>IN THE SITE

WE ARE ALL AWARE OF THE KEEN INTEREST IN ATAPUERCA OUTSIDE SPAIN> One of the steps we are taking to publicise our research is a summary page of the previous issue in English.


Conexión neandertal en las cercanías de Atapuerca

NEANDERTHAL CONNECTION NEAR ATAPUERCA > Valdegoba bones raise hopes of new Atapuerca discoveries. Neanderthals in Huérmeces means area populated 100,000 years ago.

First Neanderthals discoveries in Burgos> The discovery of several human fossils in Valdegoba Cave (Huérmeces, Burgos), on the banks of the Urbel River, were presented to the public in December 2001. The fossils, unearthed in the course of several digs in the 1980's and 90's, include bones and teeth from a Neanderthal population, descendants of the groups that lived in Sierra de Atapuerca. The evolutionary line proposed by Arsuaga, Bermúdez de Castro and others suggests that the Neanderthals are a European evolution of Homo heidelbergensis which lived on the Continent.

Several members of the Atapuerca team, led by US–based Rolf Quam and Juan Luis Arsuaga presented the bones which include an adolescent jawbone, several milk teeth from a 6 month–old baby, two bones from feet and a phalanx from a hand. They are from at least five individuals who died in the cave. One of the bones had carnivore marks, suggesting that the humans might have been consumed and possibly even hunted by predators.

The Valdegoba hominids were splendid hunters of large herbivores, especially roedeer but also horses, wild ox (Bos taurus primigenius), deer and goats. They fire users and employed ochre in their symbolic activities and body painting. The abundance of carnivores provides an idea of the richness of the Huérmeces ecosystem: two types of bears (U. denigeri and the cave type), lions, hyenas, wolves, several mustelids and lynxes. The environmental conditions suggest a colder climate than the present pattern.

The findings, which have been published in a prestigious British journal which turned more than 50 pages over to the issue, are a clear sign that sooner or later, Neanderthal remains are going to be unearthed at Atapuerca– one of the group's unaccomplished tasks. It would be very strange if they were to be found in Huérmeces, Cornejo and Hortigüela (Millán and Ermita Caves) but not in the rich Arlanzón River ecosystem. Neanderthals were a human group that lived in Europe for more than 150,000 years, and died out around 30,000 years ago for hitherto unknown reasons.

A sibling for Gran Dolina boy> An 800,000 year old skull discovered in Italy could be the adult form of the hominids found on the Aurora Stratum in Gran Dolina at Atapuerca. This theory has been proposed by Giorgio Manzi, a Rome researcher who also works at Atapuerca and has just published a study of the human fossil, discovered in 1994 like its potential counterpart here.
The discovery sounds like a novel. Bidittu, a retired schoolteacher and amateur archaeologist, was strolling past roadworks near the town of Ceprano, 100 km SE of Rome, when he saw a bone fragment on the ground. He then noticed several more bones in the embankment, and after two years of inspection and collection of fragments, he found that they all formed an almost complete 1,185 cm3 skull– slightly bigger than the adolescent Homo antecessor from Gran Dolina.

The jaw and face of the Ceprano skull are missing, but it can still be compared to the fossil from Atapuerca, Africa and Caucasia (Dmanisi, which has yielded two skulls more than 1.5 million years old). The Ceprano hominid had a sunken forehead, a large bone brow over its eyes and a very thick cranium box.
The reconstruction by Manzi and his associates opens the way to two possible interpretations of the first Europe colonisers: it either confirms the hypothesis of the Atapuerca team that some of the Homo antecessor populations, descendants of Homo ergaster, evolved in both Africa and Europe (in which case, the Ceprano fossil is the adult form of the Gran Dolina youth), or Europe was colonised by several human species at the same time (in which case Ceprano and Atapuerca were cousins, lines which have separated). The latter hypothesis would not be entirely surprising. Until at least 30,000 years ago there were many points when there was more than one type of human on the planet. The Caucasian and Ceprano discoveries and the tools unearthed at sites in the Middle East seem to lend more weight to the idea of a land colonisation of Europe via the Bosphorus Strait rather than via Gibraltar or Tunisia.


FAUNA Y FLORA EN ATAPUERCA

An extinct species> Neander River valley, Germany, 1856 > Workers were quarrying limestone near the Feldhofer Cave, outside Düsseldorf when some bones attracted their attention. Scientists tentatively declared that they were from a primitive human which they named Neanderthal.
Intelligent, able to speak > They were short, muscular types with broad nostrils, large eyebrows and a recessed chin. They were good stone craftspeople who buried their dead, could control fire and build cabins.
They arose around 150,000 years ago and became extinct some 30,000 years ago for hitherto unknown reasons.
The Iberian Peninsula is precisely where their last survivors lived > For 60,000 years they coinhabited the Middle East with the Cro–Magnon, while in Western Europe, the two species occupied the same territory for 10,000 years. In contrast to the Cro–Magnon who arrived from Africa, the Neanderthals, who were used to the freezing European climate, had a low skin pigmentation to make the most of the weak sunrays.
Better technology > The more varied diet and complex social organisation of Homo sapiens are the basic factors of the hypotheses used to explain why we are now the only human species on Earth.

