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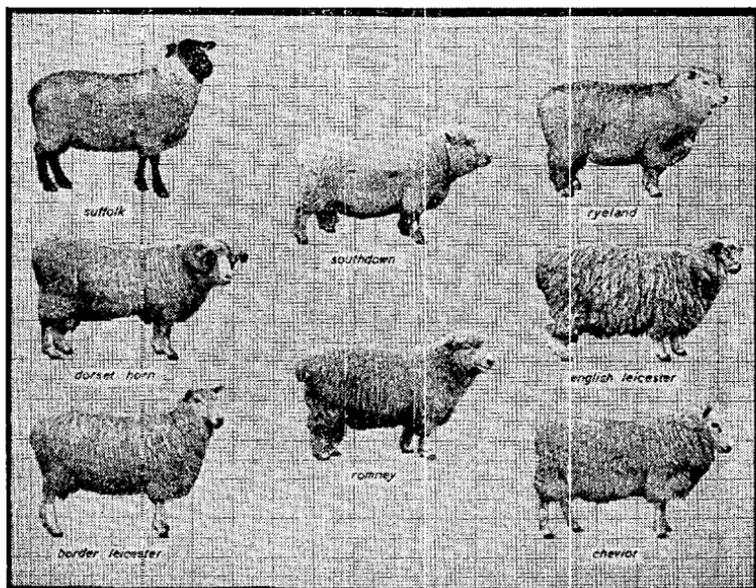
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NORTH ISLAND FAT LAMB CROSSES (Summary)

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THE Southdown-Romney lamb is the only fat lamb cross that has been of any importance in the North Island during the last twenty years. The type of lamb produced by this cross has been found most suited to our normal export market, and, although other rare breeds have been tried, and are still being used to a very limited extent, farmers in the main have been content to conform with the policy of the Meat Board and concentrate on the production of light weight Down type lambs. Nevertheless, we are still frequently asked for or given advice in respect of other crosses. Largely for this reason and because we had nothing better than opinions and prejudices to offer ourselves, we decided three years ago to compare the various crosses under the same environmental conditions on fat lamb country. To this end we selected for comparison with the normal Southdown and Romney as sires, six breeds which were most common, suitable and available. These were the Ryeland, Dorset Horn, Suffolk, Border Leicester, English Leicester and Cheviot. A selection of the rams used is shown in Figure I.

Fig. I. RAMS.



The Sire Breeds.

The Southdown with its small compact short-legged, and deeply fleshed body is obviously the ideal quality meat animal and is generally considered to be the most highly improved mutton breed of the world.

In itself the Romney has no real importance or prospects as a fat lamb sire of quality but a proportion of the wether lambs off the hill-

country must be slaughtered each year to contribute a substantial percentage of the total export kill. The Romney was, therefore, included in this comparison.

For many years the Suffolk, which originated from a cross between the Southdown and the old horned Norfolk breed, has been one of the most popular fat lamb sires in England. Both straight Suffolks and Suffolk Crosses have been very successful in carcass competitions at Smithfield, and the breed is employed to produce carcasses of 50-65lbs. dressed weight. Although a large, long-legged breed, the Suffolk is deeply-fleshed and well proportioned.

The Dorset Horn is to some extent handicapped by its horns, which are a menace to fences in New Zealand, and make handling in the shed and yards more difficult. However, it is becoming increasingly popular in Australia, partly on account of its extended breeding season which fits in to the marked seasonal variations of that country. Australian breeders are seeking to evolve a polled type. Although a tendency towards long legs and rather ungainly bodies exists in the breed, short-legged, deeply-fleshed, compact strains are available.

Border Leicesters were formerly used quite extensively in the North Island but have practically disappeared with the increasing use of the Southdown. They are a long-legged, big-framed, hardy breed, reputedly tracing their origin, through the activities of the Border raiders, to the Cheviot from the North and the English Leicester from the south.

The Ryeland is a Down breed still used to a certain extent in the North Island. A larger animal than the Southdown, it still has the thickly fleshed characteristics typical of Down breeds. Perhaps partly for the reason that carcasses of this Cross have the reputation of not grading quite as well as those of the Southdown, it has never attained the popularity of the latter.

Although the English Leicester was one of the earliest improved British breeds, it does not fulfil modern requirements of either the producer or the consumer. This Cross is considered by many farmers to be of the latest maturing and are useful where lambs are fattened on crops as in the South Island.

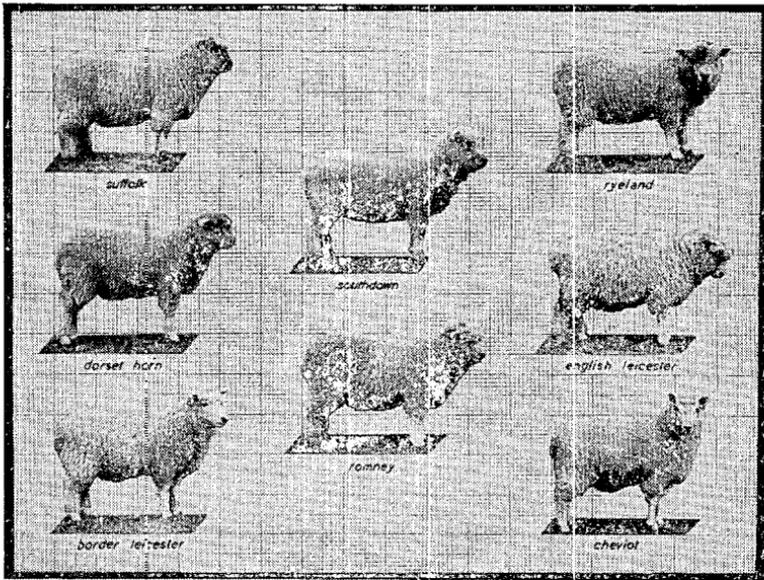
In view of the fresh interest that has been aroused in the possibilities of the Cheviot for second class hill-country, this breed was included for the same reason as the Romney, although it was realised that there was little prospect of it becoming of any great importance except as a by-product of hill farms.

