

## MAMMAL REMAINS IN PREHISTORIC SITES IN THE CANARY ISLANDS.

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## ABSTRACT

The preliminary results from the studies of mammal remains in prehistoric sites on four of the Canary Islands show that during the beginning of the Third Century on two islands far from each other, Tenerife: 200 A.D. in "Don Gaspar" cave and Fuerteventura: 200 A.D. in "Villaverde" cave, there were goats, sheep and pigs. The generalized idea that dogs were so abundant in the Canaries that the name of the archipelago derived from them (*Canis*) has no archaeological basis because very few dog remains have been found, no more than four or five isolate teeth and a falanx in more than 100.000 bones examined.

The interest in these remains consists of information on the way of life of the primitive Canarian people and they can help forward the discovery of when and from where the original inhabitants came. The only previous study (ZEUNER, 1959) is based on five problematic skulls and it is necessary to revise his conclusions.

The first work on mammal remains in the Canary Islands was done by ZEUNER (1959) who studied five skulls: two goats, one pig and three dogs. This material was in the "Museo Canario" in Las Palmas and had been collected during the last century in "Barranco de Guayadeque" (Gran Canaria). These remains did not come from a strict archaeological study. ZEUNER found that one of the dogs resembled the Australian dingo and the other was a broader-faced dog, the goat is similar to the primitive Mamber goat of the Middle East and there is also the possibility of the existence of another type of goat similar to the screw-horned Jerico goat. Finally the pig is a slender Mediterranean type pig. The people who brought these domesticated animals to the islands also carried barley as their only cereal.

For a quarter of a century this work was the only one of its kind. In 1982 MECO *et al.* published a preliminary note on mammal remains in the "Cueva de Villaverde" (Fuerteventura). In recent years a large number of meticulous archaeological studies have been done which have brought to the light numerous remains related to the first inhabitant's environment. Most of the material is now being studied, principally that of "Guayedra" in Gran Canaria (excavated under the supervision of C. MARTIN DE GUZMAN) and "Zonzamas" in Lanzarote (excavated under the supervision of I.DUG)

There are already some interesting results regarding livestock and agriculture from the studies of the prehistoric sites "Don Gaspar" and "Los Guanches" caves in "Icod", Tenerife (excavated under the supervision of C. DEL ARCO) and the "Villaverde" cave in Fuerteventura (excavated under the supervision of F. HERNANDEZ and D. SANCHEZ-VELAZQUEZ). It can be seen from radiocarbon dates that these Tenerife caves and that of Fuerteventura were occupied by man at the same time, from about the third century until the sixteenth or seventh century. Fuerteventura is the driest island and the nearest to the coast of Africa. Tenerife belongs to the central groups further into the Atlantic and has a more favourable climate.

#### THE TENERIFE PREHISTORIC SITES

The "Don Gaspar" cave is in a volcanic tuff below a basaltic lava flow. Its geographical situation is in Icod [ $28^{\circ}21'15''$  latitude N. and  $13^{\circ}01'48''$  longitude W.] and its height above present M.S.L. is 480 m. The entrance faces East, protected against the zone's frequent winds. Today, the entrance is larger probably than in the past because of loosening. The inside of cave is large, comfortable and contains three levels of human occupation. Radiocarbon ages for lower level are: GAK-8066:  $1750 \pm 80$  B.P. [= 200 A.D. ], and for middle level: GAK-8067:  $1390 \pm 110$  B.P. [= 560 A.D. ]. The upper level is undated.

