Into Egypt's Eastern Desert

In the first of two articles, **Colin Reader** takes us on a remarkable trip into Egypt's Eastern Desert. He discovers enigmatic rock art and the spectacular rocky canvas on which strange ships, animals and dancing figures have been scratched from the earliest periods of Egyptian history; and he visits impressive ancient quarries, used throughout Egyptian history.

t had been well over twenty years since I had last been under canvas, so the prospect of a week of camping in Egypt's Eastern Desert was somewhat daunting. On the other hand, over the years I had read much about the

rock art of the area - from authors such as Hans Winkler, David Rohl and Toby Wilkinson. addition to the rock art, I have also been studying the geology of the Eastern Desand acutely aware that the area had a great deal to offer anyone with even the slightest interest in rocks and minerals.

south and Wadi Hammamat in the north. Both these wadis are now major road corridors, linking the commerce of the Nile Valley and the Red Sea coast.

The wadi systems are the dominant feature of the

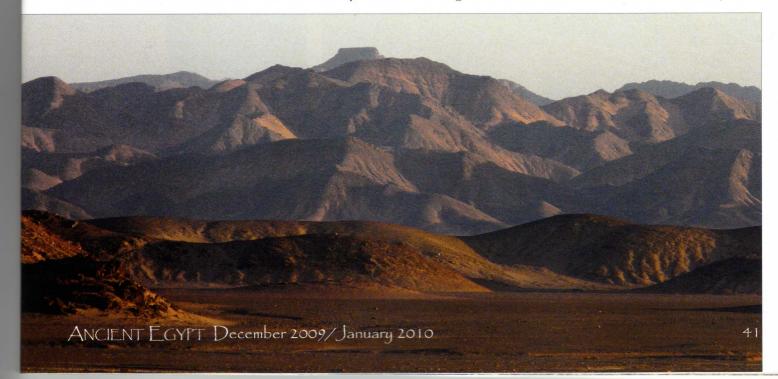
Eastern Desert landscape their origins can be traced perhaps as much as forty million years back in time. The current arid conditions in Egypt are recent - very recent on geological timescales - perhaps no more than four or five thousand years old. Before then, north east Africa experienced higher annual rainfall (although the cli-



The Eastern Desert Landscape

Egypt's Eastern Desert is a vast tract of land between the River Nile and the Red Sea. It is perhaps best not to think of the area as a desert in the classic sense: as a featureless sandy expanse, devoid of water, plants and most other forms of life. On the whole, the Eastern Desert isn't even particularly sandy, as the difficulty experienced finding suitable camp sites in some areas was to prove!

The section of the Eastern Desert that I have become most familiar with lies between Wadi Barramiya in the mate will have varied immensely over the forty million years that we are considering here). This ancient rainfall eroded the landscape to produce an elaborate network of rivers and valley systems. As the climate changed and the scale of these rivers reduced, the load of sand and silt that the flowing water carried was progressively deposited on the valley floors. Over time, these sediments partly filled the deep valleys to give us the wide sandy wadi floors that exist today (see photo above). The most recent rivers to flow through the Eastern Desert will have been relatively small



streams, which meandered across the broad flat alluvial floor of their wadis, becoming increasingly seasonal as the current arid conditions set in.

It is often surprising how much greenery is present in some of these wadis and, although sparse and patchy, it is perhaps the very presence of this vegetation that makes me hesitant to call this area a true desert. In many areas, the vegetation follows a meandering path across the floor of the wadi, which mimics the path taken by the occasional rains that even today wash through the Eastern Desert. It is this precious moisture that provides the only real sustenance for the greenery that exists in the otherwise barren landscape.

The wadis, then, provide a series of routes through the Eastern Desert and any itinerary in this part of the world will read like a roll-call of the wadis themselves, as the traveller moves from one wadi into the next and so on, through the desert. Although the wadis provide this continuity from west to east, the landscape through which the wadis pass is not as consistent.

The Geology

The geology of the Eastern Desert consists of groups of rocks from two distinct geological periods. In the west, closest to the Nile Valley, are the Nubian Sandstone strata, which were deposited as sands in coastal seas at the time that dinosaurs roamed the Earth (240 to 65 million years ago). The Nubian Sandstones, which will be familiar to most visitors to Egypt, form a relatively flat, gently westward-dipping plateau

into which the wadis are incised. Travel further east, however, and the low topography of the sandstone plateau is pierced from beneath by far more ancient rocks.

