

# The problem of the wet Sahara

Michael J. Oard

Both creation and secular geologists agree the earth's deserts and semi-arid areas were once well watered.<sup>1</sup> Creation scientists attribute this to the ponding of water in enclosed basins during the run-off stage of the Flood and greater Ice Age precipitation. During this time the Great Salt Lake in Utah, USA, was about 12 times its current area and about 330 m deeper<sup>2</sup>. Measuring the ancient shorelines in Death Valley, California, USA (figure 1), shows a lake once filled Death Valley 170 m deep.<sup>2</sup> Today it is one of the hottest, driest places on Earth.

## The Sahara Desert was also well watered

Today the Sahara Desert is also one of the hottest and driest places on Earth, but field and satellite pictures record evidence of ancient large lakes and rivers.<sup>3-5</sup> Paleolake Chad was much larger than today at 340,000 km<sup>2</sup> in area.<sup>6</sup> Countless Neolithic artefacts and fossils of aquatic animals, such as the hippopotamus, indicate comparatively recent climate change.<sup>7</sup> Dwarf Nile River crocodiles have been found as recently as the early 20<sup>th</sup> century in isolated Sahara oases.<sup>8</sup> Judging by the thousands of rock petroglyphs, the population of the Sahara was quite large. James Wellard states:

“The Sahara is a veritable art gallery of prehistoric paintings. ... The evidence is enough to show that the Sahara was one of the well-populated areas of the prehistoric world. ... Yet there is his work, in the most inaccessible corners of the desert, literally thousands of figures of tropical and aquatic animals, enormous herds of cattle, hunters

armed with bows and boomerangs, and even ‘domestic’ scenes of women and children and the circular huts in which they lived.”<sup>9</sup>

Others corroborate:

“Occupation is clearly testified in the frequent rock engravings that are scattered throughout the upland regions of the desert, illustrating a lush environment with Sahelian and riverine fauna and scenes of large-game hunting, livestock herding and religious ceremony... ”<sup>10</sup>

This period of time is called the African Humid Period (AHP).

## Timing of the African Humid Period

The timing of the AHP has been debated, but secular researchers generally believe it started about 15,000 years ago.<sup>11,12</sup> Based on 3,287 carbon-14 dates from 1,011 Neolithic archeological sites, they surmise that humans were in northern Africa 5,500–10,500 years ago. So, the AHP is inferred to have likely ended about 5,500 years ago in the uniformitarian timescale. This corresponds to the very late Pleistocene, during deglaciation,

and the early to mid-Holocene, after the biblical Ice Age.

That the wet period in the south-west United States occurred during the Ice Age or shortly afterwards is corroborated by high shorelines cut into end moraines. For instance, a shoreline from pluvial Mono Lake in the Owens Valley, about 242 m higher than the 1975 level of Mono Lake, was cut in the most extended end moraine that had formed east of the Sierra Nevada Mountains, California, USA.<sup>2</sup> Since this end moraine was not deformed after the shoreline was carved, the ice must either have been melting at the time or had totally melted from the Sierra Nevada Mountains. The highest point of the lake could not have occurred long after the Ice Age because the Ice Age climate was very wet with strong drying afterwards.<sup>1</sup> The heavy Sierra snow should generally coincide with the high levels of pluvial lakes.

The timing of the wet period in the Sahara Desert and the south-west U.S. partly coincide. It is claimed to have been dry in North Africa from the last glacial maximum to 15,000 years ago<sup>12</sup> and the south-west USA



Figure 1. Shorelines in southern Death Valley, California, USA, from an Ice Age lake 180 m deep

pluvial lakes dried out rapidly in the Holocene. The difference in timing, if real, could simply be due to the difference in latitudes.

### Cause of the African Humid Period

Secular scientists really do not know why the AHP occurred. It is assumed the intertropical convergence zone (ITCZ) that causes an east-west heavy rain band and tropical forests through central Africa somehow moved up to 600 km north. The ITCZ is related to the current general circulation of the atmosphere, and scientists do not know how or why it could be farther north during the AHP.<sup>13,14</sup> Some models claim modest success in moving the ITCZ a little farther northward due to Milankovitch fluctuations and the increase in greenhouse gases.<sup>12</sup> One wonders how slight changes in Earth radiation balance caused by the Milankovitch mechanism<sup>15</sup> and an increase in carbon dioxide after the Ice Age would produce an ITCZ significantly farther north than today. Carbon dioxide is significantly higher today than right after the Ice Age, and the ITCZ remains stable in its central African location, since it is *locked* to its average location by the general circulation. Creation scientists do not have an explanation for the AHP either, except the post-Flood Ice Age has more potential to explain it, with much more precipitation caused by the warm oceans after the Flood.<sup>16</sup>

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