

enemies, such as wolves, tigers, cougars, etc., having no guns, usually have to be content with the weak and less agile members of the herd. Thus, animal natural enemies assist in maintaining the stamina of the species preyed on" by reducing its numbers in a way leading to the survival of the fittest.

### *Limits of War on Deer.*

If the object of the deer-stalker is quality and not quantity, then animal predation is far more efficient than he.

But when man acts in the role of a killer of deer—as by Government shooting parties, payment for tails, etc.—he still fails in New Zealand, because, "owing to the extremely rough nature of the country and the mountain ranges, the natural increase cannot be kept within reasonable limits."

Captain Sanderson's outline of the New Zealand situation, Dr. Grinnell's defence of natural enemies as being necessary to any balance built up by Nature on predation, and other interesting contributions to the balance of wild life, were brought before a conference in Canada on wild life, attended by delegates of Canadian Provinces. Representatives of British Columbia, Ontario, and New Brunswick, and other delegates, emphasised the need for further observations in Canada of the effects of predation, with a view to testing whether the human war on indigenous predatory birds (such as hawks) and animals is a fallacy.

And here arises a related question: Is it not possible that the Government's war on deer in New Zealand may merely result in better quality herds, for the Government's war is not, like the deer-stalker's, selective, but merely tends to delay the time when the deer will increase to starvation numbers?

### *A Culminating Accident.*

Seeing no solution in this Governmental war, and realising that pastoral opinion would prevent any experiment in the way of importing a natural enemy, Captain Sanderson hazards the suggestion: "Perhaps the final solution will be that some domestic dog, like the Alsatian, will become feral."

Such a culminating accident would be an ironical comment on the planlessness of New

Zealand's acclimatisation plans, ever since the weasel blunder was added to the rabbit blunder.

But if the correction of mistakes like rabbit and deer has become impossible, at least let us begin to learn something about the part played by predation in Nature's balance, and therefore cease our war on hawk and shag, who are good New Zealanders, and who, to use Dr. Grinnell's words, have been in New Zealand "from time immemorial, as parts of the perfectly normal biotic complex."

### THE FOOD OF NATIVE BIRDS OF PREY.

There is no lack of reliable, scientifically accurate information on this subject. The most extensive investigations were made by the Biological Survey and published in 1893 by the United States Department of Agriculture in a report by Dr. A. K. Fisher, entitled, "The Hawks and Owls of the United States in their Relation to Agriculture." Though many later observations and investigations have been made, Dr. Fisher's work, based on the examination of the stomach contents of 2,700 of our native birds of prey has been substantiated in all its main points and is the basis for much of the information contained in later works. But in considering these figures, it should not be forgotten that many, if not most, of the birds of prey will feed on birds or animals they find dead, even if they are not at all in a fresh condition, and that the presence of bones in a bird's stomach is by no means a proof that it killed the animal or bird to which they belonged. (See the above work of Dr. Fisher, page 63.)

"Only when large numbers of our citizens take a personal interest in conservation can we have confidence that progress is being made. . . It would be a mistake if we did not make a special effort to teach our children the fundamental lessons of conservation to the end that our beautiful natural resources may be transmitted as a sacred trust for the continued enjoyment of future generations."—Governor La Follette, Wisconsin.