

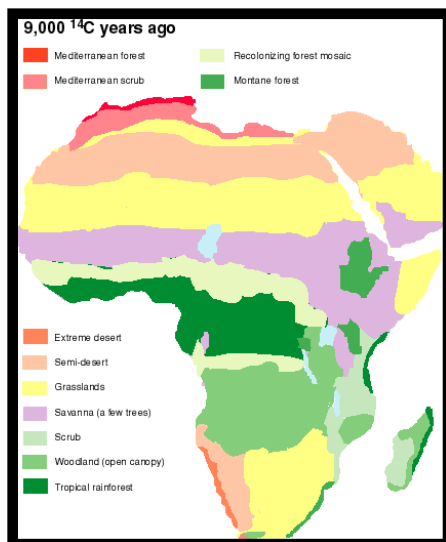


## Geological Issues

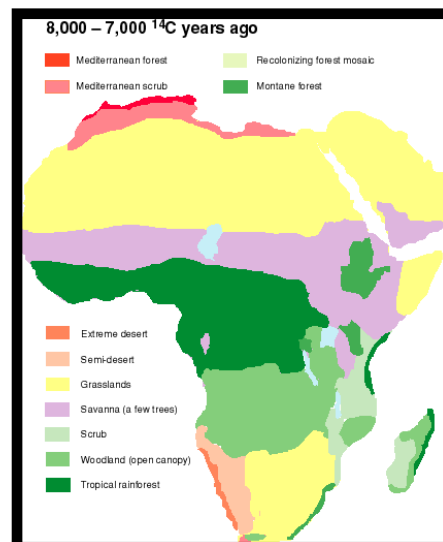
In terms of geology, we are in the Holocene Period—a period within our current ice age that has seen a relative retreat in the levels of glaciers on earth. Scientists believe that there are glacial and interglacial periods in an ice age (periods when ice covers large areas of land and periods when it does not). The last glacial period ended about 10,000 years ago—at this time the Sahara was a grassland with animals and vegetation to spare.

As the waters rose and more humid conditions came the grassland that is now the Sahara support life—in a more usual way. There were animals that could graze—people could domesticate their cattle and employ agricultural techniques in a place that would become dry.

Africa is the area of the world where human life began. Human activity has been in this area for many **thousands** of years and the fossil record dates back millions of years for human ancestry. To try to pick a date for when the ancestors of the Kemet and Nubian people began to develop the beginnings of their culture is difficult, but clues to their connectedness have been found.

