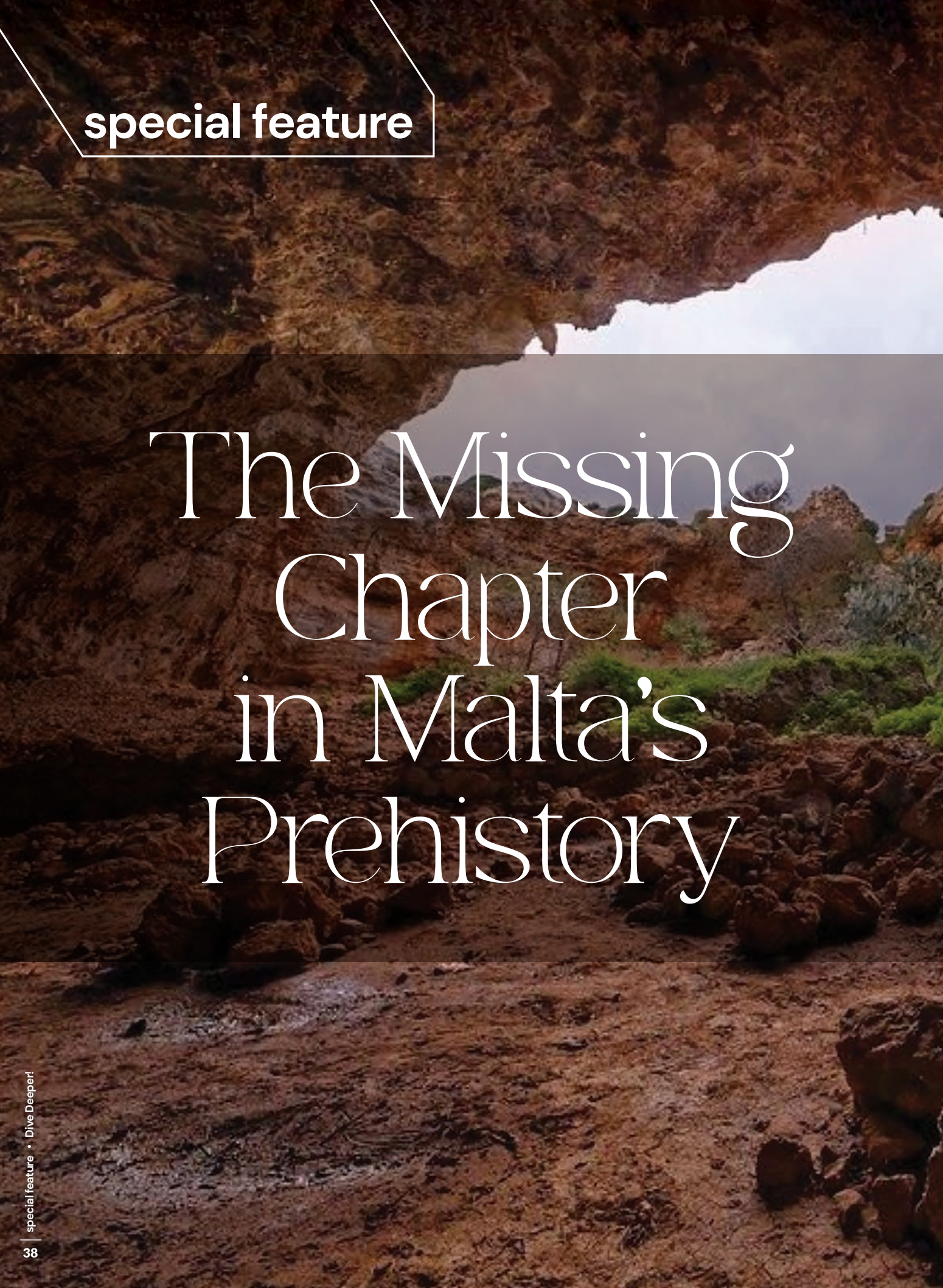
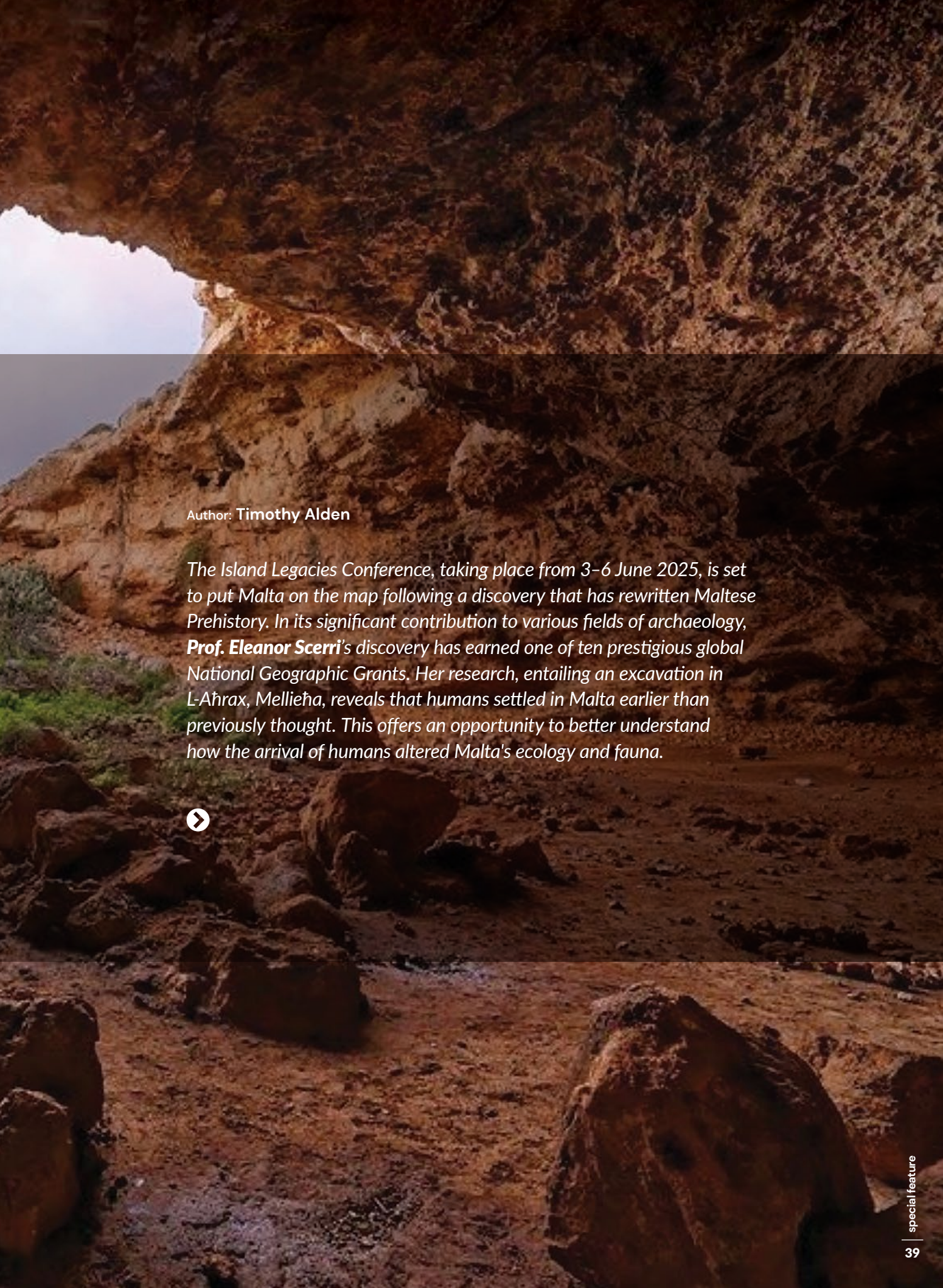


