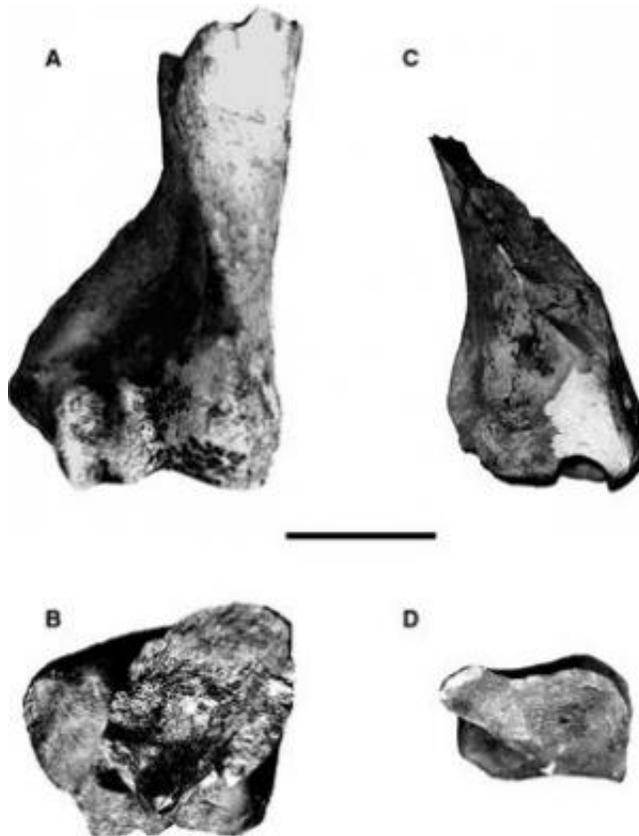


# If hippopotamuses can't swim, how can some be living on islands?

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Two limb bone fragments of *Hippopotamus antiquus* from the collections of the Geological and Palaeontological Section of the Museum of Natural History of the University of Florence, Italy. The broken diaphyses of the bones show the medullary cavities tightly packed with cancellous bone: A, distal half of right humerus (IGF 640), cranial view; B, distal half of right humerus (IGF 640), proximal view; C, distal half of right tibia (IGF 670), dorsal view; and D, distal half of right tibia (IGF 670), proximal view. The enlarged proximal views (B, D) show the medullary cavities of the diaphyses filled with cancellous bone. This solution, which can be observed also in modern *H. amphibius*, increases the

specific bone density of the distal parts of the limb bones, enabling hippopotamuses to overcome buoyancy (Wall 1983; Fish & Stein 1991; Thewissen et al. 2009). Scale bar 10 cm. Credit: Lethaia

There is no published account where hippopotamuses are demonstrably shown swimming or floating at the surface of any body of water. But if they can't swim, how did they reach and colonize islands?

Experts say that widely accepted models for the methods, patterns, and timing of the colonization and [dispersal](#) to several islands (e.g. Cyprus, Crete, and Madagascar) may need to be reconsidered.

"Although land bridge connections between these [islands](#) and the mainland are not currently supported by positive geological evidence, neither is there any contradictory evidence to exclude it," said Dr. Paul Mazza, author of a *Lethaia* article on the topic.

**More information:** Mazza, P.P.A. 2014: If Hippopotamuses cannot swim, how did they colonize islands? *Lethaia* [DOI: 10.1111/let.12074](#)

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