The Cretan Horse: Still a Unique Breed?
Part II: Equines on Crete from the End of the Nineteenth Century to the Present Day

Věra Klontza-Jaklová, Nikos Panagiotakis, Romilda Tengeriová, Michal Smíšek, Ricardo Fernandes, Manolis Klontzas

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In the first part of the study, the authors reviewed and evaluated archaeofaunal, archaeological, iconographical, and historiographical information from the Neolithic Period up to the end of the nineteenth century. The domesticated horse (Equus Caballus) was imported to the island at the end of the 3rd millennium B.C.E. and ca 1500 B.C.E. was an integral part of palatial elite identity, while the donkey (Equus Asinus) was already present in the Final Neolithic. In 1895 the Ottoman rulers defined the Cretan horse as a specific breed, and its cross-breeding and export were forbidden. The numbers of horses were significant but poorly documented during almost the entire twentieth century. Today, the Cretan horse is understood as part of local tradition, a historical patrimony, and an integral part of Crete’s cultural heritage. The island’s geographical, climatic, historical, and cultural characteristics were imprinted in its characteristics. In the context of long-term economic crisis and a lack of horse breeding experts, the Cretan horse faces extinction, despite the number of horses on the island. Therefore, the authors established the Cretan horse centre’s conservation, rescue, and education programme.

Keywords
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I. History of the Cretan horse: from the final years of the Ottoman Period (A.D. 1669 – 1898) to the start of the twenty-first century

During the eighteenth and nineteenth centuries, a horse type specific to Crete is mentioned by international travellers. Tournefort in 1701 and Sonini in 1778 described the Cretan horse as a Berber horse with a very distinctive body type. Sonini gives a detailed description, saying that the local horse moves effortlessly and is flexible and sure-footed in rugged terrain.

In 1895, the Ottoman administration of Crete forbade horse export since it was considered a specific breed, with a specific gait (rahvan – pacing) which should be protected and preserved.

Most of the twentieth century is silent on the Cretan horse. From witness accounts, we learnt that Cretan horses were used during the Balkan Wars (1912 – 1913), taken to the Albanian front, and that it was difficult to transport them over the sea. They were desired for their endurance and stamina.

Before 1985, the only information about horses on Crete we have are testimonies and scattered statistical data. Throughout the 20th century, equids were a common element in the Cretan countryside. Even very low-income families owned one donkey. Middle-class farmers owned a few donkeys and a few mules. They liked mules for their ability to traverse extremely difficult terrains, for their strength and obedience. However, to produce a mule, a mare is needed. In a more favourable area, such as central Crete (Messara, Pediada, Heraklion district), the Isthmus of Ierapetra, and the Chania region, horses were more common and systematically bred. From locals on East Crete, we learned that horse breeders travelled from village to village with a herd of horses of various ages and sex, but mainly foals. Mule foals were also included. For example, horse traders who traditionally brought animals to Kritsa, one of the largest villages on the eastern part of the island, originated from Arkalochori in central Crete. The locals then bought animals according to their needs. However, in the mountainous regions, horses or mules were not bred. (Information from Argyro Tzanaki, born Epitropaki, from Kritsa).

Horses were crucial for long-distance transport (Fig. 1) and for producing mules. Equines were the primary form of transport well into the twentieth century. Until recent years, one met older people traveling by donkey to destinations already served by air-conditioned public buses (Fig. 2).

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8 Joseph Pitton de Tournefort, Relation d’un voyage du Levant (Paris, 1717); Charles-Nicolas-Sigisbert Sonnini de Manoncourt, Travels in Greece and Turkey: Undertaken by Order of Louis XI and with the Authority of the Ottoman Court (London: T. N. Longman and O. Rees, Paternoster-row, 1801).
Fig. 1. Italian archaeologist Federicco Halbherr using a Cretan horse as a means of transport to reach the archaeological sites in Western Messara, beginning of twentieth century.\textsuperscript{11}

Fig. 2. Cretan woman on a donkey, around 2000 (Photo Leonidas Klontzas).

