

The results of the experiment are briefly summarized in the following table :

RESULT OF FEEDING STEERS AND HEIFERS FOR BEEF.				
	Average weight at end of test	Average daily gain per head	Dry matter eaten per pound of gain	Average cost of food per pound of gain
	Pounds	Pounds	Pounds	Cents
Steers.....	1,338	1.71	8.70	4.08
Open heifers....	1,300	1.86	7.67	3.65
Spayed heifers...	1,337	1.70	8.60	4.05

As shown by the experiment, the heifers made a slightly greater average gain from correspondingly less food and at a less cost than the steers. Carefully conducted slaughter and block tests did not reveal any material difference in the character, composition, or quality of meat from steers and heifers, although the percentage of high-priced cuts, ribs and loins was greater in both lots of heifers than in the case of the steers.

It has been claimed that the principal cuts in heifer carcasses contain more fat than those of steers, and are, therefore, less profitable to the consumer. The average cost of the beef to the firm purchasing the cattle raised in these experiments was 6.51 cents for the steers, 6.21 cents for the spayed heifers, and 6.14 cents for the open heifers. The average selling price received by them was 6.59 cents, 6.26 cents, and 6.24 cents, respectively.

It was observed in this and other investigations that under similar conditions heifers are inclined to take on flesh a little more readily than steers. Larger gains by the heifers may not be shown, but there is a tendency to finish at a little earlier stage in the process of fattening. The difference between steers and heifers in this regard, when fed under the same conditions, has also been noted by practical stockmen feeding on an extensive scale.

The fact is emphasized that heifer beef has been much underestimated, since in both trials the heifers have returned a higher net profit on the block than the steers, notwithstanding the fact that the steer beef was rated higher than the heifer beef. So far as could be learned from these experiments, spaying had no particular influence on the gains made.—*Bulletin, U.S. Department of Agriculture.*

To an Englishman the idea of a comparison between heifer and steers is absurd; but we always prefix the word "maiden" to "heifer,"

Fancy a "spayed" heifer calving! A maiden "home bred" heifer always fetches the highest market prices.—Ed.

DIPPING SHEEP FOR TICKS

The injury inflicted by the sheep tick upon the flocks of this state can only be roughly estimated. Ticks do not cause death directly, nor injure the wool, but cause untold torment by their biting and wandering about over the body. This saps the vigor of the old sheep, retards the growth of the lambs, and makes both susceptible to disease. The tick is a wingless fly about a quarter of an inch long, having a large, strong, reddish-gray body, and six legs. The most opportune time for killing ticks is just after shearing, as the case of handling and the cost of dip is reduced to the minimum. Nearly all the ticks will leave the sheep for the lambs, so that the work will be very effective if only the lambs are dipped. It is better, however, to dip both old and young. The sheep should be examined carefully about three weeks after dipping, and if any eggs escape destruction the sheep should be re-dipped.

The apparatus necessary may consist of only a box or barrel, into which the animal may be submerged, and a table (1) upon which they may be allowed to drain. Such temporary arrangements necessitate considerable labor and loss of dip. A special tank may be purchased or built if a large number are to be handled, as one will soon be repaid for its use. The tank should be about eight feet long at the top and two feet wide. It should be four and a-half feet high, and one end made vertical. The sides should slant so that the bottom will be from five to eight inches wide. The bottom should be about three and a-half feet long, and one end made to slant so that the sheep may walk out. The tank should be set into the ground and a chute made so that the sheep may be driven into the tank. On the whole, it is more economical and satisfactory to use some of the good sheep dips offered upon the market. These dips usually contain arsenic, extract of tobacco, or products obtained from creosote or tar as the destroying agent. As the latter dips are effective and less dangerous in the hands of most people they are to be preferred. The following is highly recommended and may be prepared by any-one: Tobacco leaves, 50 pounds; sulphur, 10 pounds;

(1) A sort of tray made of slats, with a space between them, is what we used.—Ed.