Italy Ice Age Mystery

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Abstract

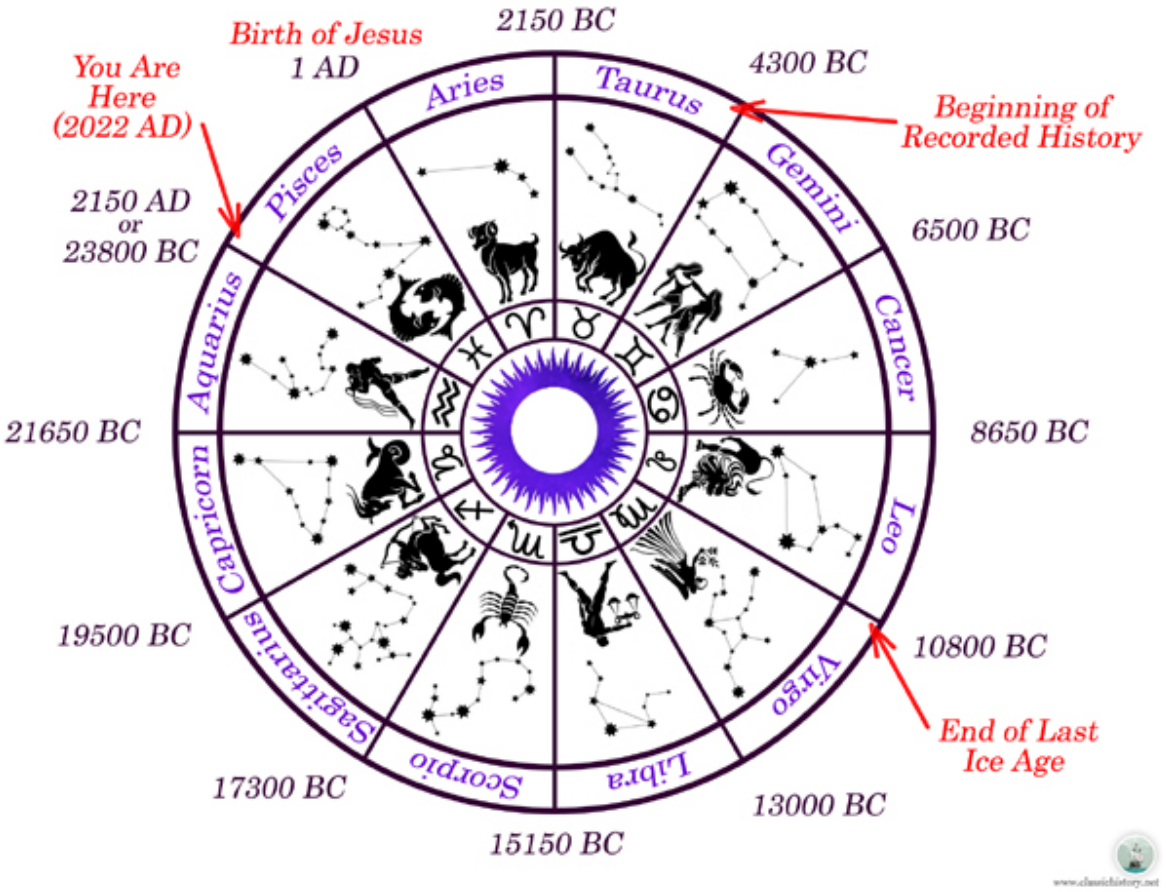
During the most recent Ice Age there was a period of about 6000 years when *Homo sapiens* apparently fully vanished from what is today's Italy. This mystery happened during the last great frozen period. In geological western Europe some related hunter-gatherer humans found refuge in southern areas of today's France away from the great ice sheets, and within the Iberian peninsula. Scientists who study Ice Age genes cannot explain the depopulation, but can document it with DNA from hundreds of burial sites. A likely systemic reason for such depopulation provides an important lesson for our 21st century and beyond.

Modern people like to think of sunny Italy as a beautiful part of Europe, filled with Roman history. However, generally between 25000 and 19000 years ago, well before the Roman era, this boot-shaped peninsula was very different, and very hostile to hunter-gatherer civilizations. From what happened in prehistory, critical survival lessons can be learned for today's seemingly invincible modern civilizations.