The care given to horses and hybrids used for everyday work cannot be compared with modern-day welfare standards although owners were aware of the labour value of the animals. When a family returned home from the fields, the first to be fed and watered were the animals. Families were highly dependent on these animals, on their ability to work hard, their endurance, and good health. Although the owners knew that they could not be overloaded constantly and tried to relieve them by supplying them with saddles (somari) made from light wood, supported by soft woollen covers, the animals worked extremely hard. Older people tell stories about animals that ran out when they felt that the workload was too heavy. Donkeys were not bridled, but horses wore hefty bits resembling the various types of western bits (grazing, S-shank curb, correction, or Pelham-like bits). They were made from solid iron and were heavy.

Some descendants of the Cretan horse breeders keep unique specimens of old saddles at home (Fig. 3). These resemble military saddles. They have two separate panels on either side of the horse’s back, held in place by an external cover. This arrangement is well suited to pacing horses, and the saddle flaps and seat resemble an English military saddle. The old Cretan saddles show the influence of the saddles that were used during the development of modern equestrianism in the early modern era (sixteenth - eighteenth centuries), i.e. the Venetian period in Crete. As far as we know, there is no one on the island today who continues the tradition of the old saddlers. Today’s owners buy saddles of any type, often without proper knowledge of the principles of gentle horse saddling.

Fig. 3. A typical saddle made in the 1980s based on the pattern of old saddles (owner: M. Genniatakis, Ierapetra). Today there is no saddler on the island who specializes in this craft. (Photo Manolis Klontzas).

Until the 1960s, equines were in most cases the only means of transport. At the beginning of World War II, horses were requisitioned for the needs of the army and only a small number remained on the island. The Wehrmacht Jäger Hans-Joachim, the Earl of Blücher, managed to steal a horse which he tried to use to provide supplies to his unit during the Battle of Crete on 21st May 1941 following a massive airborne
operation by Nazi Germany. However, he and his horse were shot by a Scottish battalion of “Black Watch” soldiers who were defending Crete, together with the Cretan partisans (Fig. 4).12

![Jäger Hans Joachim, Earl of Blücher photographed on a Cretan horse shortly before being shot together with the horse by the defenders of the island, May 21, 1941](https://www.ww2wrecks.com/portfolio/brothers-von-blucher-killed-in-action-on-21-may-1941-their-sisters-story/).

In the 1960s, when tourism and motorized transportation began to conquer the island, people were keen to acquire the latest accoutrements of civilization – electricity, motorbikes, cars, tractors, fridges, TVs, plastic bags, etc. There were 329,000 horses in Greece in 1962, while in 1988 their numbers were reduced to just 60,000. With the industrial and tourist boom, many horses were sold to Italian butchers.13

In 1985, the Veterinary Inspection of Crete (Επιθεώρηση Κτηνιατρικής Κρήτης) completed the first proper research on the Cretan horse. Eighty horses were documented across the island. Unfortunately, nothing was done at that time to

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protect the breed and its destiny remained in the hands of individual owners. Some owners provided exceptional stallions and mares for breeding at no cost. Nonetheless, Cretan horses were also sold to other Greek regions, mainly to the Peloponnese. In some cases, other breeds were traded as Cretan horses.\textsuperscript{14}

A census of Cretan horses was undertaken by one of the authors (N. Panagiotakis) in February and March 1992. Ninety horses shared among 62 owners were documented across the island (Fig. 5, Table 1). The list along with a detailed letter was sent to the General Directorate for animal production in the Ministry for Agriculture. These actions resulted in a presidential decree that accorded the Cretan horse (and other Cretan animals such as Cretan cattle or the Cretan dog) the designation of “typical local breed.” Some landscapes were also declared to be heritage landscapes.

