

breed four times yearly, and to produce each time at most six young; the tame rabbit breeds six or seven times yearly, producing each time from four to eleven young; and Mr. Harrison Weir tells me of a case of eighteen young having been produced at a birth, all of which survived. The ferret, though generally so closely confined, is more prolific than its supposed wild prototype. The wild sow is remarkably prolific; she often breeds twice in the year, and bears from four to eight and sometimes even twelve young; but the domestic sow regularly breeds twice a year, and would breed oftener if permitted; and a sow that produces less than eight at a birth "is worth little, and the sooner she is fattened for the butcher the better." The amount of food affects the fertility of the same individual: thus sheep, which on mountains never produce more than one lamb at a birth, when brought down to lowland pastures frequently bear twins. This difference apparently is not due to the cold of the higher land, for sheep and other domestic animals are said to be extremely prolific in Lapland. Hard living, also, retards the period at which animals conceive; for it has been found disadvantageous in the northern islands of Scotland to allow cows to bear calves before they are four years old.³²

Birds offer still better evidence of increased fertility from domestication: the hen of the wild *Gallus bankiva* lays from six to ten eggs, a number which would be thought nothing of with the domestic hen. The wild duck lays from five to ten eggs; the tame one in the course of the year from eighty to one hundred. The wild grey-lag goose lays from five to eight eggs; the tame from thirteen to eighteen, and she lays a second time; as Mr. Dixon has remarked, "high-feeding, care, and moderate warmth induce a habit of prolificacy which becomes in some measure hereditary." Whether the semi-domesticated dovecot pigeon is more fertile than the wild rock-pigeon, *C. livia*, I know not; but the more thoroughly domesti-

³² For cats and dogs, &c., see Beltingeri, in 'Annal. des Sc. Nat.,' 2nd series, Zoolog., tom. xii. p. 155. For ferrets, Bechstein, 'Naturgeschichte Deutschlands,' Band i., 1801, s. 786, 795. For rabbits, ditto, s. 1123, 1131; and Bronn's 'Geschichte der Natur,' B. ii. s. 99. For mountain sheep, ditto, s. 102. For the fertility of the

wild sow, see Bechstein's 'Naturgesch. Deutschlands,' B. i., 1801, s. 534; for the domestic pig, Sidney's edit. of Youatt on the Pig, 1860, p. 62. With respect to Lapland, see Acerbi's 'Travels to the North Cape,' Eng. transl., vol. ii. p. 222. About the Highland cows, see Hogg on Sheep, p. 263.