

can be counteracted by the addition of 1 per cent. of slaked lime to the feed.

Early Weaning

Special starter feeds based on buttermilk powder and ground oats, sweetened with sugar and reinforced with fats, vitamins, minerals, and antibiotics, are being used very successfully today in getting the litter started feeding independently at a very early age. Pioneer work in this direction has been done in the U.S.A., where it has been proved practicable to wean at 3 or 4 days of age, feed entirely on the dry starter feed ad lib. with water to drink, and achieve weights of about 60lb. per piglet at 8 weeks; these are much better than are normally expected from ordinary rearing on the sow supplemented by creep feeding.

Similar results have been obtained in England and in preliminary trials with this early weaning technique at the Department of Agriculture's Ruakura Animal Research Station. A heat lamp and a 4ft. x 4ft. weaner coop in which the piglets can maintain a temperature of approximately 70 degrees F. are necessary to success in this practice. The greater efficiency of feed use achieved by direct feeding to the piglets as against double conversion through the sow is the obvious advantage of this system. Other advantages may be the arranging of farrowings to have pigs at the right time to use the seasonal dairy by-product feed supply with maximum efficiency, the bringing of individual sows round to more satisfactory farrowing dates, and even reduction in the amount of labour required to rear a litter.

The value of milk powders for the special purpose of early weaning will be considerably higher than has already been indicated. However, the starter foods are mixtures and it is probable that successful results will be obtained only when a complete mixture is used. The practicability of the farmer mixing his own starter food has still to be tested.

Main Uses

Milk powders are the highest quality feedstuff available for pig feeding. There is likely to be a plentiful supply of buttermilk powders on the local market in the immediate future and probably at a price which enables economic use of them in pig feeding. The outstanding value of buttermilk powder as a pig food must be stressed. Provided it is stored under good conditions and a watch is kept to ensure that a high level of acidity is not allowed to cause digestive upsets to the pigs there is no doubt that it will be a very useful and convenient adjunct to the normal pig feeds. The uses to which buttermilk powder is best suited are:—

1. Creep feeding: An early start on independent feeding through creep-fed supplements of high quality ensures increased economy of gain and the basis for improved carcass quality.

2. Supplementing protein-deficient winter crops or whey for all classes of pigs.

3. Supplementing a declining milk food supply to enable pigs which would otherwise be unfinished to reach the premium porker weight (over 60lb.).

Free Bulletins

for the

Pig Farmer

Nos.

- 15 Causes of Excessive Waste in the Pig Industry.
- 243 New Zealand Baconer and Porker Carcass Judging Standards.
- 302 Rejection of Pigs by Works.
- 343 Crops for Wintering Pigs.
- 364 The Feeding and Management of the Sow and Litter.
- 366 Production of Quality Pig Carcasses.
- 374 The Ruakura Round Farrowing House.

The above bulletins, part of a series of over 350 on all aspects of farming, are available post free from the nearest office of the Department of Agriculture, or from the Head Office of the Department, Box 2298, Wellington.

4. Early weaning: It will generally be the most satisfactory protein concentrate for this purpose. To justify use of buttermilk in other circumstances its price would have to be comparable with that of meat meal on the basis of their relative values for pig feeding. For practical purposes, if a 60 per cent. protein meat meal costs 33s. a hundredweight, it would pay to use buttermilk powder when its price was about 37s. a hundredweight.

Radio Broadcasts to Farmers

RADIO broadcasts to farmers will be given during December as follows:—

1YA Auckland, 7 p.m.

1 December—"Transportation and Finishing Losses in Fat Lambs", by E. Nelson, Livestock Instructor, Department of Agriculture, Auckland.

8 December—"Lessons from the Past Year", by E. H. Arnold, Assistant Fields Superintendent, Department of Agriculture, Auckland.

1YZ Rotorua, 7.15 p.m.

9 December—"Topical Farming Notes, by S. R. Hewitt, Instructor in Agriculture, Department of Agriculture, Whakatane.

2XA Wanganui, 8 p.m.

2 December—"For the Countrywoman", by Mary MacDonald.

9 December—"The Radio Vet.", by S. Jamieson, Veterinarian, Wanganui.

16 December—"Lucerne", by A. A. Duncan, Instructor in Agriculture, Department of Agriculture, Wanganui.

2YZ Napier, 7.10 p.m.