At the same time, the Association for Cretan Fauna Protection was established. The major focus of its activities is the Cretan horse although in recent times few projects have been undertaken. In 1987, N. Panagiotakis founded the Pancretan Association for the Protection and Rescue of Local Fauna (PAPRLF), a voluntary group also largely devoted to preserving and protecting the Cretan horse. By 1993 PAPRLF was officially recognized by the Greek state as an association. The Cretan horse became one of the Association’s priorities. Mr. Karavalakis, the expert in Cretan fauna, was connected with both Associations.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Numbers of Cretan horses through time\textsuperscript{15}}
\end{figure}

\textsuperscript{14} Panagiotakis, “Kritiko Alogo.”
Table 1. Number of domestic livestock in Crete from 1914 to 2005\textsuperscript{16}

<table>
<thead>
<tr>
<th>Year</th>
<th>Equines</th>
<th>Cattle</th>
<th>Buffalo</th>
<th>Sheep</th>
<th>Goat</th>
<th>Pig</th>
<th>Fowl</th>
<th>Bees</th>
<th>All animals</th>
<th>horses vs. all animals (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1914</td>
<td>46305</td>
<td>42788</td>
<td>650</td>
<td>357514</td>
<td>166306</td>
<td>38625</td>
<td>283270</td>
<td>69959</td>
<td>1005417</td>
<td>4,6</td>
</tr>
<tr>
<td>1929</td>
<td>56148</td>
<td>45411</td>
<td>350</td>
<td>239682</td>
<td>166773</td>
<td>28992</td>
<td>245829</td>
<td>42881</td>
<td>826066</td>
<td>6,8</td>
</tr>
<tr>
<td>1961</td>
<td>78329</td>
<td>35058</td>
<td>43</td>
<td>393793</td>
<td>251751</td>
<td>27519</td>
<td>649204</td>
<td>73922</td>
<td>1509619</td>
<td>5,1</td>
</tr>
<tr>
<td>1971</td>
<td>67553</td>
<td>20550</td>
<td>0</td>
<td>571602</td>
<td>306158</td>
<td>49495</td>
<td>1158561</td>
<td>86647</td>
<td>2260566</td>
<td>2,9</td>
</tr>
<tr>
<td>1981</td>
<td>43218</td>
<td>15270</td>
<td>0</td>
<td>713602</td>
<td>329123</td>
<td>95388</td>
<td>1659901</td>
<td>105204</td>
<td>2961706</td>
<td>1,5</td>
</tr>
<tr>
<td>1991</td>
<td>21470</td>
<td>2669</td>
<td>0</td>
<td>1113435</td>
<td>457941</td>
<td>62959</td>
<td>1349801</td>
<td>110720</td>
<td>3118995</td>
<td>0,7</td>
</tr>
<tr>
<td>2005</td>
<td>3942</td>
<td>2069</td>
<td>0</td>
<td>1316426</td>
<td>637181</td>
<td>637185</td>
<td>1030486</td>
<td>154795</td>
<td>3782084</td>
<td>0,1</td>
</tr>
</tbody>
</table>

In 1994, PAPRLF sponsored a research project on Cretan horses. Mr. Perakis, a vet for Athenian racing, came to Crete and examined thirty horses across the island for this project. The following year, 25–26 May 1995, a conference on the "Conservation of the genetic material of agricultural animals" was held in Athens. Representatives of the Pancretan Association were present. The main conclusion of that conference was that the majority of local agricultural animals were close to extinction. This provided motivation for the Association, which, on 11th June 1995, organized a show of Cretan horses and other household animals in the Cretan capital Heraklion.

Finally, on 8th September 1997, a document setting up a Rare Livestock Support Program was signed between the Ministry for Agriculture and the Ministry of Economics. This action was governed by the agro-environmental document, 2078/92 of the European Community, of which Greece became a member in 1981. However, problems in undertaking a census of local livestock quickly became obvious. There was no studbook, and horses were not officially documented. Many horse owners, and owners of other animal species, naturally, wanted access to financial support. Many Cretan horses "mysteriously" appeared at this time (Fig. 44).

