In 2010 a surprising archaeological discovery was made in Saudi Arabia which had an important impact on world Stone Age history with the result that the chapters on the first horse domestication in history books need to be rewritten.

So what took archaeologists the world over by surprise? Imagine all experts believed that horses were domesticated 5,500 years ago in Kazakhstan and now they are told it actually happened in Saudi Arabia far beyond that time during the Late Stone Age doubling the time to 9,000BP meaning “Before Present” times or 7,000BC.

Well that changes things a lot and raises many more questions. Were the various semi-sedentary and permanently sedentary hunter-gatherer societies or clans populating the Arabian Peninsula more sophisticated then we so far
believed? Do we have to re-date all horse and rider depictions in Saudi rock art?

Was this an isolated regional development or was the culture to breed horses and use them for hunting and long distance travel wide spread on the Arabian Peninsula or even beyond?

Did the domestication happened first here or parallel in other parts of the Middle East and the world? Let’s try to shed some light on these intriguing questions and points raised.

**Location**

Al-Magar is located in a very remote area of central Saudi Arabia situated about 40km from the village of Gayirah between Tathleeth and Wadi al-Dawasir.

The Tathleeth area is well known for its richness in rock art and petroglyph sites giving proof of Neolithic settlements and early trade routes in the area. Gayirah is about 120km away from Wadi al-Dawasir on the route to Tathleeth.

This newly discovered site has been named after al-Magar the present name of the geographical location. The main ancient caravan route linking the southwestern Arabian Peninsula with its central area was passing by.

This long distance trade route became later the main frankincense trade channel between the ancient trading centers of al-Ukhdoud in Najran and al-Fau just south of Wadi al-Dawasir and only 100km to the east of al-Magar.

**Geography & Climate**

This area had green and lush vegetation and was well inhabited before drastic climatic changes with hot and dry conditions led to the desertification of most of the Arabian Peninsula.

The early settlements in this area were largely attributed to the wetter climate before that, which allowed man to well survive in this area with farming and animal husbandry as key economic activities.
Al-Magar is surrounded by other Neolithic sites extending over a wide area. It is not surprising that artifacts were found used for agricultural activities. Some of these sites are more ancient than al-Magar dating back to the Medium Neolithic Period.

The area is distinguished with its special topography located at a junction point between the Najd heights and the edges of the eastern mountains. The area is composed of small hills with a number of valleys scattered among them.

There is a major valley crossing the area, which once was a river running westward forming waterfalls and taking water to the low fertile lands west of al-Magar, with the settlement situated on both banks of the river.

It is a very large prehistoric settlement that clearly has different activity areas, including potential residential structures, burials and lithic workshop areas. This makes it the first and largest Neolithic settlement site so far located in Saudi Arabia.

It’s location near a waterfall and in open valley area suggests that it probably represented the earliest domestication of both animals and plants. Large numbers of various sized grinding stones clearly indicate crushing and grinding of grains.

If we look at the “Neolithic Revolution” which was started by the Natufian Culture around 12,500-9,000BC in the Jordan Valley area with first domestication of grains and dogs for hunting purposes leading to first sedentary settlements of rather large proportions with up to 2,000 inhabitants, we get a better idea of the possible extension and development at al-Magar a few thousand years further on in history.

**Domestication of Horses**

In March 2010 exploration was started after local citizens made authorities aware of this interesting site. Various archaeological items were discovered spread all over the surface, including Neolithic arrow heads and different stone tools. An important archaeological discovery is that of various rather large horse statues. These and the other Neolithic artifacts and stone tools were dated to 7,000BC.

So far experts were of the opinion that the domestication of horses happened worldwide for the first time about 3,500BC in Kazakhstan and believed to have taken place in Saudi Arabia much later around 1,000BC with domesticated horse being imported via Persia.

Al-Magar now gives us the proof, that horses were domesticated for the first time worldwide in Saudi Arabia and from the local point of view 6,000 years earlier than previously thought.
Creation of Early Art & Statues

Next to horses the Neolithic al-Magar Civilization artisans used other animals as art objects including sheep, goats, dogs (Saluki), ostriches, falcons and fish. Carbon date tests of these and other found objects indicate an age of about 9,000 years going back to the Late Neolithic Period.

The features of the al-Magar horse statues are similar to those of the original Arabian horse, characterized by its long neck and unique head shape. The head of this particular horse statue shows clear signs of a bridle, which confirms that at al-Magar horses were domesticated at that early stage about 9,000 years ago.

The size of a specific unearthed horse statue only comprising of neck and chest is about 100cm, which could be the largest horse sculpture known for that early period. Other statues found in Turkey and Syria were of smaller size and are dated later, but these were actually not statues depicting horses.

