

the necessity of keeping ducks in netted enclosures like other wild fowl, so that at this period there was danger of their flying away. Moreover, the plan recommended by Columella to those who wish to increase their stock of ducks, namely, to collect the eggs of the wild bird and to place them under a hen, shows, as Mr. Dixon remarks, "that the duck had not at this time become a naturalized and prolific inmate of the Roman poultry-yard." The origin of the domestic duck from the wild species is recognised in nearly every language of Europe, as Aldrovandi long ago remarked, by the same name being applied to both. The wild duck has a wide range from the Himalayas to North America. It crosses readily with the domestic bird, and the crossed offspring are perfectly fertile.

Both in North America and Europe the wild duck has been found easy to tame and breed. In Sweden this experiment was carefully tried by Tiburtius; he succeeded in rearing wild ducks for three generations, but, though they were treated like common ducks, they did not vary even in a single feather. The young birds suffered from being allowed to swim about in cold water,<sup>8</sup> as is known to be the case, though the fact is a strange one, with the young of the common domestic duck. An accurate and well-known observer in England<sup>9</sup> has described in detail his often repeated and successful experiments in domesticating the wild duck. Young birds are easily reared from eggs hatched under a bantam; but to succeed it is indispensable not to place the eggs of both the wild and tame duck under the same hen, for in this case "the young wild ducks die off, leaving their more hardy brethren in undisturbed possession of their foster-mother's care. The difference of habit at the onset in the

and tom. xxi. p. 55. Rev. E. S. Dixon, 'Ornamental Poultry,' p. 118. Tame ducks were not known in Aristotle's time, as remarked by Volz, in his 'Beiträge zur Kulturgeschichte,' 1852, s. 78.

<sup>8</sup> I quote this account from 'Die Enten- und Schwanenzucht,' Ulm, 1828, s. 143. See Audubon's 'Ornithological Biography,' vol. iii. p. 168, on

the taming of ducks on the Mississippi. For the same fact in England, see Mr. Waterton in London's Mag. of Nat. Hist., vol. viii. 1835, p. 542; and Mr. St. John, 'Wild Sports and Nat. Hist. of the Highlands,' 1846, p. 129.

<sup>9</sup> Mr. E. Hewitt, in 'Journal of Horticulture,' 1862, p. 773; and 1863, p. 39.