

Table 1. Also the expected number of each of the six possible matings has been calculated in each case and compared with the actual number found. It will be seen that the observed and expected distribution of offspring agree when tested by the χ^2 test, as do the expected and observed numbers of matings. The results presented in Table 1 therefore support the genetic mechanism proposed.

Although 'thread proteins' have been found in dogs and pigs², no evidence of polymorphism has been found in these zones in these animals, so far. The significance of 'thread protein' polymorphism in cattle is not clear at this stage.

There does not appear to be any correlation between the thread protein phenotypes and the six β -globulin cattle phenotypes described previously³.

I wish to thank the Directors of Lord Rayleigh's Farms Inc., and Strutt and Parker Farms, Ltd., for permission to bleed cattle, and the veterinary officers of the Milk Marketing Board for collecting blood samples from A.I. (artificial insemination) herds.

G. C. ASHTON

The Animal Health Trust,
Livestock Research Station,
Stock, Essex.
March 24.

¹ Ashton, G. C., *Nature*, **180**, 917 (1957).

² Ashton, G. C., *Nature*, **179**, 824 (1957).

³ Ashton, G. C., *Nature* (in the press).

Bones of a Vulture among the Remains of Animals sacrificed on the "Burial of Romulus" below the *Niger lapis* in the Roman Forum

IN 1899 Giacomo Boni, director of the diggings in the Roman Forum, discovered, in the area of the *Comitium*, below the *Niger Lapis*, a layer containing votive bronze statuettes and sherds attributed to the sixth to seventh century B.C., and many fragments of bones, horns and teeth of *Sus*, *Ovis*, *Taurus*, *Capra* and *Canis*, obviously remains of a sacrifice¹. This layer was enveloping the base of the 'sacellum', a monument (including the famous archaic Latin inscription) which Giacomo Boni identified with the "funestum locum in Comitio" (Festus) which, following the Roman tradition, was supposed to be the burial of Romulus, or of his adoptive father Faustulus.

A recent revision of the skeletal remains of the sacrificial fauna collected in the above-mentioned layer by Giacomo Boni in 1899, and kept in Rome in the Antiquarium Forense (undertaken with the kind permission of Prof. P. Romanelli, "Soprintendente" to the Palatine and Forum), has led us to the identification of three fragments of bones of a vulture (Fig. 1). The fragments are: the distal part of a right humerus, with a small part of the diaphysis; the proximal part of a right ulna, with part of the diaphysis; another fragment of diaphysis of this latter bone. The three fragments belong to the same individual. The posterior face of the ulna shows two deep incisions, made on the fresh bone, by the knife of the sacrificer, when he cut the muscles of the fore-limb.

The morphology and the dimensions of the fragments indicate that they belong to a vulture of exceptionally large dimensions: either to the black vulture, *Vultur monachus* L. = *Aegyptius monachus* (L.), or to the griffon vulture, *Vultur fulvus* Gmel. =

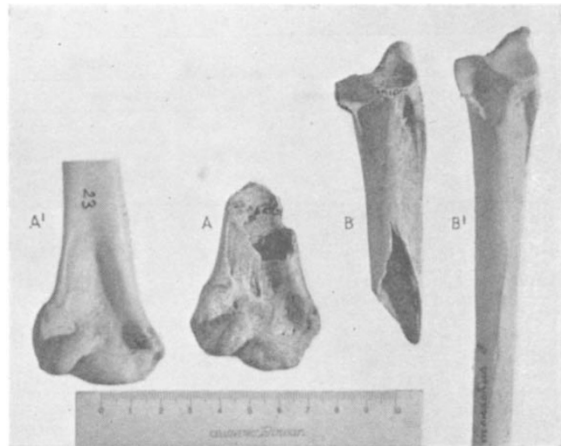


Fig. 1. A, distal portion of a right humerus, collected in 1899 by Giacomo Boni in the layer containing the remains of other sacrificed animals and archaic votive bronze statuettes and sherds of the sixth-seventh century B.C., underlying the *Niger lapis* in the area of the Comitium in the Roman Forum, now determined as *Vultur monachus* L. or *fulvus* Gmel. A', distal portion of a right humerus of *Vultur monachus* L. (= *Aegyptius monachus* (L.) Sardinia, Coll. Blanc. B, proximal portion of a right ulna collected in 1899 by Giacomo Boni, in the same layer as A, now determined as *Vultur monachus* L. or *fulvus* Gmel. B', proximal portion of a right ulna of *Vultur monachus* L. (= *Aegyptius monachus* (L.) Sardinia, Coll. Blanc.

Gyps fulvus Salvad. Owing to the extreme similarity of the osteological morphology and of the dimensions of these two species, and the fragmentary state of the bones examined, it has not been possible to reach a certain specific determination.

The vulture is a non-edible animal, difficult to capture, particularly in Roman times, and was protected by religious interdictions, being considered sacred to Mars and preferred to any other bird for taking omens.

Therefore the fact that a vulture was sacrificed, together with other victims, on the monument which was believed to be the burial of Romulus or Faustulus, should have an obvious relation with the story of the foundation of Rome, as reported by T. Livius and other classical authors. Romulus and Remus were said to have decided to settle their quarrel on where the new town had to be founded by watching the birds, believed to be the messengers of the gods. Remus watched from the Aventine Hill, Romulus from the Palatine. Remus is reported to have seen, first, the flight of six vultures, but Romulus is said to have seen twelve. Following Plutarch, Remus suspected a cheat, and moved towards his twin-brother. At that moment, Romulus really saw twelve vultures, and Remus had to accept the divine command revealed by the birds.

Titus Livius states that the first measure taken by Romulus as soon as he seized the power was to name twelve lictors, in remembrance of the twelve vultures which had announced to him the favour of the gods.

The tradition persisted for a long time, because, following P. Ovidius Naso, when Augustus became consul for the first time, he also saw twelve vultures, as was believed to have happened, seven centuries before, to the founder of Rome.

G. A. BLANC
A. C. BLANC

University of Rome.
May 20.

¹ Boni, G., "Iscrizione arcaica scoperta nel Foro Romano" (Not. Scavi, Roma, 1899). Savignoni, L., "La suppellettile archeologica trovata sotto il Niger Lapis al Foro Romano", 145 (Not. Scavi, Roma, 1900).