The Missing Chapter in Malta's Prehistory



Author: **Timothy Alden**

The Island Legacies Conference, taking place from 3–6 June 2025, is set to put Malta on the map following a discovery that has rewritten Maltese Prehistory. In its significant contribution to various fields of archaeology, ***Prof. Eleanor Scerri****'s discovery has earned one of ten prestigious global National Geographic Grants. Her research, entailing an excavation in L-Aħrax, Mellieħa, reveals that humans settled in Malta earlier than previously thought. This offers an opportunity to better understand how the arrival of humans altered Malta's ecology and fauna.*

Top view of Latnija Cave
Photo by Dr Andrés Currás

Prof. Eleanor Scerri's recent groundbreaking research, in collaboration with the University of Malta's Department of Classics and Archaeology, Department of Geography, and the Max Planck Institute of Geoanthropology in Germany, started with an interest in Malta's iconic miniaturised megafauna – originally discovered in Għar Dalam. The famous remains of pygmy elephants found there are a prime example of smaller versions of the large animals we recognise today. Against a backdrop of international debate regarding the relationship between humans migrating out of Africa and the extinction of megafauna worldwide, Scerri figured that Malta could serve as an effective control study for megafauna, since humans supposedly only inhabited Malta roughly around 5400 BC. What she discovered, however, surprised her.

