

# Fossil evidence of SA origin of man

## Startling finds in cave near Mossel Bay

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SAPA-AFP

Archaeologists have uncovered the earliest known remains of human habitation by the coast, a finding that may explain how humans ventured beyond Africa at the start of their planetary odyssey.

Mussel shells, sharpened pieces of red ochre and stone micro-tools found in a sea cave at Pinnacle Point near Mossel Bay suggest that *homo sapiens* headed for the beach quite soon after emerging from the savannah, they say.

By stumbling upon the rich harvest of the sea, man found the means to explore beyond Africa, sustaining himself through maritime edibles by probing along the coast, they suggest.

Until now, the earliest evidence of human settlement by the coast dates from 120 000 years ago – some 80 000 years after the approximate time when, according to fossil evidence, *homo sapiens* arose in the grasslands of East Africa.

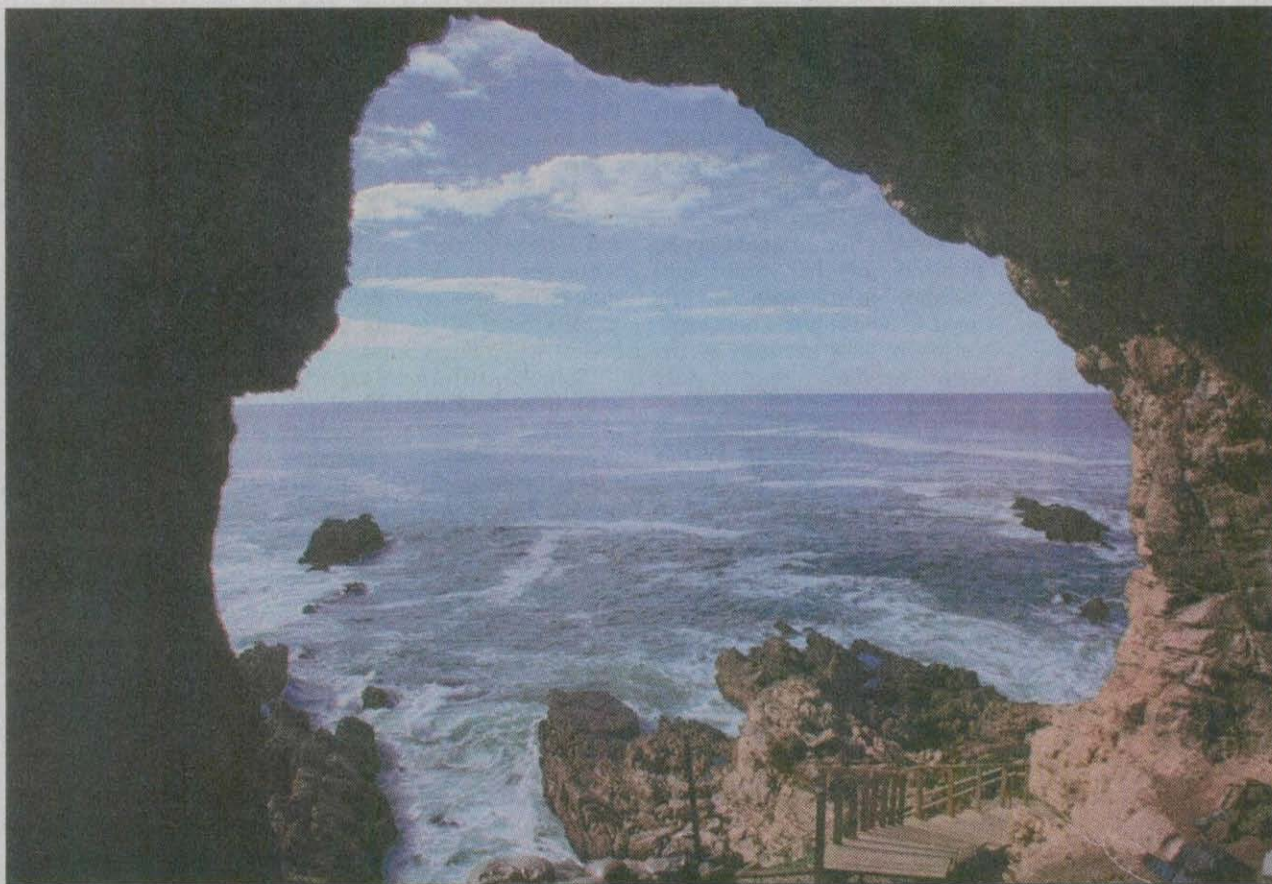
Experts have long suspected that coastal migration must have occurred earlier than this.

The problem, though, has been finding proof to back this belief.

Turn the clock back to an era between 195 000 and 135 000 years ago, and you will find Earth in the grip of an ice age.

So much water was locked up in glaciers that the sea level was as much as 125m lower than today. When the glaciers eventually retreated, the sea rose once more, swamping coastlines and sweeping away the traces of habitation.

One remarkable location that survived, though, was cave 13B overlooking the Indian Ocean in coastal cliffs at Pinnacle Point. The cave is so high



□ A view of the sea and a staircase leading up to Cave 13B at Pinnacle Point near Mossel Bay where international researchers found ochre, bladelets and evidence of shellfish, findings that reveal the earliest dated evidence of modern humans.

PICTURE: REUTERS

that, even now, it is 15m above the sea. At the time when it was inhabited, it was located within five to 10km of the coast.

Curtis Marean, of Arizona State University, led a team that sifted through the cave's walls and floor and found remains of hearths, of some two dozen shellfish, mainly brown mussels, as well as 57 pieces of ochre pigment, some of them brilliant red, and nearly three dozen "bladelets", or tiny tools made of chipped stone.

The find has been dated to around 164 000 years ago, give or take 12 000 years, according to their paper, which appeared yesterday in the British weekly journal *Nature*.

Marean believes the discovery opens a door to understanding the

movements of our early forebears.

During the long glacial period, southern Africa was cooler and drier, and hunter-gatherers probably found it hard to get food from animals, fruits and berries, he says.

Moving to the coast thus opened up a whole new larder of food.

"Shellfish may have been a critical food source to the survival of human populations when they were faced with depressed terrestrial productivity during glacial stages ... when much of southern Africa was more arid and populations were isolated and perhaps concentrated on now-submerged coastal platforms," the study says.

Seafood was the biggest shift in the human diet until animal farming began at the end of the last ice age,

roughly 11 000 years ago, it contends.

Once humans realised the bounty of food that lay within their grasp, they could use it for sustenance as they moved out of Africa, along the coast of the Red Sea and northwards into the Middle East and beyond.

In a commentary, also published by *Nature*, anthropologist Sally McBrearty and palaeontologist Chris Stringer say the pigment is an equally exciting find.

The brilliant red colours that feature in the find suggest it was also used for decorating the body or objects.

"It suggests that early humans in Africa inhabited a cognitive world enriched by symbols before 160 000 years ago," the pair say.