Prof. Apostolos Zafrakas from the Aristotle University at Thessaloniki visited Crete in the Fall of 1997 and, with substantial help from N. Panagiotakis, listed all horses declared by their owners to be Cretan. One hundred and thirty-three horses were documented. One of the authors (N. Panagiotakis) knew that many of the reported horses were not Cretan but rather Peloponnesian imports. Following this, all horses were sampled for genetic analysis from blood and hair samples. In a subsequent publication,\textsuperscript{17} around two dozen DNA analysed samples were presented.

\textsuperscript{16} Panteleimon Arvanitis, “Traditional Forest Management in Psiloritis, Crete [c. 1850 - 2011]: Integrating Archives, Oral History and GIS.” (University of Nottingham., 2011), http://eprints.nottingham.ac.uk/12324/1/P_Arvanitis.pdf.

How samples were chosen, and on what criteria, is not defined in the study. Genetic analyses were carried out using the RAPD test and the results showed that the Cretan horse is a highly homogenous group differing from other Greek breeds which were also tested. However, the method is problematic, and the lack of information concerning the sampling choices reduced the value of the published research. Since this publication, nothing has been done to protect the breed.

II. The present state of breeding

Presently, the number of Cretan horses is unknown. We estimate that there should be about a hundred individuals. They are kept by private owners, who, with a few exceptions, usually have only one horse. Most of these owners have no training in horse keeping, transporting and breeding, or even riding. Many of them are only first-generation owners. Many are, indubitably, dedicated to their horses. Their main ambition is to train a successful racehorse. Unfortunately, such an amateur or empirical approach is reflected in the state of the breed. It is generally thought that any Cretan horse must be a pacer. Breeders, know that they need to look for both parents to have such a natural gait; otherwise, this ability is easily lost. A horse that doesn’t pace is useless for racing and further breeding. Traditional breeders had knowledge of which stallions and mares produced pacers. In this way, heterozygote pacers were almost eliminated. But they also experimented with individuals of unknown origin and numerous cases have been documented where unscrupulous traders imported horses from other Greek regions and sold them as Cretan.

Although breeding is neither organized nor properly documented, it is still possible to obtain a subsidy from the Greek Ministry or EU for local livestock protection. At present, any animal can be presented as a Cretan horse to Ministry for Agriculture officials. A Studbook has not yet been established. Owners do not keep written records of their foal’s parents.

Modern-day landscapes are also less favourable to horses: extended olive groves, intensive fencing and greenhouses limit the space where horses can survive in a manner close to their previous natural conditions. It is usual to find a horse bound on an iron chain or thick rope on a collar, firmly fixed behind the ears and under the jaw with limited possibilities to move freely or to maintain necessary social contacts. They eat what is within their reach, get various extra foodstuffs, and sometimes access to water is a problem. These care circumstances are far from acceptable horse welfare standards. There are no meadows on Crete, and rare expensive hay is mainly imported.

Horse races in Crete have a great degree of improvisation: a racecourse may be established on any suitable flat space, and the horses run a few circuits of the course. Anyone can take part and dress is casual. No type of bridle, saddle, jersey or protective equipment is mandatory. Although helmets are mandatory, these do not have to be of the equestrian type. There is one strict race rule: the horse must pace. If the trot is broken by a few steps of gallop, the horse is rejected from the course.

Cretan horses are typically named from mythological references (e.g. Hera, Dias, Herakles, Odysseas), marine references (e.g. Kapetanios, Piratis, Koursaros), and in some cases, human names typical in Crete are used (e.g. Manos, Valentinos).