These rocks are truly ancient. Referred to as Precambrian, they are older than most life on Earth, with some formations dating back as far as about 1200 million years. Initially part of the planet's earliest continents, vast earth movements closed the surrounding seas and huge island systems were dashed against the continental margins. The sediments that had collected on the old sea floors were squeezed into new mountain chains, only for these mountains to erode slowly over the vast periods of time that then unfolded. With each stage of this evolution, the Precambrian group as a whole became increasingly complex, as the rocks were altered by the immense forces at work. As a result of this complex history, the rocks of the Red Sea Hills developed a great and varied mineral wealth.

Over time, the Precambrian rocks became covered with younger Nubian Sandstones and even younger Cenozoic limestones (laid down during the last 65 million years or so). It is likely that this covering of younger rocks would have largely survived if it were not for the formation of the Red Sea.

The Red Sea is a relatively recent feature of the surface of the Earth and is associated with the African Rift Valley. As this great rift opened up, some 30 to 40 million years ago, the northern section flooded to become the Red Sea and mountains were raised on its flanks. It was the subsequent erosion of the sand-stones and limestones that capped these mountains that eventually revealed the ancient Precambrian rocks that lay beneath and, because this happened only very recently, it had important implications for what was to follow.

As a relatively young mountain chain, the Red Sea Hills are dramatically ragged. Furthermore, as nature had only a mere 30 million years in which to weather and erode this young highland area, much of its great mineral wealth survived, ready to be exploited by the emergent civilisations of the region.

The Adventure Begins

After flying into Luxor, our first night was spent in the relative luxury of an

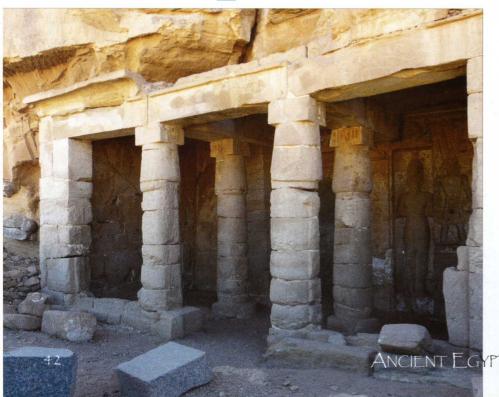
Previous page, top:

a general view of an Eastern Desert wadi.

Previous page, bottom:

a general view of the Red Sea Hills

This page, below: the portico of Kanais Temple.

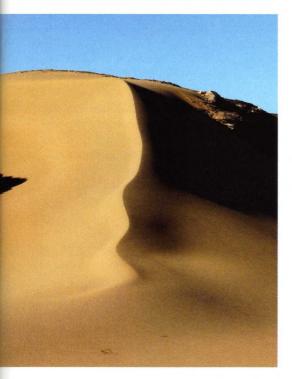


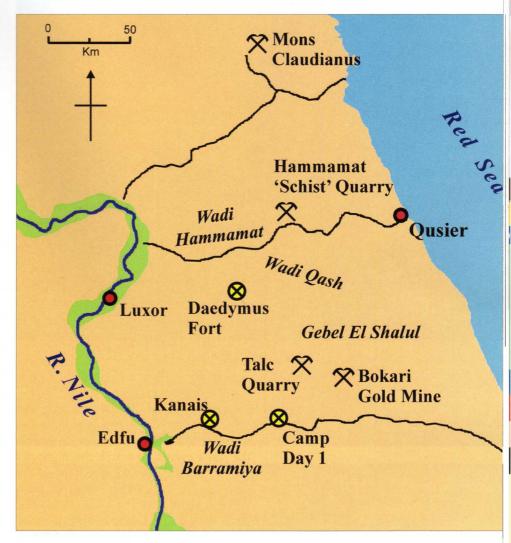
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hotel. Early next morning, however, our fleet of three Landcruisers headed south with an official tourist convoy for Edfu, to begin our journey into the desert along the tarmac road through Wadi Barramiya. Our trip had clearly taken much preparation and, in addition to our three superb drivers, we were also accompanied by an officer from the police force and an official guide. Without our official permits, we would not have been able to pass through the many police check-points that we came across and there would have been little prospect for us of exploring the desert. The convoy system has now ended for journeys north and south of Luxor, but special permission and escorts are still required for journeys such as ours.