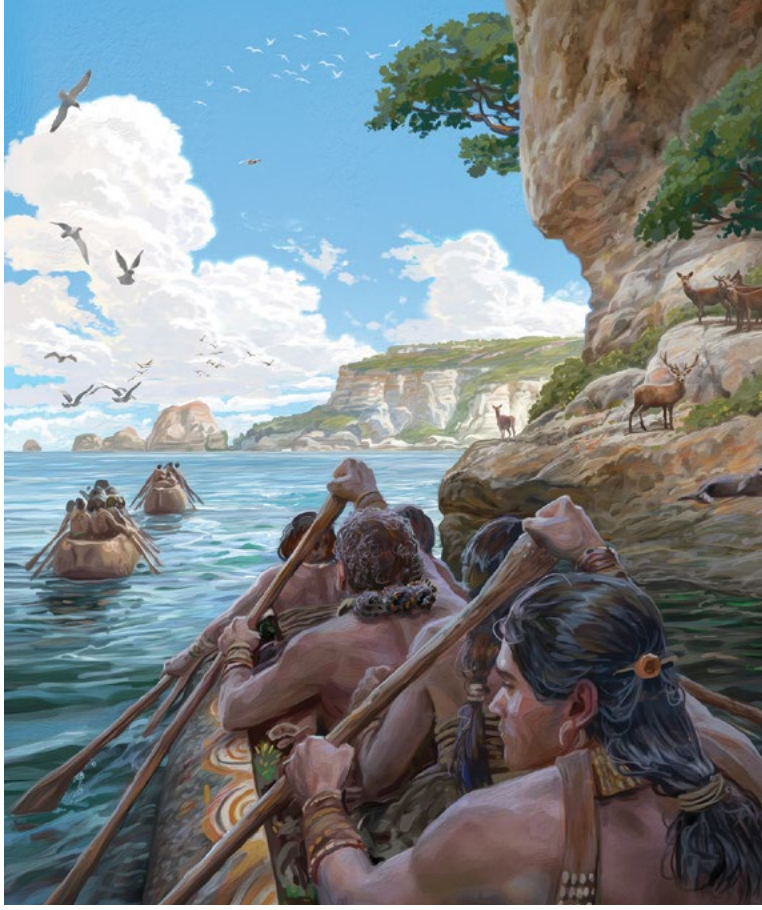
Digging through a cave in L-Aħrax, the soil layers first revealed what one would expect: remains dating to the Roman period, the Bronze Age, and even early neolithic farmers, who were believed to be the first arrivals. However, as the team dug deeper, the pottery and domesticated animals disappeared, giving way to signs of hunter-gatherers – who were never thought to have existed in Malta at all. In Latnija Cave, the team discovered hearth ash containing the remains of stone tools and cooked wild food, including birds, fish, marine mammals, local species of tortoise, and red deer. This pushed the timeline of human presence in Malta further back by at least a thousand years.

The scientific consortium for this project included Prof. Nicholas Vella, Dr Huw Groucutt, and master students and project technicians Nicolette Mifsud and Rochelle Xerri, all from UM's Department of Classics and Archaeology, as well as Dr Ritienne Gauci from UM's Department of Geography, who also contributed to this study. In addition to receiving a National Geographic Grant, the research was funded by the European Research Council and a Research Excellence Award from the University of Malta.

OUT OF AFRICA

While modern humans (*Homo sapiens*) originated in Africa around 300,000 years ago, they began to leave and spread across the globe approximately 120,000 years ago. Nonetheless, all modern humans are descended from a group that left Africa roughly 50,000 years ago. At that time, the ancestors of all modern non-African populations successfully dispersed into Eurasia, where they encountered Neanderthals and other evolutionary cousins – whom they ultimately replaced and absorbed. By 30,000 years ago, *Homo sapiens* were the only remaining human species.

Inside Latnija Cave
Photo by Dr Andrés Currás



Hunter-gatherers were crossing at least 100 km of open water to reach Malta 8,500 years ago
Illustration by Daniel Clarke

As humans spread across Eurasia, Australia, and the Americas, small and remote islands became the final frontiers of human migration, requiring seafaring knowledge and technology. As hunter-gatherers require large spaces to sustain themselves through foraging and hunting, small islands posed significant challenges for their survival. There was, therefore, an impression that islands could only be colonised via farming, where intensive crop cultivation could maximise food production.

'The oldest indications of the development of farming can be traced to the Middle East, Mesopotamia, and Turkey around 12,000 years ago. Farming reached the Central Mediterranean about 8000 years ago, and it is even more recent in southern Italy, Sicily, and Malta. Malta's prehistory is very interesting, but the story of the temples is a relatively recent one,' Scerri explains.

While Malta boasts some of the oldest free-standing buildings in the world, thanks to its temples, Scerri notes that, in the broader sweep of history, Malta's temple-builders were still in the Stone Age at a time when mainland European farming communities were already producing copper. From this perspective, the Maltese temples are younger than most people assume.