The archaeological studies show a permanence of human occupation after third century in this fertile area of the north coast of Tenerife with drinking water near the cave, pasture for the cattle, a pine grove. There is evidence of the use of sea resources ( fish bones and molluscan shells, principally littoral *Patella* ). The agricultural activity is shown by the findings of carbonized barley ( *Hordeum vulgare* Linne *polystichum* ), wheat ( *Triticum aestivum* *aestivo-compactum* Schiem.) and bean seeds ( *Vicia faba* Linne). [ Classified by M. HOPF, "Römisch Germanisches Zentralmuseum" of Mainz]. It is the first proof of double culture ( cerealian and leguminosae ) in Tenerife. Therefore dry barren land/ irrigated land agriculture are not exclusively to Gran Canaria (GONZALEZ ANTON and TEJERA, 1981). The findings of seed remains of *Vicia faba* in the lower level perforated by the beetle *Bruchus* sp. proves a storage of seeds ( DEL ARCO AGUILAR, 1982, 1985).

The goat remains belong to at least seven individuals ( one of them less than a year old ) deduced from the number of left astragalus found. There are also sheep remains. It is not always easy or possible to tell the difference between the goat bones and the sheep bones. This case was considered a goat because they are more numerous and it is therefore more probable. Goat remains are more abundant in the middle level ( fig. 4 ). The available remains of sheeps are more abundant in the upper level and very scarce in the lower level.

The pig remains belong to at least five individuals (one of them less than two months old) deduced from the number of left mandibles found. The pig remains are more numerous in the lower level, decrease in the middle level and in the upper level there are few.

The other mammal remains belong to a cat, a rabbit, three hedgehog teeth ( genre *Erinaceus* ) and the tooth and a femur of an equine ( *Equus asinus* ? ) were also found. These remains are found in the middle level and in the upper level (fig. 4 ) except for the hedgehog remains which are found also in the lower level. This is problematic because it is possible that these animals entered the cave after prehistoric human occupation.

The cat remains were studied by I. SARRION MONTAÑANA. They are a left mandible, a lower right canine tooth and a few other bones classified as *Felis aff. catus* Linne principally because their denture is stronger than that of the European cat and it is perhaps related to the small African cat *Felis margarida*.

The bones and shells are used as utensils or ornaments (tools, awls, spoons, beads). Hand made pottery is coarse and dark coloured (dark-grey 52.2%, dark red 17.49%, ochre 15.71%, grey-red 13.99% and red 1.28% ) undecorated except a 17.7% of

pieces in the rim. Finally, there are lithic industries on obsidian. This finding distroys the theory that the first inhabitants arrived in the Canaries in the first half of the first millenium when north Africa lost this tradiction of lithic industry (BALOUT, 1969, PELLICER CATALAN, 1971).

The archaeological site of "Los Guanches" cave [28°22' 28" latitude N. and 13°00'35" longitude W. ], in Icod, is inside a volcanic tube. Its height above present M.S.L. is 175 m. The entrance is narrow. Inside light is scarce. The floor is sloping and water mixed up the materials. There are not radiocarbon dates but it has similar archaeological contents to the "Don Gaspar" cave. There are not seeds and there are more molluscan shells, probably because the sea is nearer. However, there is also lithic industry.

The mammal remains are goat (at least four individuals), probably sheep, pig, dog (an incisive tooth), hedgehog (an incisive tooth) and perhaps cat (a first falanx).

#### THE FUERTEVENTURA PREHISTORIC SITE.

The "Villaverde" cave [28°31'10" latitude N. and 10°12' 30" longitude W ] in "La Oliva". The distance to the coast is at least six km. The cave is a volcanic tube 190 m long. Only 16 m of the western part is an archaeological zone. This is separated from the rest by a stone wall. This area has circular and semi-circular stone structures. The human remains found are an adult man and a child. The archaeological material, in study, is hand made pottery of rich and variated decoration. Basaltic stones, bones and shells, used for tools. The food remains are molluscan shells, fish bones and mammal bones (HERNANDEZ *et al.*, 1988 and also in this volume). The radiocarbon dates in vegetal coal are: 1730 ± 50 B.P. [=220 A.D.] (C.S.I.C. 556), 1260± 50 B.P.[=690A.D.] (C.S.I.C. 555) and 1070 ± 50 B.P.[=880 A.D.] (C.S.I.C.554) for the surface level.