Our first experience of rock art was in the Nubian Sandstone landscape at Kanais – the site of a small rock-cut temple (see opposite page), built during the reign of Sety I, alongside a well in the western end of Wadi Barramiya. At Kanais, the pharaonic art forms, with which the New Kingdom temple was decorated, softened the impact of the less familiar boats and 'dancing' figures with their upraised arms that could be found on the walls of the wadi and on fallen boulders close to the temple.

In many ways, the two types of rock art at Kanais establish this site as a threshold – a transition between the familiar and the unfamiliar, between the Nile Valley and the desert ... between the Black Land and the Red.





Before we could start to explore the desert landscape in earnest, however, there was the matter of our accommodation. Much of the first day of the trip had been lost to the tourist convoy, to negotiating police checkpoints and to a stop in Edfu to take on provisions – the last such stop we were to have until, in several days time, we would emerge out of the desert and descend towards the Red Sea coast some one hundred and twenty miles to the north east.

The site of our first night's camp was in a narrow wadi a short distance north of Wadi Barramiya. The chosen spot was an undisturbed area of sand, which was sheltered from the cool evening desert winds by a narrow dune (see photo left). The crest of this dune rose from the sandy surface of the wadi to form an impossibly narrow and fragile serpentine ridge.

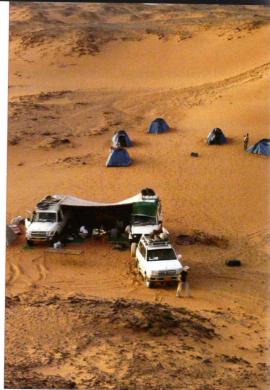
As the sun set behind the wadi walls and the sands took on increasingly deeper orange hues, the chill night air closed in quickly on our little camp (see photo overleaf, top right). After pitching our

Above:

a map of the Eastern Desert, showing the places visited on our journey. Map by Peter Robinson.

Left:
a dune formation north of
Wadi Barramiya.





tents, while there remained sufficient light to do so, the crew began to prepare the evening meal.

Out here, away from everything, the rich banter of our nightly ritual drew us together around the camp fire, to discuss the day's events, to watch the night sky and to make plans for the sunrise the next day, in a way that bands of travellers in remote parts of the world must have been drawn together for millennia.

Night falls quickly in Egypt and, when the moon is new, the darkened sky presents a stunning starscape that is far brighter and far clearer than anything I have seen elsewhere. Fleetingly, out of the corner of your eye, you will occasionally half-see a shooting star and wonder what you would have wished for if you had seen it properly. But the disappointment is as fleeting as the shooting star itself and is quickly softened, both by a nursed tot of whisky and the warmth of the fire. Then, with a brief smile to yourself, you realise that there was probably little you would have

wished for because being right here, right now, is so very, very good.

The next morning starts before dawn as you are woken by the brightening sky and the stirring of your fellow travellers. In other circumstances, this would be an almost obscenely early start to the day, but the opportunity to herald the rising sun in this wilderness is not to be missed. In our expectations of sunrise, we were never disappointed and the majesty of each day's dawn underlined why Ra, the sun god, was of such great importance to the ancient Egyptians (see above left).

The Rock Art

On day two, we headed north, continuing through the Nubian Sandstone landscape and stopping to examine the frequent rock-art sites that lay along the wadis. Although known in the West since at least the 1930s, there has been renewed interest in the Eastern Desert in recent years. As a result of the sterling work of a number of recording expeditions and their painstaking publications (see list at the end of this article), we now have a great deal of factual information about the enigmatic shapes and figures that were carved or pecked onto the rocky sandstone walls of many of the wadis.

Despite this wealth of facts, little is known with any certainty about the purpose of the rock art (see photo left and others opposite) or the motivation of the ancient artists. The great variety of the subject matter, and the clear evidence within the corpus of Eastern Desert

Top left:

desert sunrise.

Top right:

our desert camp.

Below:

a curved-hull boat with decorations,

'dancing' god and crew.



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rock art for activity from all periods of the pharaonic era, suggests this is a complex issue that will ultimately be very difficult to resolve.

Time may be running out, however. One disturbing feature is that a number of sites appear to have become the focus of modern 'treasure-hunters'. We couldn't be sure what the purpose of these excavations was, but someone had put a great deal of time and effort into tunnelling into the wadi walls at a number of locations.