Reproduction practice is a straightforward issue. The owner introduces the mare to the chosen stallion and leaves both animals together for a few days. They are left free, and the copulation takes place without any assistance. Purchase is an individual operation between two owners. The prices run between 1500 – 2000 euros for a foal, and 3000 – 4000 euros for an adult horse. But the process depends on the owner’s reputation and if the parents (or at least one of them) are famous.

Horses are formally certified by the Ministry of Agriculture and some financial support is given. However, there is no scientific examination to prove whether or not the declared individual is truly a pure-blood animal. Almost any horse may be presented to the state administration as a Cretan horse. There was supposed to be a continuous recording practice, but the documentation process slowly ground to a halt after 2013, when the state support ended due to the Greek financial crisis and the so-called Memorandum circumstances.

III. The horse as a cultural and historical heritage

When researching the Cretan horse, our starting point is archaeology which traces the history of human-horse interactions on the island of Crete. It is a holistic discipline employing all available methods and scientific techniques to decode the dialectics of such a relationship. Approached from this perspective, the subject of
archaeological study is then an entire system, in all its complexity, wherein humans are acting. Each feature, including people, has an impact on others. The horse is also part of such a system (Fig. 6). The environment shapes the species, and they again affect the environment.

![Fig. 7. The Cretans see their patron, St. Minas, as a mounted knight on a Cretan horse. St. Minas church in Episkopi Pediados, central Crete; painter A. Alexandridis (Photo Nikos Panagiotakis).](image)

In Crete, this relationship between people and nature was in equilibrium for a long period. Past populations knew that they had to manage their resources carefully so that they could survive. They had to exploit each valley agriculturally, while the inhabitants were spread across many small villages. Their knowledge of the environment, plants, and mineral resources were built up over time and kept alive from generation to generation as an oral tradition. We can approach the countryside of the island as permaculture on a large scale.20

We are experiencing a period when humans severely impact the environment, climate, and local cultures. In Crete, modern pressures are destroying traditional ways of life, and, quite literally, cementing the natural landscapes. Without discarding many of the achievements of modern civilization it is necessary to learn from the past and look into periods where there was an equilibrium between people and nature.

For the Cretan horse, its rescue signifies saving rather more than just one element of the island’s biodiversity. The history of the island is imprinted in this quadruped. Their body shape, abilities, and genetic heritage, mirror past cultural and natural developments. There are well-known examples of loop feedback mechanisms linking landscapes and horse culture. This was noted by UNESCO experts in 2019 when they declared the cultural landscape of Kladruby n. L. in the Czech Republic with its indigenous horse breed (the Kladruber horse) to be a World Heritage. As Crete is subject to the pressures of the Anthropocene, the Cretan horse is destined to only survive as a zoo animal. It is not possible to breed the Cretan horse outside its natural habitat. Therefore, its preservation is interlinked with the preservation of the Cretan natural landscape.

IV. Is the Cretan horse today a unique breed?

Presently, we cannot accurately identify which and how many horses originate from Cretan horse parents. Ancient lineages remained, at least up to the beginning of the twentieth century, according to personal testimony, but there are few such horses now, probably due to a small gene pool. Therefore, comprehensive DNA analyses are necessary. It may be both necessary and possible to introduce new breeds to the island, with specifically focussed DNA analyses identifying those breeds closest to the Cretan horse.

There is no documentation process, no control, and, more importantly, no strategy to protect the breed. The Cretan horse is, or at least was, a breed, but at the moment it is in danger of extinction. Its unique characteristics may only survive as genetic residues in crossbreeds.

