

A lost civilization under the Persian Gulf?

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Once fertile ground now submerged under the Persian Gulf may have been home to some of the earliest human populations outside Africa, according to a new report.

Jeffrey Rose, an archaeologist and researcher with the University of Birmingham in the U.K., said the area in and around this "Persian Gulf Oasis" may have been host to humans for over 100,000 years before it was swallowed up by the Indian Ocean around 8,000 years ago.

Rose's hypothesis introduces a "new and substantial cast of characters" to the human history of the Near East, he said, and suggests that humans may have established permanent settlements in the region thousands of years before current migration models suppose.

His report is published in the December issue of the research journal *Current Anthropology*.

In recent years, archaeologists have turned up evidence of a wave of human settlements along the shores of the Gulf dating to about 7,500 years ago, Rose said. "Where before there had been but a handful of scattered hunting camps, suddenly, over 60 new archaeological sites appear virtually overnight," he elaborated. "These settlements boast well-built, permanent stone houses, long-distance trade networks, elaborately decorated pottery, domesticated animals, and even evidence for one of the oldest boats in the world."

But how could such highly developed settlements pop up so quickly, with no precursor populations to be found in the archaeological record? Rose believes evidence of those preceding populations is missing because it's under the Gulf.

It may be "no coincidence that the founding of such remarkably well developed communities along the shoreline corresponds with the flooding of the Persian Gulf basin around 8,000 years ago," Rose said. "These new colonists may have come from the heart of the Gulf, displaced by rising water levels that plunged the once fertile landscape beneath the waters of the Indian Ocean."

Historical sea level data show that, prior to the flood, the Gulf basin would have been above water beginning about 75,000 years ago, Rose noted. And it would have been an ideal refuge from the harsh deserts surrounding it, with fresh water supplied by the Tigris, Euphrates, Karun, and Wadi Baton Rivers, as well as by underground springs. When conditions were at their driest in the surrounding hinterlands, the Gulf Oasis would have been at its largest in terms of exposed land area. At its peak, the exposed basin would have been about the size of Great Britain, according to Rose.

Evidence is also emerging that modern humans could have been in the region even before the oasis was above water, Rose maintains. Recently discovered archaeological sites in Yemen and Oman have yielded a stone tool style that is distinct from the East African tradition. That raises the possibility that humans were established on the southern part of the Arabian Peninsula beginning as far back as 100,000 years ago or more, Rose said. That is far earlier than the estimates generated by several recent migration models, which place the first successful migration into Arabia between 50,000 and 70,000 years ago.

The Gulf Oasis would have been available to these early migrants, and would have provided "a sanctuary throughout the Ice Ages when much of the region was rendered uninhabitable" due to drought, Rose said. "The presence of human groups in the oasis fundamentally alters our understanding of human emergence and cultural evolution in the ancient Near East." It also hints that vital pieces of the human evolutionary puzzle may be hidden in the depths of the Persian Gulf, Rose claims.