7 December—"Harvesting Seed Crops in Hawkes Bay", by F. H. Collin, Fields Instructor, Department of Agriculture, Hastings.

2ZA Palmerston North, 12.33 p.m.

6 December—"Sheep Feed and Feet", by D. L. Calder, Livestock Instructor, Department of Agriculture, Palmerston North.

13 December—"Haymaking", by E. G. Rose, Instructor in Agriculture, Department of Agriculture, Palmerston North.

20 December—"Some Causes of Poor Quality Cream", by H. A. Scott, Farm Dairy Instructor, Department of Agriculture, Feilding.

3YA Christchurch

9 December (7.15 p.m.)—"Review of 'The New Zealand Journal of Agriculture'", by E. G. Smith, Fields Instructor, Department of Agriculture, Rangiora.

20 December (12.20 p.m.)—"The Farming Year", by C. C. Leitch, Fields Superintendent, Department of Agriculture, Christchurch.

4YZ Invercargill, 7 p.m.

7 December—"Field Drainage", by K. L. Mayo, Instructor in Agriculture, Department of Agriculture, Invercargill. "Litter in the Fowl House", by I. D. R. McKenzie, Poultry Instructor, Department of Agriculture, Dunedin.

14 December—"Field Drainage", by K. L. Mayo, Instructor in Agriculture, Department of Agriculture, Invercargill. "The Honey Crop", by S. Line, Apiary Instructor, Department of Agriculture, Invercargill.

21 December—"Field Drainage", by K. L. Mayo, Instructor in Agriculture, Department of Agriculture, Invercargill. "D.D.T. and Grass-grub Control", by T. Sewell, Instructor in Agriculture, Department of Agriculture, Gore.

Regular Sessions

1XH Hamilton, Mondays at 12.33 p.m. and Tuesdays at 8 p.m. (Frankton stock market report), Wednesdays at 12.33 p.m. (report from Ruakura Animal Research Station), Thursdays at 12.33 p.m., Fridays at 8 p.m. (stock sale review).

1XN Whangarei, Mondays at 8.5 p.m., Wednesdays at 8.1 p.m. (Northland stock market report), Fridays at 8.1 p.m.

1YA Auckland, Tuesdays at 12.35 p.m., Wednesdays at 7 p.m., Thursdays at 12.33 p.m., Saturdays at 6 p.m. (Auckland stock market report).

1YD Auckland, Thursdays at 7.30 p.m.

1YZ Rotorua, Mondays at 12.33 p.m. (Waikato stock market review), Tuesdays at 7 p.m. (Hamilton stock market report), Wednesdays at 7.15 p.m. (Pig Council talk on fourth Wednesday of every other month), Thursdays at 12.33 p.m. and 7.15 p.m. (fortnightly).

2XA Wanganui, Wednesdays at 8 p.m. (Wanganui stock sale report), Thursdays at 8 p.m.

2XG Gisborne, Tuesdays at 8 p.m., Fridays at 8.2 p.m. (Gisborne stock market report).

2XN Nelson, Thursdays at 8 p.m.

2XP New Plymouth, Thursdays at 8.1 p.m.

2YA Wellington, Mondays at 7.15 p.m., Thursdays at 12.33 p.m., Fridays at 7 p.m. (Feilding stock market report).

2YZ Napier, Tuesdays at 12.12 p.m. (Hawkes Bay orchardist session), Tuesdays at 7.10 p.m., Wednesdays at 7.15 p.m. (Hawkes Bay-Poverty Bay livestock market report), Thursdays at 12.33 p.m.

2ZA Palmerston North, Mondays at 12.33 p.m., Fridays at 8.45 p.m. (Feilding stock market report).

3XC Timaru, Mondays at 8 p.m. (Pleasant Point stock market report), Tuesdays (fortnightly) at 8 p.m. (Demuka stock market report), Wednesdays at 8 p.m., and Saturdays at 10.30 a.m.

3YA Christchurch, Mondays at 12.20 p.m., Wednesdays at 7.15 p.m. (Addington stock market report), Thursdays at 12.33 p.m. and 7.15 p.m.

3YZ Greymouth, Thursdays at 12.33 p.m.

4YA Dunedin, Mondays at 12.33 p.m., Wednesdays at 7 p.m. (Burnside stock market report), Thursdays at 12.33 p.m.

4YZ Invercargill, Mondays at 12.33 p.m., Tuesdays at 7 p.m.