EDITORIAL > Burgos, cultural capital. José María Bermúdez de Castro. *Atapuerca co–director*

We will soon celebrate the 25th year of research at the Sierra de Atapuerca sites. It is not easy to explain how this scientific project has managed to overcome the innumerable obstacles placed its way. One day the story will be written– it will not be so different from other complicated tales about research in Spain. But in the end, we have managed to survive. A team has evolved and been shaped parallel to the profound changes in Spanish society over the last 25 years; a team forged in precarious conditions and in spite of the incomprehension in certain parts of that society. Those who tried to thwart the development of the project, and with it the advance of science, did not realise that vocational commitment and enthusiasm are major components of scientific research– an extremely hard adversary to subdue. Fortunately, Atapuerca has had the constant backing of many people, close friends, who can proudly consider themselves part of a project that ultimately belongs to all of us.


Primeras Memorias de Excavaciones en la UMA sobre Atapuerca

After surmounting the difficult times, we must now look to the future with optimism. We now have a consolidated team which is constantly training young researchers, opening up new lines of research and collaborating fully with teams in other countries.

The trail has been long and the results bountiful. The Sierra de Atapuerca is now a World Heritage site, and many have familiarised themselves with the scientific treasures yielded by this extraordinary part of the Burgos Province. The future seems most promising. There is no exaggeration in the claim that the discoveries and findings will continue for at least another 25 years. This is the time to make the most of the prevailing winds and bring to a safe haven the most important cultural projects in Burgos that are linked to Atapuerca: the Museum of Human Evolution and the Inter–university Research Institute.

All things must come to fruition in their good time, and the time for these projects has arrived. A train stops briefly at a station, but then it moves on. Burgos must catch the scientific and cultural train that has already been boarded by several Spanish cities. The future of Burgos is largely bound to the signs of identity provided by its architecture and the related museums and centres of scientific and cultural activity. The City of Burgos has a magnificent opportunity to link its enormous historical values to a state–of–the–art project that does not need to be invented or started from scratch. Atapuerca is a world–scale reality which at the same time is exclusive to its location in Burgos Province. From these pages, in the name of all my fellow members of the Atapuerca Research Team, we encourage you to help make Burgos one of the cultural capitals of Spain in the very near future.

ATAPUERCA AMONGST WORLD'S MOST POPULAR ARCHAEOLOGY WEB SITES > 100,000 VISITORS TO HTTP://WWW.ATAPUERCA.COM IN A YEAR

The official Internet site on the Atapuerca archaeological complex has become one of the most frequently visited sites in the world, ranking third in Spain and tenth in the entire world. The site was placed on line last June after the brewery group Mahou–San Miguel bought the rights to the domain. To date there have been more than 100,000 visits– a good indication of the interest in the Atapuerca discoveries around the globe. It is no surprise to find that major visitor sources include Mexico and Argentina for the Spanish language version and the USA, Japan, Sweden and Canada for the English pages.

ATAPUERCA AND BURGOS > The Foundation Atapuerca defines new challenges for 2002> This year's budget for the Atapuerca Foundation provides for up to 12 research grants to guarantee the continuity of the work being conducted at present. The Castilla–León Regional Government's Education and Culture Department and the Herberto Gut–Prosegur Foundation have become members of the Atapuerca Foundation. This has facilitated a range of improvements including new equipment for the research team. The challenges for 2002 include the production of a video, a new web site, an Educational Unit for teachers, several photographic exhibitions and a theatre play. Money has also been set aside for events commemorating of the 25th anniversary of the start of excavations, one of which includes an exhibit in New York to coincide with the 'Ages of Man' exhibition when it tours the USA.

Regional Government starts work in the Sierra de Atapuerca > The Castilla–León Regional Government has announced a g600,000 public works budget to improve road access to the Sierra, improvements to the Atapuerca Archaeology Park and extensions to the Archaeological Education Centre in Ibeas de Juarros. The Provincial Government also announced its intention to improve signposting at the sites.

Duques de Soria Foundation organises international Seminar > The 2002 calendar for the Duques de Soria Foundation, the organisation which established the Atapuerca Professor's chair, includes an international seminar on the Atapuerca sites. This will be the venue for presentation the latest discoveries and advances by the research team. The seminar will be attended by leading human evolution and prehistory scientists. According to Foundation sources, the aim is to establish the seminar as a regular event held every three years.

Compressor Cave to become Information Centre> The cave, a former quarry in the Railway Trench abandoned in the 1970's, to become one of the most modern audio–visual venues in Europe. Last October, work funded by the Patrimonio Foundation began to turn the Compressor Cave into an audio–visual auditorium. The 80 seat hall will be used to explain the importance of the Atapuerca discoveries in an educational, participatory approach. There will be video projectors, holograms that reproduce some of the most impressive everyday scenes, and display cases to hold some of the most important items unearthed during excavations.
For those with more than a passing curiosity, there will also be a bookshop selling all of the books by the Atapuerca team members as well as other international publications.

Renovation work is expected to conclude on 1 June, coinciding with the start of the 2002 excavations.