Fat lamb production in Western Australia - Part 2.

N. Davenport
SOUND management of the flock is essential for successful lamb raising. Aspects such as mating practice, nutrition, disease control, marketing arrangements and general care of the flock all have an important bearing on the success of the venture.

Following a teasing period of a fortnight using either vasectomised or entire rams, the mating period should extend for at least seven weeks to allow of three oestral periods. There are always, in any flock, some ewes which come into the breeding season later than others. Many breeders prefer to leave the rams in for a fortnight or more longer, contending that a late lamb is better than no lamb.

**NUTRITION**

It is hardly possible to over-emphasise the importance of nutrition in lamb production. Inadequate nutrition is often the main cause of loss of many lambs and ewes prior to and during the lambing period.

By the end of the flushing period and as a result of it, the ewes will have increased somewhat in condition. From then on, for about the first two-thirds of pregnancy, their food requirements will be very little above those for dry sheep. During this period, the ewes, should not be fat and preferably in good store condition or a little better. Paddock grazing at this time will usually ensure this but, if not, a small ration of grain or hay should be fed, or alternatively the ewes could have access to pastures which have been mown and left in the paddock.

The nutritional needs of the pregnant ewe increase considerably during the last six or eight weeks of the gestation period.

The foetus, or unborn lamb, makes most of its growth in this period, while at the same time, the ewe's body is adjusting itself in preparation for the act of lambing and the udder is developing to ensure the well-being of the lamb. Meanwhile, the food intake must continue to provide for the ewe's normal bodily maintenance and wool growth. To meet these simultaneous demands, an ample supply of nutritious food is required.
As a large percentage of the lambing takes place in the late autumn and early winter period, the paddock feed is apt to be lacking in both quality and quantity during the most critical period of the pregnancy. It is essential therefore to supplement the sparse grazing by hand-feeding with grain and-or hay.

It has been shown that ewes lambed satisfactorily and without losses from pregnancy toxaemia when fed, during the last six weeks or so of pregnancy, a ration of ½ lb. of wheat grain per day with some cereal hay where the ordinary paddock grazing was poor. However, such a grain ration must be considered as the minimum and a higher rate could be used and so ensure ample milk supplies and strong healthy lambs. Up to 1 lb. of oats or 13 to 14 oz. of wheat or barley are suitable quantities. Where grain is not available these rates can be replaced by 1½ to 2 lb. of good meadow hay. While research has shown that still higher levels of prenatal feeding will produce heavier lambs, which grow faster and hence reach marketable size and condition more quickly, it is doubtful whether such heavy feeding is justified.

Grain can be fed either in feeders or trickled out in a long thin line on hard ground. Experiments have shown that better results are obtained by feeding two or three times a week rather than daily. This allows the less vigorous sheep to obtain their share. Feeding arrangements should be such that all sheep can feed at the one time. Hay may be fed from self-feeders or distributed in the paddocks once or twice each week. The periods between feeding out will, of course be influenced by weather conditions.

Nutrition after lambing is also very important. The growth of the lamb is largely dependent upon the milk supply of the mother; it is wholly so during the first six to eight weeks of its life. It is obvious therefore that the ewe should be well fed throughout her lactation to ensure a good milk supply. While paddock feed is usually ample and of good quality from mid-winter onwards it is commonly inadequate prior to this, and provision must be made for this deficiency. Early cereal crops of barley or oats are very suitable grazing for newly-lambed ewes. Until such grazing or the new seasons pasture is sufficiently developed, supplementary feeding of hay or grain or both should be continued.

There is a tendency among some farmers to cease hay-feeding too soon. Young pasture is very rich in protein on a dry basis but very high in moisture and much better use is made of this grazing when some hay is also available.
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CRUTCHING

This operation is not only necessary for the control of fly strike but also to enable the newly-born lamb to have ready access to the udder. It should be carried out preferably about four to six weeks before lambing is expected to commence. The ewe should be handled with care. Rough treatment could result in lambing troubles particularly malpresentation and premature birth. Crutching may be done somewhat closer to lambing if circumstances make this unavoidable but extreme care is necessary.