Officially established horse breeds required a well-kept studbook with restrictions on entry. The breed requirements are based on the animal size, colour, morphology, locomotion, and pedigree. This is yet to be established in Crete and almost any horse living in Crete can be declared as Cretan. We suggest the following breed definition (Table 2):

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20 Adam Geisler et al., “Cretan Landscape as a Natural Permaculture” (Brno, n.d.).
Table 2. The breed characteristics

<table>
<thead>
<tr>
<th>Withers height</th>
<th>Up to 148cm for males</th>
<th>Up to 134cm for females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Any</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>Wedge-shaped</td>
<td></td>
</tr>
<tr>
<td>Ears</td>
<td>Small</td>
<td></td>
</tr>
<tr>
<td>Shoulders</td>
<td>Narrow</td>
<td></td>
</tr>
<tr>
<td>Back</td>
<td>Short, roof/like shaped in section</td>
<td></td>
</tr>
<tr>
<td>Back line</td>
<td>Straight, shallow</td>
<td></td>
</tr>
<tr>
<td>Hindquarters</td>
<td>Rounded and small</td>
<td></td>
</tr>
<tr>
<td>Legs</td>
<td>Dry, slim, small joints, unfeathered</td>
<td></td>
</tr>
<tr>
<td>Hooves</td>
<td>Column-like, narrow</td>
<td></td>
</tr>
<tr>
<td>Tail</td>
<td>Poor, high rooted</td>
<td></td>
</tr>
<tr>
<td>Mane</td>
<td>Any</td>
<td></td>
</tr>
<tr>
<td>Dorsal strip</td>
<td>Allowed</td>
<td></td>
</tr>
<tr>
<td>Origin (blood-horse)</td>
<td>Both parents</td>
<td></td>
</tr>
</tbody>
</table>

V. Conclusions

As summarized above, the Cretan horse is a natural and integral part of specific Cretan landscapes, as are the people who interact with it. Although it has had a turbulent history, the island has also experienced a continuity of human occupation, particularly in its countryside. This was confirmed by the human DNA studies but, primarily, the evidence is archaeological. In the countryside, where the majority of the island’s inhabitants traditionally lived, many villages have been continuously inhabited at least since the Roman period. Archaeology also confirms the existence of many local forms of domesticated species: Cretan bee (extinct), Cretan cattle (a few last individuals still exist), and the Cretan hunting dog.

It has been argued that the island with its rough mountainous terrain and limited lowlands, is not suitable for horses. This is a result of a lack of knowledge, and even misapprehension, of the archaeological record and of the required environmental circumstances.

The evidence suggests that the Cretan horse is an indigenous horse with a well-established phenotype despite a long but not fully traced history of cross-breeding, and that it can trace its origins to the Bronze Age horse admixed with some other imports, mainly during the Roman, Early Medieval (Byzantine and Arabic/Muslim periods), and during the Late Middle Ages. How exactly this took place and which breeds were involved will be the subject of future ancient DNA studies. What is essential to note is that the vocabulary related to the horse originates from Turkish, with some Arabic residues. Ottomans controlled the island from 1669 to 1896 and they were aware of the need to protect the Cretan horse (1895).

Equids were very intensively used on the island and the main work animal was the donkey. Unpretentious, modest animals with impressive stamina and endurance represented a considerable advantage that, since the Early Bronze Age, has always been appreciated in the Eastern Mediterranean. From the Roman period, when it was empirically proven that such hybrids are strong, large, and fearless, mules were preferred for their versatility, strength, and often larger size. The only disadvantage was that such individuals were usually barren. We were informed that even during the 20th century, it was the local priest who owned the best mares for mule reproduction and loaned them as a source of income.

