

other animal species, the number must likewise be uniform and unalterable. It is to be observed that this fixed state, this permanent number, are not to be considered in an absolute sense; all physical and moral causes, and all the effects which flow from them, are comprised and balanced within certain limits, more or less extended, but never so large as to destroy the equilibrium. As the whole universe is in a state of perpetual motion, and as all the forces of matter act against and counter-balance each other, so every thing is brought about in a kind of oscillation, to the middle points of which we refer the ordinary course of Nature, and whose extremes are the furthest removed from that course. In effect, therefore, we find that an excess of fecundity, either in animals or vegetables, is the usual fore-runner of sterility. Plenty and scarcity present themselves so alternately, and often follow so close upon each other, that a tolerable judgment may be formed of the product of one year by that of the preceding. The apple, plum, oak, beech, and indeed most fruit and forest trees, do not bear plentifully two years together. So likewise it is with caterpillars, May-bugs, flies, field mice, and many other animals, who if they multiply to excess one
year