SALT FOR CATTLE

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All field officers and most farmers know that it is a good idea to feed salt blocks to cattle. We are all aware that cows like salt very much, and that quiet cows will lick men's skin to get the salt from sweat. The question then arises — is it necessary to feed salt to cows?

What Happens When Salt is Fed?

In a trial at the Highlands Beef Research Unit, Bena, lactating (milk-producing) cows which were fed with salt gained 61 kg liveweight in 3 months. Those lactating cows which were not fed salt lost 23 kg in that time. The nett difference is 84 kg. The calves from the cows that were fed salt also gained weight — 49 kg, while calves from unsupplemented cows (cows that were not fed salt) gained less weight — 35 kg. Therefore the total difference in liveweight in the 3 months was 84 kg + 14 kg = 98 kg.

Why Do Cattle Need Salt?

Salt contains the element sodium. About half the salt is sodium, the other part is the element chloride. Sodium is the important one, cattle need sodium (as do other animals).

How Much Salt Do Cattle Need?

A mature cow (500 kg or 1,100 lb) which produces 1.5 gallons (6.8 litres) of milk a day needs 10 g of sodium for maintenance and a further 6 g for milk production. This means a total of approximately 16 g of sodium (or 32 g of salt) per day is needed.

The grass contains some sodium. Analysis of pasture samples from the highland areas shows that 1 g of sodium per day comes from the pasture. Therefore another 15 g of sodium (or 30 g salt) must be fed to the cows each day. A lactating cow has about 200 g of sodium in her body. If she needs 16 g per day, this will be used up in 14 days under highland conditions. If she is not given salt she will lose body weight rapidly, with death often following. This condition — called lactational stress — is widespread in the highlands and is found also in the Situm and Garaina areas.

How Much Salt Will Cattle Eat?

If cattle are regularly fed salt the average daily consumption is 44 g/day or 16,060 g/year. A salt block weighs 20,000 g so one cow will eat 3/4 of a block a year.

In sodium deficient areas where salt is not fed regularly, cows will eat salt at a very high rate for the first few days, e.g. 1.3 kg in 3 days, but will soon settle down to 44 g/day if fed regularly.

Farmers often think that it will cost a lot to give their cattle salt supplements. The common answer I get when talking to farmers about this is: "I can't afford to buy salt." I would ask,

Can They Afford Not To?

If salt is fed regularly it will cost about 1½ toea per cow per day. If a salt block landed on the farm costs K6.00, 1 g will cost 0.03 toea, $\frac{600 \text{ toea}}{20{,}000 \text{ g}} = 0.03$ toea/g. If a cow eats 44 g per day this comes to approximately 1½ toea per day (44 x 0.03). From trials at the Highlands Beef Research Unit supplemented steers averaged an extra 0.32 kg liveweight gain per head per day. In extra meat value this represents 14 toea per day, a good return for 1½ toea expense, i.e. a 900% return on outlay.

Conclusions

If the farmer feeds his cattle salt, they fatten quicker, and are healthier. Also they have a higher calving percentage and are more resistant to worms and other parasites.

The other obvious advantage of feeding salt is the effect on temperament of stock. Stock regularly fed salt are generally quiet. Ideally, the block should be broken up, small quantities fed daily by hand and this way the stock think of humans as friends not enemies. As we all know, friendly cattle are much easier to yard for inspection or sale.

In conclusion, I again state — when farmers say that they can't afford to buy salt blocks — CAN THEY AFFORD NOT TO?