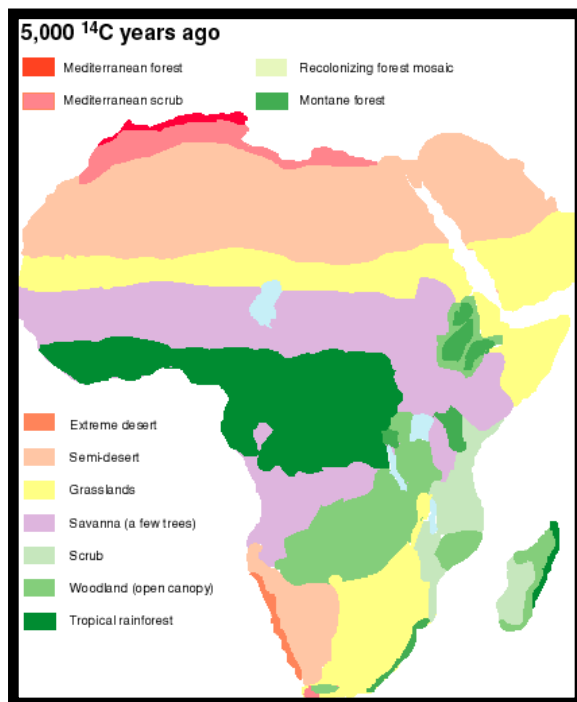


About 10,000 'real' years ago

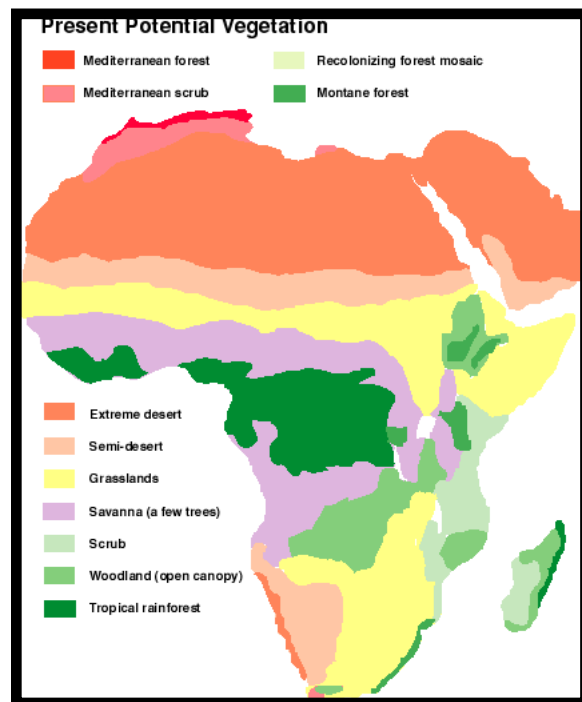


About 9,000-8,000 'real' years ago

You can see that the geographical landscape of northern African changed, from about 10,000 years ago to today. During the two-thousand-year period prior to the start of the Kemetic nation the people of northeastern Africa had to deal with an ever-increasing desert that required them to go in **search of water** around which to set up their permanent settlements. Of course, agriculture had already been in use, but additional growth and knowledge can come when people are forced to work together.



About 6,000 'real' years ago



Present - potential vegetation

Also, religious beliefs are allowed to be developed, more fully, as people live in large working groups—especially as people went to gather around places up and down the Nile.

## NABTA PLAYA

About 5000 B.C. people in the southern desert of what is today Egypt, referred to as Lower Nubia, near the Sudanese border left stone structures that indicated their belief in the importance of the stars, animal life and their ancestors.

In a large basin in the desert, about 100km west of today's Abu Simbel, human beings created a large ceremonial area.

“It is .8 miles wide and 1.8 miles long.” It includes a remarkable calendar circle that was used to observed the summer solstice and that aligned with the rising of the star, Sirius. At certain times of the year, Sirius could not be seen in the night time sky, but every year it would make an appearance, again, just at dawn above the horizon. This heliacal rising of Sirius also coincided with the flooding of the Nile in this area. This was therefore an important star to the ancient Kemetic people and, apparently, to the people of Nabta Playa.

“Because Nabta lies near the Tropic of Cancer, the noon sun is at its zenith about three weeks before and three weeks after the summer solstice, preventing upright objects from casting shadows.” (NASA, Egyptian Stonehenge)

The calendar circle is about twelve feet wide and has slabs of stone laying down, and some standing upright. The vertical stones would have indicated the summer solstice, as they would cast no shadow during that time of the year.

You can see how marking the rise of the Nile, or the extended daylight, might have been important for people who were herding cattle and seeking water to live....planting food for survival.

“Two pairs of upright stones stand directly across the circle from each other, defining a view that would have displayed sunrise at the summer solstice. The circle also contains two other pairs of standing stones that defined a north-south view.” (NASA)

Nabta Playa also has eight stone-covered tumuli (burial mounds), “each under a pile of 40 to 50 rocks weighing up to 200 or 300 pounds apiece.” (NASA)

It also includes, “10 slabs some 9 feet high and 30 rock-lined ovals”, which contain shaped and unshaped stones and “both surface and subsurface architecture.” (Wendorf, )

Here we see a structure that demonstrates a respect for cattle, a veneration of the star, Sirius, and an importance assigned to the summer solstice (and perhaps flooding of the Nile)—all of which were important to the ancient Kemetic people and to Nubian people as well.

- Danita Smith, author

**References:**

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