**DNHG geological trip to Wadi Naqab on Saturday 8th January, 2022**

We will start a new year with geological field trip lead by David Kingston.

The theme of this geology field trip will be the Triassic - Jurassic mass extinction in Wadi Naqab as a proxy for the present climate concern.

Wadi Naqab is the closest geological proxy to the situation today where Greenhouse Gases (GHG) emissions are so high. Contrary to what we are told, CO2 is not the worst GHG. Methane and nitrogen compounds are worse. Vast amounts of methane come from coal mining and nitrogen compounds from manmade nitrogen fertilizers such as ammonium nitrate.

The location has been chosen to view the stratigraphic column in order to help understand how the rocks were formed in the first place. As we work our way across the stratigraphic column, we will see how the rock types that were formed were influenced by the environment of deposition that prevailed at the time of deposition. We will also see how subsequent tectonic mountain building events have shaped the rocks to form the mountains we see today.

The Wadi Naqab stratigraphic column extends over the Triassic - Jurassic boundary. This boundary is about 200 million years old and is associated with one of the world's mass extinctions. We will try to find evidence of this mass extinction by working our way across the stratigraphic column and looking at the fossil assemblages as they change from one geological formation to the next.

The wadi continues to be influenced by geological processes so we will look for and identify some of these recent, though perhaps less dramatic processes, not to mention human interference with the new dam.

**Trip details:**

This trip will start in Wadi Naqab (RAK) at 9 am. Exact meeting location will be sent to participants additionally.

Due to the nature of this walk the group is limited to **16** people.

A 4X4 vehicle is not required.

This will be a half day trip but do bring a lunch or snacks in case we run over.

The field trip will not cover a large distance and will not require climbing, though some scrambling will be required.

You should wear closed shoes or hiking boots, carry a lunch box and at least two litres of water. Sun protection is a must as there is no shade. For fossil inspection a magnifying glass will be helpful.

There will be moderately technical descriptions and discussions and there will be adequate opportunity for questions and explanations, and for fossil inspection.

**All DNHG trips are observing the current Covid protocols, so pls make sure you comply:**

-               Group will be limited to 15 pax

-               All participants need to have vaccination proof or the proof of PCR test not older than 72 hrs

-               Masks are obligatory, outdoors and indoors, as well as in the cars if the passengers are not from the same household

-               Social distancing must be observed throughout the field trip