

REVIEWS

Sledges and Dog Food in Arctic Canada.

In the *Geographical Journal* for May 1939 (xciii, No. 5, pp. 424–29), the Rev. H. R. Rokeby-Thomas has written a most interesting and instructive short article entitled “Notes on Dogs and Sledges in the Queen Maud Sea and Coronation Gulf Areas”. The author of the article has worked in the area in question over a number of years, and writes direct from personal experience and experiment combined with a sound appreciation of the opinions of police officials, trappers, Eskimos and others. He is a disciple of the “Nome hitch” with the dogs running in pairs, though he realises the advantages under certain conditions of driving dogs in fan formation. Mr Rokeby-Thomas speaks also of the advantage of having more than one leader in the team, so allowing the leading dog sometimes to be changed, and avoiding any individual animal becoming dispirited by too long a spell of duty in the lead. Very few people seem to have tried extending this principle by the perfectly possible expedient of training the same dogs to work in more than one formation, then, in the course of a long journey, with the aid of a few toggles, modifying the hitch to suit the immediate conditions.

The writer of the article next describes types of imported dog feed that may be and often are used in northern Canada when there is a failure of the native supply of seal meat or fish. Apparently large amounts of meal and rice are frequently fed to the dogs with an addition of tallow, or better, seal oil. Such extensive use of carbohydrate foodstuffs for a carnivorous animal is clearly basically inefficient so far as calories per unit weight are concerned. The widespread use of carbohydrate foodstuffs is probably due to their relative cheapness. The opinion of a reliable half-breed Eskimo is given that a dog mash “which contains meat and bone as well as corn meal” is “the only imported feed . . . that would put fat on a run-down dog during the cold months”. The frequent occurrence of a progressive sluggishness in dogs on imported feed of the carbohydrate type, or even on some types of pemmican, is mentioned. It is evident that there is room for a great advance in dog-feeding as a result of further research. It is to be remembered that the vitamin requirements of different species of mammals are by no means necessarily the same. Vitamin C, for example, appears to play no essential part in the metabolism of the dog. The sluggishness already mentioned may have its basis in some real

dietetic deficiency, and Mr Rokeby-Thomas speaks of the benefits of adding a small amount of blubber or seal oil to the diet of dogs otherwise on imported feed. Further, the requirements of vitamins A and D apparently are increased in the presence of large quantities of carbohydrate.

The second half of the article is taken up with an account of the relative merits of different types and lengths of sledges which have been tried by the author, and others with whom he has talked. He states that "under all conditions the native *komatik* has proved itself unbeatable as a general or only sledge... being the one type that can carry a big load under any conditions". It also seems to be the general conclusion that the longer the sledge (within reason, of course) the more efficient it is, even though in itself it may weigh over 200 lb. Mr Rokeby-Thomas says that "for the season 1938-39 I am using an 18 foot sledge made of red pine boards $2\frac{1}{2}$ inches thick and 9 inches high, shod with hickory $2\frac{1}{2}$ inches wide and $\frac{1}{2}$ inch thick. With the hickory iced this makes a fine running surface". The advantages of icing the runners with mud, or better, oatmeal, are well brought out. "In the cold weather oatmeal stands up much better than mud. It is harder to break, and in extremity is a reserve dog-ration. It should be well cooked before applying. Uncooked oatmeal for runners is not nearly so successful." It would have been interesting had it been stated below what temperature the author had normally found it expedient to ice the runners. "Thirteen dogs on a sledge of this type, pulling a 1000-1200 lb. load can easily make a daily average of 30-40 nautical miles." From internal evidence one gathers that such a sledge itself weighs about 250 lb., and that this weight is included in the load given. Thus when making this very high average speed of travel the dogs were each pulling about 65 lb. of load actually on the sledge. This load is, of course, much less than has been usual with exploratory parties in recent years in Greenland and Antarctica, where 100 lb. per dog is more nearly the figure, but in these latter cases the daily average distance covered has been far lower. The present impossibility of saying in words, and so conveying to others, precisely the merits or difficulties of travelling conditions in a particular area at a particular time, is most unfortunate for all who desire to make accurate comparisons of sledging technique. What the Beaufort scale has done for meteorology still remains to be done for sledge travel. It will remain undone until a man such as Mr Rokeby-Thomas, with real knowledge, enthusiasm and an analytical mind, is able to extend his experience all round the north polar sea and to Antarctica as well.

G. C. L. BERTRAM