The people who are involved in this illegal endeavour must think there is something worthy of all the effort (not to mention danger) buried deeply behind the rock. The problem is that this excavation is damaging the sites. Despite the clear threat that these 'treasure-hunters' pose to these unique sites, in the remote areas of the Eastern











Desert, security will be a major challenge.

As well as admiring the rock art, however, throughout our journey in the Eastern Desert, we were constantly reminded of how much beauty is inherent in nature itself. As the two pictures below show to great effect, the rocks of the Eastern Desert have a grandeur and a beauty of their own. Above, top:
a boat and crew.
Above, centre:
a possible hunting or herding scene.
Above, bottom:
a natural bowl, formed by an ancient waterfall (known to visitors as 'the jackuzi'!)

Right: examples of the natural beauty of the rocks.



Above: Precambrian conglomerate formed in an ancient riverbed.

Travelling Further Back in Time

The rock art that has been the focus of much of the recent interest in the Eastern Desert is largely confined to the Nubian Sandstone landscape in the western areas of the Eastern Desert. Undoubtedly, the ancient artists found the Nubian Sandstones to be a much easier canvas to work with than the time-hardened Precambrian strata. If the rock art of the Eastern Desert is, at least in part, the relict of an early culture that entered the Nile Valley from the east, as some have argued, they left few traces of their passing in the more ancient rocks of the Red Sea Hills.

Day three took us first west and then north into the ancient Precambrian

landscape. Initially, the mountains surprised me. I had expected these ancient rocks to rise sharply ahead of us like the saw-tooth ridges I'd seen in many photographs of the area (see photo at the foot of page 41). Our first encounter with the Precambrian rocks, however, was one of a shattered landscape, resembling the floor of a huge quarry on which stockpiles of rubble sat.

Here in this apparently broken landscape, however, there was wealth to be had if you knew where to look. We stopped at the remains of a settlement – most likely from the Roman Period – long abandoned and now a low ruin in the floor of the wadi, preserving only the original layout of the various rooms and buildings that had been constructed there.

A quick inspection of the site revealed why the miners had been prepared to inhabit this apparently barren spot. Around and within the remains of the dry stone huts there were abundant piles of talc, a highly altered, metamorphic rock which, when pulverised, gives us the smooth powder familiar for its use in cosmetics. A short distance up the western wall, above the floor of the wadi, we found the partially worked-out seams of talc that had been the focus of activity for the quarrymen.

Eventually we left the broken landscape of the western-most Precambrian rocks and before us rose the sharp granite outlier of Gebel el Shalul (see below). In the late morning sun the rocks took on varying shades of red and the track we were following took us along a narrow pass through the south eastern end of the granite massif. It was good to take

Below:
a granite outlier of Gebel el Shalul.



lunch in the shade of the towering granite cliffs, next to an ancient well that so many travellers before us must have sought out so eagerly.

After the granites of Gebel el Shalul, we entered yet another Precambrian landscape – possibly an ancient riverbed or river delta along which large rounded cobbles had settled in the ancient sandy floor. Turned to stone hundreds of millions of years ago, this conglomerate looked, in many respects, like natural concrete but this was a concrete endowed with a rich range of colours, reflecting the variety of the source rocks that had lined the ancient valleys upstream (see the upper photo opposite).

Talc is not the most exciting, nor indeed the most valuable feature of the mineral wealth of the Eastern Desert. In the second part of this article, we will continue our exploration of the Eastern Desert and visit what must be regarded as some of the most remarkable quarrying sites in the ancient world.

Colin Reader

All photos by the author.

Colin is a professional geologist with a deep interest in ancient Egypt. He has applied his knowledge and training to the study of the geology of Egypt, and in particular to the way in which it helps us to understand the history of the country and some of its ancient monuments, such as the Great Sphinx at Giza. Colin is a regular contributor to AE.

Further Reading

Desert.

Rohl (Ed) Followers of Horus – Eastern Desert Survey Report, Volume 1, ISIS, 2000.

Morrow and Morrow (Eds.), *Desert RATS* – *Site Catalogue*, BSS, 2002.

Rohl, David *Legend*, Century, 1998. Wilkinson, Toby *Genesis of the Pharaohs*, Thames and Hudson, 2003.

How to Get to the Eastern

It is not possible to travel in this region on your own and without special permissions and permits. You will need a specialist tour company. Colin made his journey with *Ancient World Tours* (AWT). He is leading a tour to the Western Desert and the Gilf Gebir next year with AWT. See www.ancient.co.uk.

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