Important Structures & Burials

All statues were made of the same local rocks available at the site and it seems that the statues had been fixed on a central building at the southern bank of the river before the water fall.

This central building might have had a major role in the social and religious life of the early al-Magar people. Some natural caves were found near the central building and these might have served for funerary purposes. Remains of buried skeletons were found as well as other graves covered by mud and hay.

Burial methods applying some embalmment technique were found when inspecting the skeletons and these are considered as an advanced funerary technique.

Variety of Stone Tools

The list of Neolithic stone tools found at al-Magar is long with over 80 objects and including:

- arrow and spear heads, various scrapers, plenty of grain grinders and pestles for pounding grains, gravitation stones used in weaving looms, stone reels for spinning and weaving, tools for leather processing and soapstone pots decorated with geometrical motifs.

Judged on the sophistication of its varied and elaborate stone tools and artifacts the al-Magar Civilization could be considered at the time as another “Neolithic Revolution” in human knowledge and handicap skills.
Fabulous Stone Dagger

In addition to the above mentioned artifacts, a stone dagger was found bearing the same features and shape of the genuine Arabian dagger used presently throughout the Arabian Peninsula.

The dagger is one of the most important cultural and traditional symbols among Arabs, which according to this evidence dates back to several thousand years and survived up to the present time. No doubt that this important discovery of a stone dagger in al-Magar going back 9,000 years demonstrates the significance of our ancient history in Saudi Arabia.

Another noteworthy stone piece was found at al-Magar bearing small cut lines on the edges. The parallel lines were set in groups perhaps for accounting, numbering or timing purposes. It seems that this piece played an important role and future studies may reveal its significance and usage.

Rock Art & Petroglyphs

In addition there are various rock art drawings in the area adjacent to al-Magar. The petroglyphs were created by deep pecking and engraving the darkly patinated rock surface called desert varnish. Ibex, ostriches and other animals as well as human figures including a horse rider are carefully depicted.

Another drawing shows a hunting scene with dogs following various ibex and five dogs surrounding a single ibex. The petroglyphs collected over time a certain amount of black desert varnish from manganese traces in the rock, which indicates that they were made rather early on during the time when the site was inhabited and not thereafter by passing by caravans.

Other rock drawings were found among the remains of the central building at al-Magar including drawings of horses and humans. Horse riders and some strange unidentifiable figures on this Middle Palaeolithic site with lots of Mousterian stone objects scattered all around the rock art area are
the most fascinating discoveries.

**Horses in Saudi Rock Art**

The above early horse depictions are not from al-Magar as the site’s exact location is kept as a secret and therefore is heavily guarded and obviously closed to any visitors. But these images are from the Tathleeth area very close to al-Magar and worthwhile to examine. Based on the recent discoveries we have to re-examine the dating of horse images in Saudi Arabian rock art. All existing publications indicate age of maximum 3,000 years which was based on the assumption that domesticated horses only appeared about that time in Saudi Arabia.

We have many extremely large rock art compositions in Saudi Arabia showing over 100 animals including horses on a single rock panel. Some were created over various periods and others only show carvings of a single period.

There are some compositions I have seen in various parts of the country, where horses are mixed with animals normally created only during earlier periods such as gazelle, orix, ibex and others.

These carvings do not differ in patina coloring, nor can we imagine that the ancient creators left spaces free for horses to be added later to their refined compositions.

We also do not find any superimpositions of images and in addition these horses fit perfectly into the overall composition in size and picture message logic.

We also know that the more realistic animal depictions are the earlier they were created. This is a good indication that some of these images must be older than 3,000 years like al-Magar.

**Summary**

The Neolithic al-Magar Civilization combined four significant Arabian cultural characteristics, which Arabs are highly proud of. These include horsemanship and horse breeding, falcon as well as dog hunting and wearing the typical dagger as part of the Arabian traditional dress. These inherited cultural characteristics were all found 9,000 years ago at al-Magar.

The various impressive discoveries reflect the significance of the site as an important ancient civilization that started domestication of animals, in particular of horses for the first time very early on during the Late Neolithic Period.

This gives al-Magar significant pre-historic importance with enough proof and detailed data for re-writing the Neolithic history of the Arabian Peninsula and Saudi Arabia in particular. Al-Magar also reveals additional information about the relationship between human economic activities and inherent climate change, how hunter-gatherer societies became sedentary, how they made use of natural resources available to them, and how they set into motion the domestication of plants and animals.

This fascinating culture was not confined to al-Magar only, but has been spread across the Arabian Peninsula. As it is still early on after the first discovery two years ago, we will certainly see in the near future more detailed archaeological research reports being published by the Saudi-British team investigating this important Neolithic site in the desert area west of the Rub al-Khali in central Saudi Arabia.