CHALLENGING THE GARDEN OF EDEN

The main question in the study of human evolution has long been: where in Africa did humans first evolve? In 2018, Scerri's research challenged a dominant narrative that presented human origins as emerging from a singular 'Garden of Eden' – a single location, habitat, and ecosystem from which *Homo sapiens* originated. Instead, her work revealed that the roots of our species lie in a constellation of populations, dispersed across diverse environmental and geographic settings in Africa. We now have proof that humans lived in early African rainforests 150,000 years ago – double the previous earliest estimates. Furthermore, the evidence takes us to West Africa, challenging conceptions that the cradle of humanity was confined to East Africa.

'Over the course of this research, I generally became knowledgeable about the human niche – how humans expand into, adapt to, and shape their own habitats. We look not only at plants and animals but also at pathogens, human adaptation, and gene co-evolution,' Scerri says. 'We can talk about humans adapting in a rainforest, savannah, or desert niches. We understand this, too, for people in tundras and polar environments. However, the ability to cross water represents an entirely different kind of niche – a sea niche. The capacity for long-distance water crossings marks a crucial expansion of the human niche.'

Animal bones and stone artefacts recovered during the excavations at Latnija Cave
***Photos by Prof. Eleanor* Scerri**

MYSTERIES OF MEGAFAUNA

Scerri remarks that in learned more about the human niche, she found herself questioning the long-standing narrative about our species: humans lived in harmony with nature in Africa, only to begin killing everything upon migrating beyond it. The global disappearance of megafauna remains an ongoing debate, with climate change also acknowledged as a contributing factor. This is what makes Malta's miniaturised megafauna, discovered in Għar Dalam, such a fascinating case study: they are thought to have gone extinct without human intervention.

It is for this reason that Scerri chose Malta as the location for a control study – to assess megafauna extinction in the absence of clear human interference. It was only then that the team inadvertently discovered traces of prehistoric hunter-gatherers, a discovery that now rewrites Maltese prehistory.

The discovery of the L-Aħrax archaeological site is particularly valuable given that Għar Dalam was excavated a century ago, at a time when advanced scientific techniques were not available. As a result, much of its context and value were lost. It is for this reason that, until now, Malta had largely been excluded from global academic

View of excavations at Latnija Cave in 2023
Photos by Dr Huw Groucutt

discussions about megafauna, despite the richness of its history. L-Aħrax offers us a second chance.

Understanding more about megafauna and their extinction lies also in anticipating climate change today. Scerri says that scientists are only beginning to understand the ecological functions of megafauna: from regulating soil nutrients to their impact on wildfire regimes. Their roles may have been so significant that scientists are only recently recognising how our entire understanding of the biosphere and the functioning of the earth is based on a world artificially devoid of megafauna, one which has already been fundamentally altered beyond its original state. Malta, she argues, deserves its place in this wider discussion, and it will earn it through the groundbreaking discoveries at L-Aħrax.

PUTTING MALTA ON THE MAP

The Island Legacies Conference marks the first time Scerri is presenting the scientific details of her research at the L-Aħrax cave to the international academic community. Fields such as archaeology, biogeography, and climate studies, which have traditionally overlooked Malta due to lack of data, will now take it into account. As significant climate shifts in the Earth's past mirror those we face today, understanding their effects on plants, animals and human societies may offer valuable insight. Investigating what enabled ecosystem resilience in the past – and the role megafauna played in that resilience – might offer valuable lessons today.

'Discovering that these hunter-gatherers arrived in Malta isn't the end of the story. We want to know whether people were here even earlier. The excavation taught us not to take things at face value and to keep questioning. It took us time to accept the evidence before our eyes. We found remains of red deer, foxes, wild tortoises, and even some kind of large lizard. Some of these animals – especially the smallest form of deer – had feet evolved like those of mountain goats, allowing them to live on cliffs and boulders, and we may have lost these species fairly recently,' Scerri remarks. 'We even uncovered evidence of animals we were not certain had existed based solely on Għar Dalam.'

The importance of the discoveries at L-Aħrax prompted the award of a National Geographic Grant. Scerri hopes that communicating its full importance will lead to the protection and recognition the site deserves – especially now that Malta finds itself at the heart of an international academic debate. She believes that the archaeological site in L-Aħrax is not only one of the most important in Malta, but amongst one of the most significant globally. With Maltese history already rewritten, who knows what more remains to be uncovered – with time, research, and adequate care.

Further Reading

Ben Arous, E., Blinkhorn, J. A., Elliott, S., ... Scerri, E. M. L. (2025). Humans in Africa's wet tropical forests 150 thousand years ago. *Nature*, *640*, 402–407. https://doi.org/10.1038/s41586-025-08613-y

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