Natural History.

Our Domestic Animals.

Great interest has always attached to the tracing of our domesticated animals back to their original sources; but all investigations of this sort have proved extremely difficult. Sometimes we have historical evidence of the domestication of some particular animal, or the same animal exists in both a wild and a domesticated condition. Even in this case, however, great difficulty often arises from the multiplicity of the domesticated breeds, or from the great differences which exist between these breeds as to form, colouring, and other characters. There thus often arises an additional question, as to whether all existing varieties of a given domestic animal are the descendants of one wild species, or whether each has arisen by the domestication of a separate wild species. Breeders and farmers have generally adopted the latter view, but the preponderance of scientific opinion is in favour of the former. It would seem probable, however, that there are some cases in which the numerous domesticated breeds of some one animal,—such as the dog,—can be traced back to more than one original wild stock.

No animal exists in which there are more numerous or better marked varieties than the domestic dog. According to some authorities, all the varieties of the dog are descendants of the wolf or the jackal. According to others, every domestic breed has had its wild prototype. This last view is almost certainly false; but there are good grounds for believing that the various breeds of dogs have descended from three or four wild species. In the earliest historical times we have evidence of the existence of many of the existing breeds of dogs, or of forms very nearly allied to these. From Assyrian, Egyptian, and Roman monuments we know that greyhounds, mastiffs, house-dogs, turnspits, and lapdogs existed at a very early period. In the latter portion of the Stone Age,—in pre-historic times,—we have ample evidence that the dog was domesticated in Western and Northern Europe. At the present day, also, the most barbarous tribes possess their breeds of dogs. All the existing breeds of dogs appear to be capable of inter-breeding, which, would to a certain extent, support the view that they are all produced by the modification of a single primitive form. On the other hand, the native dogs of each country most closely approximate to the wild canine species of the same country; and this would strongly support the view that a certain number of existing breeds are produced by the modification of different wild species. The domestic dog of the North American Indians thus closely resembles the ordinary North American wolf; the sledge-dogs of the Esquimaux similiary resemble the grey wolf of the Arctic regions; and the Hare Indian dog nearly approximates to Prairie Wolf. In the Old World, many of the varieties of Shepherd dogs very closely resemble the European wolf; the pariah dogs of India often are very like the Indian wolf; and the half-domestic, half-wild dogs of Asia and Egypt have the closest affinity to the ordinary Jackal. In Australia, lastly, the Dingo is both domesticated and wild; but it is only a doubtful native of this singular continent.

The source of the domestic cat still remains uncertain; but there are good grounds for belief that the various breeds of the cat are not descended from a single wild species. Cats have been domesticated from time immemorial, and they are found pictured in the monuments of Egypt or preserved as mummies in the catacombs. It seems quite certain that the ordinary domestic cat of Europe is not a descendant of the wild cat of the same region; but beyond this nothing can be definitely stated as to the source of the different varieties of cats. It is noticeable, however, that the cat can only be said to be partially domesticated, much less restraint being usually laid upon it than upon most other domestic animals, whilst almost complete freedom is usually accorded to it during the night time, when its nature leads it to be most active—since the cat is a distinctly nocturnal animal.

The original stock whence the various breeds of horses have been derived is also wholly unknown. In this case, however, there are the strongest reasons for believing that the numerous varieties of the horse are in reality descended from a single wild species, the home of which must have been somewhere in Asia. Few wild species of animals differ from one another, more than a race-horse, a dray-horse or a Shetland pony, and yet there is almost irresistible evidence that all the known varieties have been produced by the modification of a single primitive form. No "wild horses," in the proper sense of this term, are at present known to science; the first domestication of this noble animal is lost in the mists of antiquity. We know, at any rate, that the horse was domesticated in Western Europe in the latter portions of the pre-historic Stone Age; for its remains have been discovered in the lake-dwellings of Switzerland. All the so-called "wild" horses of the present day—such as those which roam over the vast plains of South America—are known with certainty to be nothing more than descendants of the domesticated horse. We know, namely, that when America was originally discovered by the Spaniards, the horse was entirely unknown. When once introduced, however, it speedily reverted to a wild state and soon multiplied to an enormous extent, showing that the American continent, in its present condition, is singularly adapted to the horse. It becomes, therefore, a curious subject for speculation how the older breeds of horses which inhabited both North and South America, should have become extinct. It is known that numerous species of horses existed in America in comparatively late geological periods, and some of these were nearly allied to the existing horse, though none of them were quite the same, and some of them were extremely different. All of these, however, seem to have become extinct before the introduction of man into the American continent, and all existing American horses are unquestionably the descendants of those originally imported from Europe. Upon the whole, it has been concluded that the original wild species from which our domestic breeds of horses have descended, was of a dun colour, with a dark stripe down the back, and probably with leg-stripes and shoulder-stripes as well. Geology, though it throws no light upon the parent-form of our existing horses, has nevertheless done something towards elucidating the present remarkable structure of the foot in the horse. In all the existing horses each foot is terminated by a single toe only, all the other toes being absent or rudimentary. If we take the fore-foot of a horse, we find the single toe that is present to be really the middle toe; that is to say, it corresponds with the "middle finger" in the hand of man. The toes which correspond with the thumb and little finger of the human hand are entirely absent; but the toes which correspond to the fore-finger and ring-finger are present in a completely rudimentary condition. They are concealed beneath the skin, and they merely constitute two little spines, which are called the "splint-bones." In some extinct horses, however, these two rudimentary toes carried little hoofs, and dangled loosely on each side of the middle toe,