Preliminary results of mammal studies (MECO *et al.*, 1982) show that the remains of goat and probably sheep are numerous, about a hundred individuals, half of them are kid. Remains of five individuals of pig, a small number of teeth and a third phalanx of dog and a humerus and left mandible of seal appear too.

The continuation of these studies with the numerous material found in other archaeological sites could help the discovery of when and from where the original inhabitants came. A revision of ZEUNER's conclusions is necessary.

COMPARISON OF MAMMAL REMAINS OF APPROXIMATELY THE SAME AGE FOUND IN PREHISTORIC SITES ON FUERTEVENTURA AND TENERIFE.

	FUERTEVENTURA	TENERIFE	
	Villaverde cave	Don Gaspar cave	Los Guanches cave
DATES	880 A.D. 690 A.D. 220 A.D.	upper level undated 560 A.D. 200 A.D. (lower level)	Undated but similar contents
MAMMALS WHICH ARRIVED WITH MAN	Goat Sheep ? Pig Dog (few remains) - - - Rodent -	Goat Sheep Pig - Cat Equine ? Rabbit ? - Hedgehog	Goat Sheep ? Pig Dog (a tooth) Cat (a tooth) - - - -
AUTOCHTHONOUS MAMMALS	Seal	-	-

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Fig. 1.- Map of the archaeological sites in the Canary Islands which contain the important mammal remains mentioned.

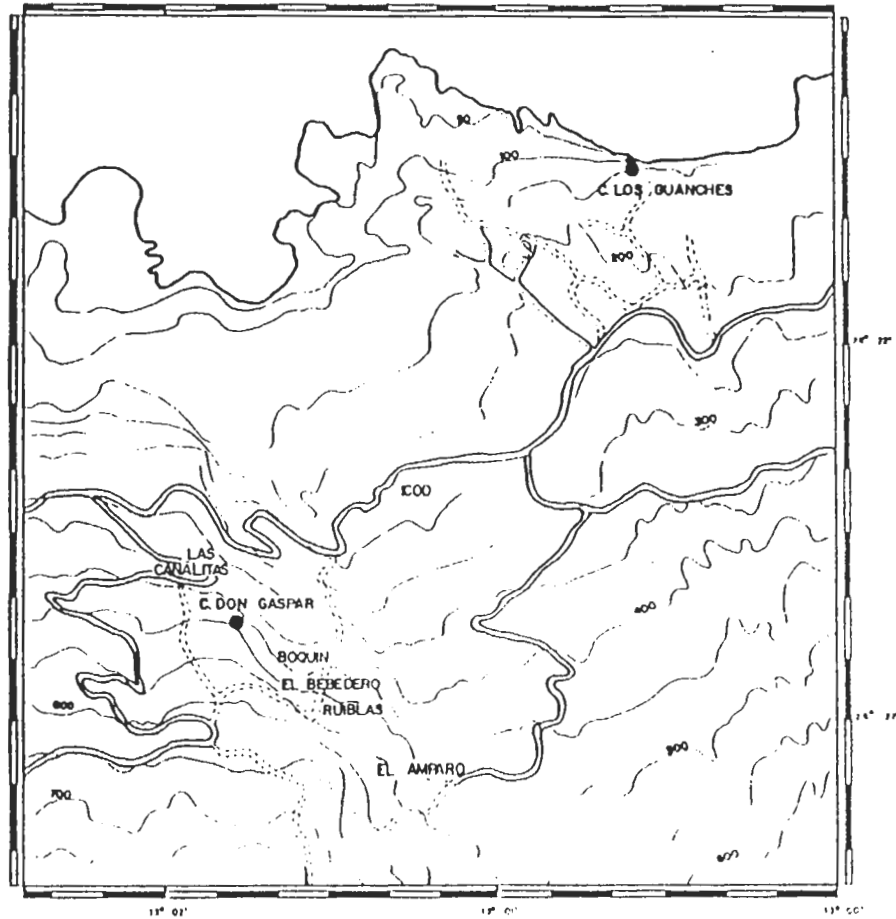


Fig. 2.- The Icod area in Tenerife including the prehistoric sites of "Don Gaspar" and "Los Guanches" caves.



