

in most ranches rather imperfectly met. Although apples are fed liberally in certain of the more successful ones, in the majority they are used very sparingly if at all. There is much to be said for their regular inclusion in the diet.

After this general discussion of feeding practice in the fox industry it remains to consider which, if any, among the actually prevalent sources of damage or loss may be in whole or in part the consequence of imperfect nutrition. The list of reported complaints in which a nutritive defect of some sort may with reason be suspected to be a factor is, as a matter of fact, quite large. It would include, e.g., rickets, convulsions, sore eyes, still births, the abandoning or even the killing and eating by the mother of her young, premature cessation of milk supply, early death of the young, failure to grow, failure to reproduce, and imperfect development of fur.

During recent years there have been conducted in different laboratories a great variety of experiments in which rats, guinea pigs, swine, or other animals have been subjected for longer or shorter periods to the influence of variously restricted diets. Among the results of these experiments one may find, singly or in various combinations, every one of the abnormal conditions just mentioned. This does not necessarily mean that these are always to be attributed to a dietary factor. The habit of killing and eating the young, for example, may be merely a vice, inherited or acquired, in which case there is nothing to be done but to destroy the animal. What the experiments referred to demonstrate is that this, and the other conditions named, may be, and doubtless often are, the consequence of improper feeding. It is probable that most of them would become much less common if the foxes could be assured a diet which supplied continuously each and all of the factors essential to perfect nutrition.

Incidentally it may be pointed out that we do not know definitely the normal duration of lactation in the fox, nor its normal growth curve. These furnish problems that should not be forgotten in any experimental study of the growing fox's nutrition.