LAMBING TIME

After crutching, the ewes should be put into fresh paddocks specially reserved for the purpose, particularly as they should be drenched for worms at this time. If these paddocks are reasonably handy, inspection of the flocks can be carried out more readily and with the minimum of travel. Inspections should be made at least daily before lambing commences and whilst lambing, twice daily inspections are desirable. Plenty of attention at this time can reduce losses of both ewes and lambs. With lack of attention these can be considerable.

LAMB MARKING

These operations should be done early, preferably when the lamb is about two weeks old and if possible not later than four weeks. The older the lamb the greater is the check in growth from shock and loss of blood. Usually two or three markings are necessary according to the duration of the lambing period.

The operation should be carried out in fine weather and should be performed quickly and hygienically. It is essential to commence with sterilised instruments and to sterilise them at frequent intervals.

A 5 per cent. solution of lysol or dettol (1 oz. to 1 pint of water) is suitable for the purpose. Marking should not be done in permanent yards but in the paddock in temporary yards in order to minimise the possibility of infection of the wounds by tetanus and other organisms.

It is often preferred to separate the lambs from the ewes and put the ewes back into the paddock. As the lambs are treated they can then be put quietly down outside the yards to be mothered. The work should cease early enough to ensure that all lambs are mothered by nightfall.

No antiseptic need be applied to the wounds. Healing will take place more readily and with less trouble without it.

Several methods of castrating and docking are in use, including the knife, constricting rubber rings, crushing type pincers and hot iron. Investigations have shown that the other methods have no advantage over the knife in degrees of
check to growth rate and extent of infection of the wounds. A higher incidence of tetanus has been observed on occasions where rubber rings have been used, and there is also a greater risk of other infection because of the longer time required for the wounds to heal.

SHEARING THE LAMB

In breeding sucker lambs one of the principal aims is to have them ready for market before the feed commences to dry off and before grass seeds become a problem.

However, it is sometimes found, particularly in short seasons, that it is not possible to have all lambs in marketable condition and off the farm by this time. Those not ready should be shorn as they will then finish much better and damage from grass seeds will be avoided. Lambs which are to be carried over for any period should certainly be shorn.

Bruising and cuts due to shearing take some time to heal and may show in the carcass up to a fortnight later. This is of importance when deciding when to market and particularly if the lambs are being exported on consignment.

DISEASE CONTROL

Failure to safeguard the health of the flock may result in considerable financial loss. In addition to actual deaths, wool yields and lambing percentages can be seriously reduced. Adequate nutrition is the first step in disease control. Well-fed sheep have a much higher resistance to disease than poorly-fed sheep.

The most important diseases associated with fat lamb raising are commented upon briefly in the following text. Further and more detailed information may be obtained from the Agricultural Journal and appropriate bulletins published by this Department and issued free to bona fide farmers.

Pregnancy Toxaemia (Twin lamb disease) is a serious disease of the prenatal period and high mortality can occur. It is more prevalent in ewes with a multiple pregnancy. In practically every case the trouble develops as a result of ewes being poorly fed during the six weeks or so prior to lambing. It may also develop through temporary starvation during this period such as by leaving them in the yards overnight without feed or by trucking over long distances.

Little can be done for affected sheep and death usually results although some measure of cure of early cases may be obtained by drenching daily with 4 to 6 oz. of glycerine mixed with an equal quantity of water.

Hypocalcaemia (Milk fever) occurs usually within a few days after lambing or less commonly shortly before lambing, although it has been known to occur at other times.

The onset of the disease is sudden and the symptoms consist of dullness, unsteadiness of gait, muscular tremors and coma followed by death within a few hours up to two or three days. Injection of a solution of calcium borogluconate (½ oz. in 2 oz. water) under the skin or into the jugular vein will in nearly all cases result in rapid recovery. Since driving or yarding are predisposing factors to the disease, freshly-lambed ewes and those close to lambing should be moved quietly and on no account left in yards overnight.

Enterotoxaemia (Pulpy kidney) is mainly a disease of the flush season. The majority of outbreaks occur between April and October when green feed is abundant, but the disease may also develop during the dry season, particularly if heavy grain feeding is carried out. High feed intake and lack of exercise are predisposing factors. Sheep of all ages are susceptible but lambs seldom become affected before 10 to 12 weeks old. Sick sheep are very rarely observed and it is usual to find their carcasses in the paddock highly distended with gas, discoloured and undergoing rapid decomposition.