## "DON GASPAR" CAVE

The MIDDLE LEVEL (560 A.D.)

- Goat
- o Sheep
- + Pig
- G Cat
- A Equine
- E Hedgehog

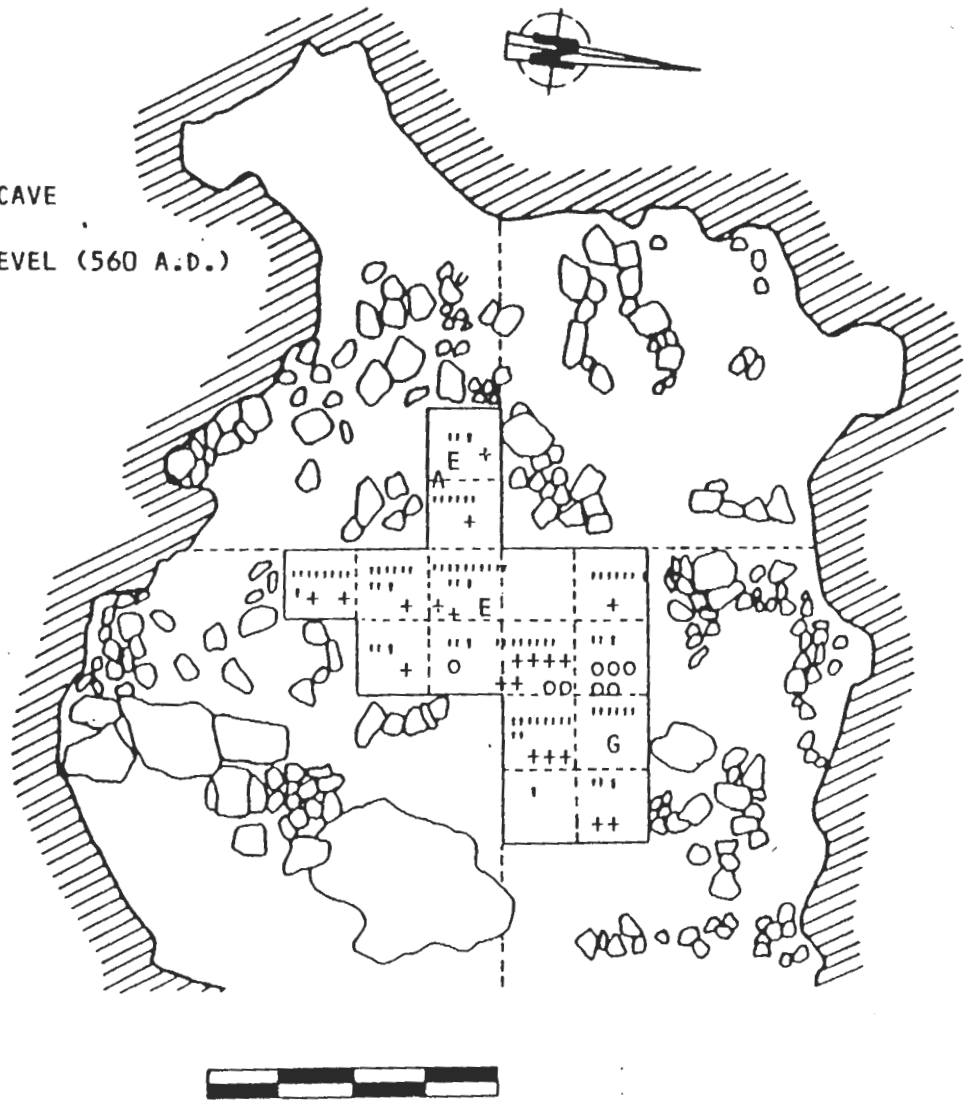


Fig.3.- Ground plan of the "Don Gaspar" cave with sites of mammal remains in the squares excavated.