All these breeds have been tried out by individual farmers in the past and have been gradually abandoned over the years in favour of the Southdown—except in the case of a small minority who have always retained their partiality for one breed or another in the face of public opinion and trade demands. But no definite and comparative facts in terms of figures existed and in any case farms, farmers, and seasons vary and for a strict comparison the influence of these factors must be commonly shared. It was therefore necessary to compare the breeds on the same basis.

Procedure.

For the past three years two selected rams of each of these breeds were mated to some 50-60 Romney mixed-age ewes each season. The ewes were run together from the end of tupping till the lambs were drafted under typical Waikato fat lamb management conditions at 4-5 ewes per acre. In the first two seasons the same pairs of rams were used but they were all replaced in the third season, as far as possible from different studs.

Fig. II. LAMBS.



Results.

Data for all three seasons have been bulked to provide an average picture and the following table gives a summary of the more important results.

TABLE I.

Cross.	Total per cent. fatted	Per cent. killed off mother	Per cent. 1st draft	Carcass wt. (lbs)	Grading Percentages			Average return per lamb*
					Down.	Prime.	Second.	
Southdown	91	39	34.6	90	8	2	34/-	
Ryeland	94	47	34.9	39	56	5	34/4	
Suffolk	89	47	39.9	13	81	6	37/4	
Dorset Horn	91	54	36.1	14	81	5	36/-	
Border Leicester	83	48	38.9	9	90	1	35/11	
English Leicester	76	29	37.1	10	87	3	35/5	
Cheviot	80	36	35.7	6	77	17	33/11	
Romney	72	18	34.9	5	73	22	33/6	

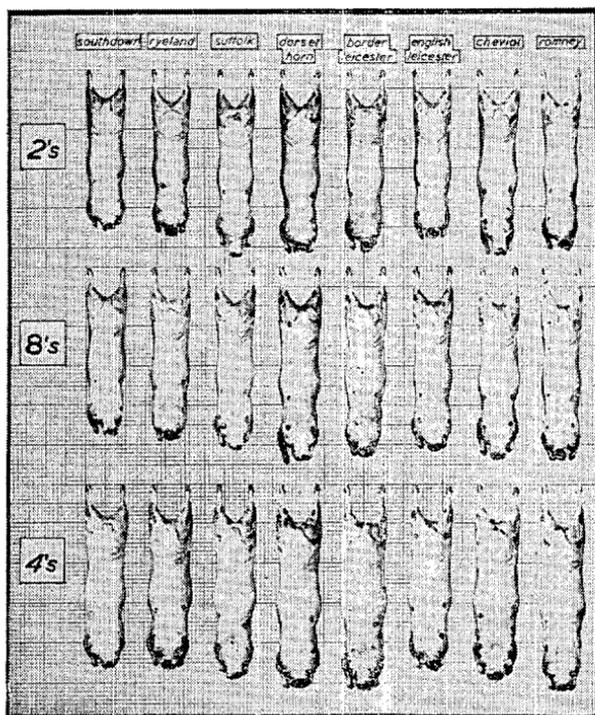
* Calculated on opening schedule based on 11½d per lb. for Down 2's on December 9th (the ruling price for the middle season) to overcome seasonal price fluctuations.

A first draft was taken in mid-December and a second, varying with season, some time in January.

Highest returns are derived from the heavy weight lambs in spite of the disparity in grading but the superiority of the Southdown Cross lamb from a qualitative point of view is well illustrated by the high percentage graded Down. The carcass is short-legged, blocky, and well filled in the loin and crutch, whereas the other crosses, to a greater or

lesser degree, show greater length both of leg and body. Fat distribution is more uniform over the Southdown Cross carcass. The other crosses carry less fat and some (in particular the Dorset Horn Cross) are inclined to be rather bare on the points.

Fig. III. CARCASSES.



During the past season we have dissected five carcasses of each cross. These were selected from the first draft and approximated as closely as possible to the average of the group in weight, grade and carcass measurements.

While on the whole the differences are not very great the Southdown Cross lamb carried considerably more fat than the other crosses.

Fig. IV. CARCASS COMPOSITION.

In view of the demand for lean meat and pre-war complaints from the English consumer that New Zealand lamb is too fat, it appears that other crosses might be preferred. Recent indications point to the need for exporting "lean" rather than "fat" meat to a market suffering from rationing. The important point to note in this connection is that the heaviest weight producing breeds—Suffolk, Dorset Horn and Border Leicester—achieve this result not merely without excessive fat but with more lean meat than the popular Southdown.

Summary.

It is obvious that this study, originally intended purely as an attempt to round off our knowledge of one aspect of fat-lamb production, opens up a very wide question as to its implication to national fat-lamb production policy. Whether one takes a short term or long term viewpoint the greater potential worth of breeds other than the Southdown in increasing the export of meat to Britain in the present emergency should receive consideration. This angle will not be developed since there are people here better informed than the author, who no doubt will express their views.

PERCENTAGE CARCASS COMPOSITION