Earth has experienced several ice ages. In distant geological time young Earth was a frozen iceball. Within the recent several hundred thousand years our planet has experienced surges of

extremely deep ice-sheet deserts, followed by long periods of reasonably mild climate such as what we enjoy today.

The best theory for when, and for how long, deep ice ages repeatedly occur is associated with our planet's periodic polar axis movement, called the precession of the equinoxes. Here is an astrological visual with associated constellations:



A quick glance at the visual above suggests three apparent correlations:

First, we moderns are again entering an "age of Aquarius" on this astrological wheel, as the popular song proclaims.

Second, the last great ice age ended fairly rapidly about 10800 BC (or BCE), followed in the Italian boot by a period of several thousand years when different tribal humans from the east appeared before recorded history began around 4300 BC.

Third, some climate scientists have hypothesized that our planet might otherwise now be entering another precessional glacial cycle, if it were not for hyperkeystone industrial humans blindly generating vast amounts of greenhouse gases.

When we envision what a real deep ice age would be like, it is good to use Greenland and Antarctica today as models for how frozen water several thousand feet deep becomes impenetrable desert. Whereas some types of animals, primarily some flying birds and penguins, can navigate both thick ice and frigid oceans nearby, such was not the case for hunter-gatherer humans and their large prey when the last great freeze occurred.

The most recent ice surge across the northern hemisphere extended for thousands of miles south of the north polar region. For example, New York City is located near the most southern reach of the North American ice sheet, and still the ice depth there carved out much of today's city geography.

A similar phenomenon happened in western Europe when the great ice sheet pushed southward to near the border of today's France and the Iberian peninsula. Bands of classical hunter-gathering humans and sufficient prey survived in parts of today's France and Spain. Neanderthals did not factor into that equation, as the last of their pure species vanished about 40,000 years ago.

While the ice sheet in Italy was mostly blocked from moving south by the Alps, both barriers stopped walking traffic both ways. Most of the Italian boot was therefore left ice sheet free, seemingly similar to land in south France and Iberia; but humans vanished from the southern boot. DNA scientists have clearly documented that absence, but do not have a clear idea of why humanity vanished in the Italian boot for several thousand years.

Put simply, both human hunters and their prey walked both ways through the Alps during warmer periods. During the last great period of ice the European and Italian populations of megafauna could not replenish each other. Critically, the boot megafauna were trapped inside a climate cell, and initially the hunters did well. However, a finite pool of large mammal prey will be exhausted by constant predation. When that happens specialist hunters need to escape their own prison; or pivot to different forms of food; or perish themselves from starvation.

Today's map suggests hunter-gatherers could have gone fishing on boats. However, boat fishing was not yet developed. Another option (assuming at least rafts) would be for humans to migrate from Gibraltar to proximal Africa, just thirty miles away during that low-water era. Nobody during that time is recorded by ancient DNA as migrating overseas in either direction – not to

mention the relatively distant, isolated population in Italy that couldn't even float around the Alps to southern France.

It was many centuries later when the climate warmed enough for more technologically advanced populations to migrate in from areas near the Caucasus Mountains. They introduced cultivation of the soil and newer food technologies. Several thousand years closer to our time domesticated horses arrived from the east, and those cultures spread throughout the newly warmed Europe.

An aspect of the arrival of blue-eyed Caucasians from their Caucasus region was overall somewhat lighter skin from interbreeding. Today's "modern" Europe has some darker-skinned people with genetic blue eyes from eastern Europe.

How can the modern world learn from this ancient, but not too prehistorically distant, period of Ice Age Italy without humans? As with all ecological systems, when food sources go away only generalists that can pivot to new food sources survive, assuming their new sources are sufficiently abundant and nutritious.

The modern world's agricultural productivity is propelled by phosphorus fertilizers; but phosphorus is becoming more expensive. There will be enough phosphorus for rich consumers to demand food. However, poor global populations at nutritional margins will later this century begin to perish in huge numbers as global per-person agricultural productivity drops, and as global climate dysfunctions rapidly increase.

In the precise vocabulary of economics, it is one thing for all hungry human stomachs to properly want and ask for food. It is another for those with starving stomachs to also have enough cash to *economically demand* increasingly expensive quality food.

Ironically, this century's emerging regional famines among impoverished populations will not be caused by deserts of deep water ice, but by deserts of dry heat. Both fatal desert scenarios are easily explained by historical and scientific systems theory.