Some toponyms mirror the tradition of concentrating equines in the lowlands and the rolling hills of central Crete. In the northwestern part of Messara plain, the village of Fari (horse in Arabic, and used in medieval Cretan language, see above) was abandoned in the 1960s. It was a small settlement consisting of a few dozens of houses but operating in a large and fruitful agricultural hinterland. Even today, the ruins of large houses with stables and residues of gardens witness local prosperity (Fig. 7). On the southern coast lies the village Psari Forada, meaning Blue Roan Mare. From this location, an anecdote reveals the usefulness of horses – a mare named Hera (Fig. 8)– became part of an archaeological survey done by one of the authors (N. Panagiotakis). Nikos had Hera for three decades, and in 1982 she became involved in his archaeological project. She served as a transport medium during the environmental and archaeological survey of the Pediada region. Usually, archaeologists combine cars and walking as means of travelling. Nikos combined riding and walking. Given this, he didn’t need to follow modern-day roads allowing him to locate plenty of traditional connecting paths, test the horse’s behaviour, endurance, and orientation in the landscape, as well as his horsemanship with Hera. One of the criteria for undertaking a survey and research is time and funding. Go quickly, work quickly, publish soon, and spend less; this may not lead to the best scientific results. By using a traditional means of transport, N. Panagiotakis identified about 2000 archaeological sides, which made Pediada, if not the most, one of the most intensively surveyed regions in Greece and beyond.
Fig. 7. Village Fari in central Crete: The gate of such dimensions suggests that horses, or mules or donkeys were kept in larger numbers in the homestead, and these animals were housed in stables around the homestead courtyard (Photo Vera Klontza-Jaklova).

Fig. 8. Mare Hera of Nikos Panagiotakis, archaeologist, expert in Cretan landscape, Cretan horse, farmer and horse breeder (Photo Nikos Panagiotakis).
A. Further research

In the forthcoming years, we will document all Cretan horses, and collect information on their parents and birthdates from their owners. We will keep photographic documentation, maintain contact with their owners, and take samples of organic tissues for DNA analyses, which are already underway.

Osteological material from excavations will be collected, and if possible, DNA analyses will be undertaken. Here, we want to remark that official permit processing for archaeological works in Greece could and should be made much less time-consuming and difficult.

B. Protection and conservation project

It is necessary to work closely with Cretan horse owners and offer them support and education. We have already started to organize seminars and workshops on horse breeding, horsemanship, the history of their own horses, horse care, and welfare.

We trust that this will also lead to the revitalization of their associations, working groups, fan clubs, etc.

Establishing a studbook is a necessity and we are in the early stages of producing such a document, at least among the owners who wish to protect this unique breed and the living cultural and historical heritage.

For horse documentation, we suggest a system, already successfully employed in the Czech Republic and other countries, where each horse has its own ID book kept in a central national horse database. When the horse is purchased or changes ownership, the book is given to the new owner and the central database is updated. The ID book compiles information on a horse’s health, vaccination status, sport licensing, birth of date, and ancestry. Horses lacking such a document cannot take part in competitions. Horses are also classified according to the purity of their lineage. Sometimes the horses are documented in more registers. E.g. if a stallion documented as a Kladruber is purchased abroad, he will follow the rules of the country where he will be exported but still will be kept in the Studbook of Kladrubers. Each horse must also be chipped. In Greece, it is strongly recommended but not obligatory.

We have established the Cretan Horse Rescue, Research, and Horsemanship Centre (http://CHRRHC.org/) which aims to systematically support the activities described above. A proper Studbook will be established and fully accessible as an online source on the Pandora interface (https://pandoradata.earth/dataset/veraklontra-jaklova)

We also aim to establish a pilot farm that will operate as an information and education centre, DNA bank, research facility, and rescue point. It will be established jointly with the Civic Committee of Ierapetra, awarded for its heritage protection activities by the European Archaeological Association in 2021 (www.e-a-a.org/EAA/Navigation_Prizes_and_Awards/Heritage_Prize_2021.aspx). Professional patronage will come from the National Stud Center Kladruby nad Labem (UNECSEO monument).
An overview of the current state of breeding and care of the Cretan horse represents the first step in establishing the possibilities and limits of additional work, particularly to establish advanced methodologies, to decode the origin of the Cretan horse and develop a strategy to support its breeding (Fig. 9).

Fig. 9. It is a rarity today to observe small herds of horses enjoying their freedom in the Cretan landscape. One will usually see them tied around their necks among olive trees or between farm buildings. Our goal is to return as much as possible natural living conditions to these beautiful animals (Photo Nikos Panagiotakis).

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