

CARNIVORES AND RAPTORES

NATURAL AND UNNATURAL

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IT is often difficult to make those unfamiliar with biological reactions realise that good can come to any race through killing its component members. In conversational discussions there is no other question that comes more often to the fore, or upon which scientific pronouncement meets with more scepticism. That predation is necessary to the well-being of wildlife is often regarded as one of those highly speculative theories in which detached scientists like to indulge but which common sense rejects.

The horse could never have developed its speed without the wolf at its heels and the fear of death in its heart, nor the grouse its camouflage and quick reactions without the vital threat of the hawk in the air. Lacking predatory pressure, all organisms eventually deteriorate, as is plainly demonstrated by the flightless birds and other degenerate forms found on many oceanic islands where predation is absent.

The question is commonly asked that if predation is essential to the continued well-being of wildlife, why not destroy the predator, let man do the preying, take the predator's share, and thus achieve a double benefit? The argument sounds convincing and, like all wishful thinking, has a great appeal. It would be unanswerable if man preyed as does the predator. Unfortunately, he does not, but to the contrary. No hunter ever takes the poorest if he can help it, but always the best as far as he is able—the finest head of horns, the biggest bear, or the fattest goose. In this he is genetically and positively destructive instead of actively constructive, and consistently lowers the constitutional standard of the objective races.

The hunter may not always have the privilege of selection; but where he has not, he takes the average run of mine, the good with the bad in about the same proportions as are presented to his gun. He thus effects general reduction of numbers without any compensating benefit to them. Under these conditions

he may be genetically neutral, but he is numerically harmful.

The modern hunter, with his tremendous superiority in arms and equipment, does not take the place of the natural predator with whom the terms of combat are approximately equal, and strength and address are at a premium on either side. The best physical equipment against traditional predators is useless against the gun, in fact, the very feeling of strength and confidence that health and perfect co-ordination induces encourages an animal to take risks that lead towards destruction. With or without selection, the genetic effect of the hunter is degenerative and cannot replace the constructive role of the natural enemy.

The successful predator is regarded as a blood-thirsty ravenor, the successful human hunter, either with gun or the coin of the realm, is admired as a good provider. Here are two diametrically opposed standards of judgment. With the scales of prejudice removed from our eyes, predation should be looked upon as a normal and necessary process of nature.

Even with all the obvious conditions seemingly favourable and nicely adjusted—food, enemies, cover, shelter, etc.—there yet remain population densities that cannot be safely exceeded. All other controls of numbers failing, disease remains to set the limit. We all know that a few chickens can be kept in comparatively good health and productiveness under the most primitive conditions and with the slightest attention; but for the raising of poultry in numbers, the most scientific care and sanitary surroundings are necessary. Each individual differs from all others in its physical resistance to disease and in its chances of contracting it. A flock of one hundred individuals has just ten times as many chances of including susceptibles as a flock of ten. In scattered communities, individuals are more or less isolated and the spread of infection proportionately limited. In congested associations, disease can be rapidly transmitted through