

With a diameter of approximately 35 km, the Erongo is one of the largest Cretaceous granitic complexes in northwestern Namibia. Situated some 25 km southwest of Omaruru, it rises more than 1000 m above the deeply weathered, 650 to 600 million year old Damara metasediments and granites, which it intruded. In the east, south and west, it is bounded by high granite cliffs, while in the southeast the Erongo volcanic rocks are juxtaposed against conglomerates, sandstones and siltstones of the Triassic Lion's Head Formation (~220 m. y.), which equally form an imposing natural bastion. The Erongo Mountains represent the eroded core of an ancient volcano, with peripheral and central granite intrusions.



Satellite image (above) and geological map (below) of the Erongo Mountain and surroundings



The weathered Erongo granite harbours a number of caves, which provided shelter to the early Bushmen roaming the area. Apart from offering protection from the elements, the sheer granite walls also served as canvas for illustrations of hunting scenes and rituals. Highly detailed rock paintings can be seen at various localities throughout the complex, three of which (Phillip's Cave on Farm Ameib on the southern edge of the complex, Etemba Grotte on Farm Etemba to the north and Paula's Cave near Omaruru) have been declared national monuments.

Similar to other intrusive ring complexes of the Damaraland Suite, the events that created the Erongo 137 to 124 million years ago were related to the break-up of the Gondwana Supercontinent and the opening of the South Atlantic Ocean. While some of the complexes (e. g. Brandberg and Spitzkoppe) are made up mostly of plutonic rocks, others, like Messum and Erongo, comprise an assemblage of both intrusive and extrusive rocks. In the Erongo a layered sequence of darker, silica-poor to lighter-coloured, silica-rich volcanics within the core of the complex was intruded by granitic to granodioritic magma during several subsequent phases. Encircling the main complex is an up to 200 m thick ring dyke of dolerite, which although deeply weathered, forms a pronounced feature on aerial photos and satellite images.



Green garnet from the Erongo

The Erongo rocks as well as the surrounding country rocks host a variety of mineralization styles related to the magmatic / volcanic activity. Among these tungsten, tin, fluorite and beryllium mineralization are the most common, but gold and uranium also occur. Mineral specimens from the Erongo are highly sought after by collectors locally and overseas and include acquamarine, jeremejevite, smoky quartz, schorl, fluorite, brabantite, siderite, cassiterite and green garnet. They are exploited in many small diggings, while larger-scale mining operations were abandoned decades ago as uneconomic.



Boulders of weathered Erongo granite ("Bull's Party")