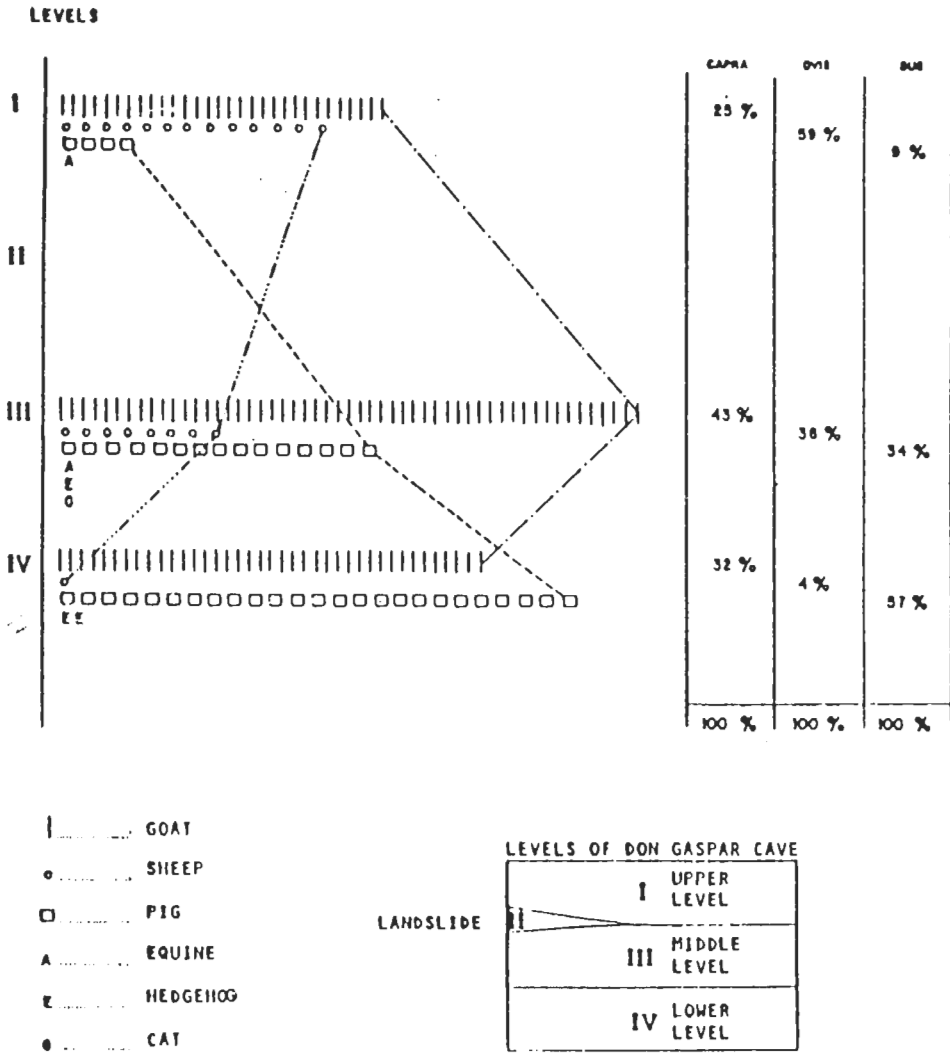


Fig. 4.- Graphic of the distribution of mammals remains in the levels of "Don Gaspar" cave shows that pig and goat are numerous in lower level (200 A.D.) but goat and sheep are the principal animals in the upper level (later than 560A.D.). Between middle and upper levels there is a sterile landslide.