature, the Attaqua's Kloof in 1689. His colonial presence halted the Later Stone Age in this region. A hundred years later, the Cango Caves were discovered by a certain Van Zyl, farmer and road builder. He was accompanied by a team of slaves. This colonial 'discovery' could never be substantiated by archival evidence. Political 'disputes' often erupt over the naming of the Caves and some of its larger chambers. The evidence however, provides archaeological sufficient proof that Stone Age People occupied the twilight zone of Cango as far as back as 80,000 years ago. The discovery is undisputedly their claim.



Kent Henderson and Hein Gerstner in Cango 2

Cango is not the deepest or longest cave in Africa, but it is one of the oldest tourist attractions in South Africa. The sheer size of the caverns and its massive speleothems (as well as the lack of competing caves around), was sufficient to be described as one of the wonders of Africa by

Hedley Chilvers at the turn of the previous century. Some of the first protective legislation was passed by the British government specifically for the conservation purposes of Cango. The first ever official and government remunerated guide was appointed at the Cango Caves.

Managing a show cave in Africa poses many challenges. Having local politicians as decision makers for cave policies often affecting operational procedures, together with the fact that the Municipality is becoming increasingly more dependant on cave income, ensures a threatening environment for the Cave. This affects staff appointments, conservation, ethics and often much needed funding for critical projects, e.g. LED lights. Solutions are never simple, often implying intense negotiations, arguments and threats of intervention by the Provincial Government. The latter is the appointed keeper of the Cango Caves. Sadly they also lack the capacity or drive to make a drastic change.

The Cave currently is receiving 230000 visitors annually and the market is healthily split on a 50/50 basis between foreign (mainly German, Dutch and U.K.) and domestic.



Hein Gerstner about to go 'show caving'
- ACKMA Conference 2009

Negative impacts are definitely the absence of an accepted management plan and the (still) dormant scientific advisory body. Council still has not been in a position to approve the existing management plan and views the science committee as a threat and unnecessary expenditure.

Not all is doom and gloom. We are currently running several worthwhile projects that we try to align with international best practise models, e.g. the LED light replacement programme, the construction of a new walkway to prevent dust pollution, the radon protection programme and the environmental monitoring project.

Our current aim is to 'ringfence' the cave as a recognized conservation Trust, run by an assembly of knowledgeable directors, to ensure the longevity and well-being of the caves as a non-renewable geo-asset and as the unique selling point of the Little Karoo. The future of Cango is doubtful under the prevailing situation.

 $^{\ast}$  paper presented at the 18th ACKMA Conference, Margaret River, 2009.