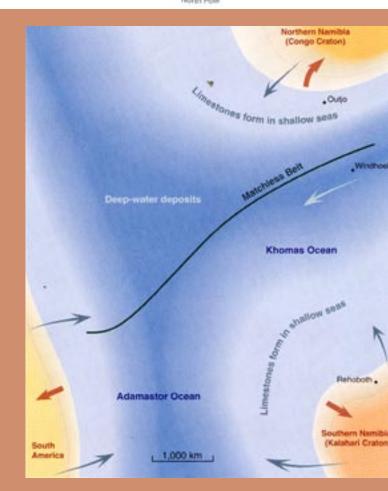


## Namibia, Southern Africa

"Namibia has many features to be admired and appreciated: spectacular scenery, abundant wildlife, people diverse in culture and outlook, a sunny climate" (*Atlas of Namibia*)....and brilliant geology that is exposed over broad tracts of land. In this land of sand and spectacular landscapes the fossil imprints of some of the world's first animals are entombed, known since World War I when German soldiers found odd shapes in the rocks.











From top to bottom: The dunes of the Skeleton Coast, west coast of Namibia.

Location of Namibia in Africa.

Palaeogeography of southern Africa and eastern South America 750 to 550 million years ago (courtesy of Atlas of Namibia).

Pteridinium from Precambrian sandstones of Aar Farm, Namibia (courtesy of the Geological Survey of Namibia).

Nemiana, a possible relative of modern corals.

Since the early part of the 20th century the impressions of animals which had no hard parts have been known in Namibia, some of them collected in the early days by the German soldiers that manned outposts in the most isolated parts of the country.

Impressions of a variety of animals, some of the first on Earth, are found in the sandstones and claystones of the Nama Group (@ 550 million years old). These rocks represent deposits in a shallow, ancient sea, the Adamastor Ocean, which lay between three tracts of land – to the west, South America; to the north what we now call the Congo, and to the south, the Kalahari Craton – southern Namibia and South Africa. This sea closed by 550 million years ago, and these continental masses collided to form the great southern continent, Gondwana.

Many of the animals which left their impressions are similar to those found elsewhere in the world, while some are entirely unique to Namibia. *Pteridinium* is common in Namibia and also along the White Sea locales in Russia, much rarer in Australia and North Carolina.

What *Pteridinium* was, and how it lived, is debated. Some palaeon-tologists, Ben Waggoner for example, have suggested it was related to corals. Others, Dolf Seilacher, think it belonged to a group called the vendiobionts, which left no living relatives. It appears to have three tube-like structures, that fit together. Perhaps polyps lived inside these and fed by filtering particles out of the water. Perhaps *Pteridinium* lived with the help of symbiotic algae abiding in its tissues. partly buried in the sediments or attached to the bottom and did not move around.

Nemiana was a colonial form, perhaps related to corals, which occurs in concentrated groups. Each one of the "cups" may have housed a little polyp, just as in a coral colony. *Ernietta* probably lived partially buried in the sediment with individuals closely associated, though not in direct contact with one another. The polyps very likely filtered food from the surrounding sea water.

Rangea was an elegant form, with a leaf-like configuration – probably living with its base attached to the sea floor and its frond-like structure extending into the water. Its closest relatives alive today may be the soft-corals, the sea pens.



Near Grunau in southern Namibia, Nama Group rocks in the distant mountains (courtesy of B. Brain).