Postwar Planning IV

The artificial insemination problem

THE recent interest in artificial insemilacksquare nation by dairymen has attracted the attention of veterinarians. The attitude the veterinarians should take toward this new enterprise has been the subject of much discussion by the Postwar Planning Committee of the A.V.M.A. It is the opinion of the committee that the veterinary profession should have a part in this program for insemination work is too closely associated with breeding problems to remove the veterinarian from the picture. This project, however, should be viewed with caution by the veterinary profession for there is danger that it may become over-sold and mushroom beyond the limits of rational control.

Gains Popularity

It seems to be the rule when insemination work is done in a community, the demand for this service increases and continues to increase, depending largely upon the availability and quality of the service. Mass inseminative work is not only a possibility but more a probability in localities where the cattle population is large. From this, it is easily understandable why the formation of a breeding association to handle artificial inseminative work is frequently undertaken. This may have undesirable repercussions to the cattle industry, thus precipitating detrimental criticism for the veterinary profession.

The nature of this undertaking does not lend itself well to greatly increased volume without a corresponding increase in the service of skilled technicians and veterinarians. It is logical and practicable that technicians be used for the microscopic work and the sterilization of equipment

It is generally recognized that artificial insemination has many advantages, some of which are the introduction of new blood lines in herds far removed from the home of the male, and the siring of many more calves during the life of the male than by ordinary mating. Certain other economies and advantages are obtainable which undoubtedly will be more generally recognized and appreciated as the practice of this procedure continues over a longer period of time. This being the case, it only remains for us to determine, if possible, the attitude which the veterinarians can conservatively take and maintain in this vast undertaking.

At points in the various parts of the country, the semen from desirable bulls may be purchased by veterinarians and shipped for considerable distances. Some veterinarians employ this manner of securing semen; others employ it only partially and in addition use semen from their own bulls or from bulls which they have leased for this purpose.

Adaptation to Private Practice

For the time being, at least, it would seem that the work of artificial insemination could best be limited to the amount which the veterinarian can handle in conjunction with his practice and with the aid of technicians available to him. There is danger that the growth and development of the project under the control of breeding associations could be such that eventually it might operate to the detriment of the owners of the cows which it is set up to serve.

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For example, I like the way one veterinary practice group is handling the subject. They were approached by the dairymen of their community to join in the organization of a breeding association. These two veterinarians discouraged such an organization, stating that they believe that greater service to the dairyman could be rendered if the insemination of cows was handled independently by them as part of the service they offered the livestock industry in their practice area. This suggestion appealed to the interested dairymen and as a result only those individuals who had need for artificial insemination participation. At first, these veterinarians bought the semen of outstanding bulls and imported it for use as needed. The result has been that a worthy, lasting, appreciated addition to regular practice was developed. These veterinarians have found that the demand for artificial insemination has increased under their careful guidance and supervision, until today they find themselves doing enough of this kind of work to warrant the purchase of their own sires to supply semen for the needs of those dairymen wishing to participate in this program. The result has been that dairymen who have had no need for this service did not participate. Other cattle owners have not been over-sold on the idea, there has been no association financial burden, and meritorious veterinary service has been ren-

It would seem, therefore, that veterinarians should keep an open mind and endorse inseminative work, encouraging the increase of it only to the extent that it can be done under their guidance and direction. As veterinarians become available, then active measures may be taken to further the development of the program.

H. L. F.

The South Dakota Experiment Station suggests for shipping lambs:

- 1. Shade protection.
- 2. Don't overfeed before shipping.
- 3. Avoid over-crowding.
- 4. Use fine sand for bedding trucks and
- 5. Feed before watering.

Sheep Nutrition

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in mind the possibility of bloat in some years. The parasite problem is also controlled to some extent by this rotation during the summer. In the latter part of August the sheep may be put on a bluegrass pasture till the middle of October, at which time the ewes and late lambs are rotated with rye pasture. During drouth seasons it may be desirable to plant sudan grass during the latter part of May or early June, 15 to 20 pounds per acre giving a satisfactory crop. A setback by drouth or frozen sudan grass presents the prussic acid poisoning problem, which should be stressed to the farmer.

Minerals

The mineral requirements of sheep vary considerably but in general they are equivalent in proportion to those of cattle. The following simple mineral mixture will provide the adequate elements and prevent deficiencies in most all cases.

Salt	20 lbs.
Ground limestone	40 lbs.
Bonemeal or spent bone black	40 lbs.
Potassium iodide	0.02 lb.
Ferric oxide	1 lb.
Copper sulfate	0.03 lb.

Vitamins

In summarization of vitamins, sheep synthesize biotin, vitamin K, thiamine, riboflavin, vitamin B_6 and nicotinic acid. Ascorbic acid which is ingested by the ruminant is destroyed in the rumen. Fairbank and Krider³ believe it is synthesized in the tissues of the body. The site has not been determined as yet. It is believed that young ruminants can not synthesize the vitamin B complex factor. They must depend on the milk from the ewes. The milk from healthy ewes contains sufficient vitamins if she is on a proper ration.

The winter level of riboflavin may be kept sufficiently high by feeding a ration of good quality hay, acid grass silage and a grain mixture.

In regard to the relationship of vitamin E to reproduction sufficient evidence has

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