

descended from two species; and there is no improbability in this fact, for the genus *Bos* readily yields to domestication. Besides these two species and the zebu, the yak, the gayal, and the arni ⁴⁷ (not to mention the buffalo or genus *Bubalus*) have been domesticated; making altogether six species of *Bos*. The zebu and the two European species are now extinct in a wild state. Although certain races of cattle were domesticated at a very ancient period in Europe, it does not follow that they were first domesticated here. Those who place much reliance on philology argue that they were imported from the East.⁴⁸ It is probable that they originally inhabited a temperate or cold climate, but not a land long covered with snow; for our cattle, as we have seen in the chapter on Horses, have not the instinct of scraping away the snow to get at the herbage beneath. No one could behold the magnificent wild bulls on the bleak Falkland Islands in the southern hemisphere, and doubt about the climate being admirably suited to them. Azara has remarked that in the temperate regions of La Plata the cows conceive when two years old, whilst in the much hotter country of Paraguay they do not conceive till three years old; "from which fact," as he adds, "one may conclude that cattle do not succeed so well in warm countries."⁴⁹

Bos primigenus and *longifrons* have been ranked by nearly all palæontologists as distinct species; and it would not be reasonable to take a different view simply because their domesticated descendants now intercross with the utmost freedom. All the European breeds have so often been crossed both intentionally and unintentionally, that, if any sterility had ensued from such unions, it would certainly have been detected. As zebras inhabit a distant and much hotter region, and as they differ in so many characters from our European cattle, I have taken pains to ascertain whether the two forms are fertile when crossed. The late Lord Powis imported some zebras and crossed them with common cattle in Shropshire; and I was assured by his steward that the

⁴⁷ Isid. Geoffroy Saint-Hilaire, 'Hist. Nat. Gén.,' tom. iii. 96.

⁴⁸ Idem, tom. iii. pp. 82, 91.

⁴⁹ 'Quadrupèdes du Paraguay,' tom. ii. p. 360.