

# Fire out of Africa: A key to the migration of prehistoric man

October 27 2008

---



Excavations at the Gesher Benot Ya'qov site. Credit: Professor Naama Goren-Inbar

The ability to make fire millennia ago was likely a key factor in the migration of prehistoric hominids from Africa into Eurasia, a researcher at the Hebrew University of Jerusalem's Institute of Archaeology believes on the basis of findings at the Gesher Benot Ya'qov archaeological site in Israel.

Earlier excavations there, carried out under the direction of Prof. Naama

Goren-Inbar of the Institute of Archaeology, showed that the occupants of the site – who are identified as being part of the Acheulian culture that arose in Africa about 1.6 million years ago -- had mastered fire-making ability as long as 790,000 years ago. This revelation pushed back previously accepted dates for man's fire-making ability by a half-million years.

The Gesher Benot Ya'akov site is located along the Dead Sea rift in the Hula Valley of northern Israel.

Dr. Nira Alperson-Afil, a member of Goren-Inbar's team, said that further, detailed investigation of burned flint at designated areas in all eight levels of civilization found at the site now shows that "concentrations of burned flint items were found in distinct areas, interpreted as representing the remnants of ancient hearths." This tells us, she said, that once acquired, this fire-making ability was carried on over a period of many generations. Alperson-Afil's findings are reported in an article published in the most recent edition of *Quaternary Science Reviews*.

She said that other studies which have reported on the use of fire only verified the presence of burned archaeological materials, but were unable to penetrate further into the question of whether humans were "fire-makers" from the very early stages of fire-use.

"The new data from Gesher Benot Ya'akov is exceptional as it preserved evidence for fire-use throughout a very long occupational sequence. This continual, habitual, use of fire suggests that these early humans were not compelled to collect that fire from natural conflagrations, rather they were able to make fire at will," Alperson-Afil said.

The manipulation of fire by early man was clearly a turning point for man's ancestors, Once "domesticated," fire enabled protection from

predators and provided warmth and light as well as enabling the exploitation of a new range of foods.

Said Alperson-Afil: "The powerful tool of fire-making provided ancient humans with confidence, enabling them to leave their early circumscribed surroundings and eventually populate new, unfamiliar environments."

Source: The Hebrew University of Jerusalem

Citation: Fire out of Africa: A key to the migration of prehistoric man (2008, October 27)  
retrieved 9 April 2024 from <https://phys.org/news/2008-10-africa-key-migration-prehistoric.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--