Inoculation with enterotoxaemia vaccine is a very practical and effective means of prevention. A single injection is usually satisfactory but where the disease is known to be a problem a second inoculation after 30 days is strongly recommended. Inoculation should be carried out in the autumn, in association with crutching. This is a very suitable time. When carry-over lambs are to be fattened they should be inoculated immediately beforehand.
Arthritis in lambs can be important chiefly because of the temporary check in growth and the loss of condition in varying degree which can occur. The mortality rate is low and the majority make a complete recovery from a few days up to two or three weeks from the onset of symptoms. In a small proportion of cases affected lambs become chronically lame and cease to thrive. The condition usually results from infection of tailing and castrating wounds by organisms present in the soil. It can also develop before marking by infection through the umbilical cord. Control is by the prevention of infection of marking wounds as already mentioned under "Lamb Marking."

Worms.—Serious worm infestation of pastures can occur during the spring and summer months. In order to reduce the incidence of worms in the flock to a minimum, ewes should be drenched some weeks before lambing say at crutching time. Lambs are rarely affected during the winter. Those not sold as suckers should be drenched at weaning and also following any appreciable summer rain.

For worm control, good feeding is no less important than systematic drenching. Carryover lambs and weaner breeding ewes should have special paddocks reserves for summer grazing and receive an ample grain or meadow hay ration when necessary. They should not remain over long in any one paddock.

Clover Disease.—This disease develops as the result of grazing subterranean clover dominant pastures during the growing
season. Ewes fail to get in lamb, many of those in lamb have trouble at lambing (distocia) and lambs are often born dead. Some months after lambing, prolapse and inversion of the uterus may occur. Losses of both lambs and ewes can be appreciable and lambing percentages due to infertility may be as low as 20 per cent. or even lower. The disease can be controlled by avoiding grazing on sub-clover dominant pastures. This calls for sound pasture and sheep management. The development of balanced pastures, the provision of early cereal crops for grazing and ample hay reserves are important and effective factors for control.

Epididymitis.—As mentioned previously, this disease can cause a serious reduction in lambing percentages. Rams should be inspected regularly, particularly prior to joining, and affected animals destroyed. If the disease is present, young rams should be isolated from the remainder when not in use and also if possible mated separately from the older rams.

MARKETING

The price levels of the lamb market follow a similar pattern each year governed by supply and demand. The marketing of sucker lambs usually commences early in July and prices are then relatively high. Supplies increase rapidly with the result that price levels fall progressively until the local demand is met which is generally early in September. This is followed by a period during which there is surplus to home requirements and exporters operate freely. Prices are then maintained at near export parity until this period of surplus is over, usually towards the end of November, when with diminishing supplies there is again a general rise in price levels. The sucker season terminates about the end of December.

The grower can sell his lambs in several ways as he so desires. They can be sold locally or to an outside buyer in the paddock or forwarded to the Metropolitan Market at Midland Junction for sale by auction or exported on his own account through the W.A. Meat Export Co. Robbs Jetty.

Lambs should be sold when “finished,” i.e. when well fleshed and commencing to put on fat but before they are overfat. Excess fat is not wanted today. Carcasses weighing 28 to 36 lb. are most in demand. Marketable weight depends to some extent on the breed and on the individual lamb. Those from the heavier sires such as the Dorset Horn and Border Leicester will be “finished” at rather higher weights than Southdown cross lambs. Lambs dress out rather less than 50 per cent. of their live farm weight, varying with the season and the breed. Southdown cross lambs generally dress out at a higher percentage than those sired by other breeds.

The lamb is a delicate animal easily bruised and injured and should always be handled with care. Particularly is this so at marketing time. Rough treatment in the yards or in transit can result in an appreciable loss in value.

INSPECTION OF WOOL CLIPS

The Director of Agriculture, Mr. G. K. Baron Hay, advises that, with shearing now well under way, growers are reminded that officers of the Department of Agriculture’s Sheep and Wool section will, upon request, inspect clips on brokers’ show floors.

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