

who has closely attended to this subject, allows a difference of four days in the gestation of the dog. The Rev. W. D. Fox has given me three carefully recorded cases of retrievers, in which the bitch was put only once to the dog; and not counting this day, but counting that of parturition, the periods were fifty-nine, sixty-two, and sixty-seven days. The average period is sixty-three days; but Bellingeri states that this applies only to large dogs; and that for small races it is from sixty to sixty-three days; Mr. Eyton of Eyton, who has had much experience with dogs, also informs me that the time is apt to be longer with large than with small dogs.

F. Cuvier has objected that the jackal would not have been domesticated on account of its offensive smell; but savages are not sensitive in this respect. The degree of odour, also, differs in the different kinds of jackal;⁴³ and Colonel H. Smith makes a sectional division of the group with one character dependent on not being offensive. On the other hand, dogs—for instance, rough and smooth terriers—differ much in this respect; and M. Godron states that the hairless so-called Turkish dog is more odoriferous than other dogs. Isidore Geoffroy⁴⁴ gave to a dog the same odour as that from a jackal by feeding it on raw flesh.

The belief that our dogs are descended from wolves, jackals, South American *Canidæ*, and other species, suggests a far more important difficulty. These animals in their undomesticated state, judging from a widely-spread analogy, would have been in some degree sterile if intercrossed; and such sterility will be admitted as almost certain by all those who believe that the lessened fertility of crossed forms is an infallible criterion of specific distinctness. Anyhow these animals keep distinct in the countries which they inhabit in common. On the other hand, all domestic dogs, which are here supposed to be descended from several distinct species, are, as far as is

112) that in the Jardin des Plantes the period of the jackal has been found to be from sixty to sixty-three days, exactly as with the dog.

⁴³ See Isid. Geoffroy St.-Hilaire,

'Hist. Nat. Gén.,' tom. iii. p. 112, on the odour of jackals. Col. Ham. Smith, in 'Nat. Lib.,' vol. x. p. 289.

⁴⁴ Quoted by Quatrefages in 'Bull. Soc. d'Acclimat.,' May 11th, 1863.