

greater productive capacity. But Levin is 59 miles from Wellington and it is doubtful whether a well-adjusted summer price would be an incentive to the farmers to send milk to the city in the summer-time rather than deliver it to the factory. The winter price, however, may well prove an incentive to many farmers in that area to develop winter production and so meet a real need of the city with appreciable advantage to themselves. In this way summer production in the 30-mile area and winter production farther north by farmers with dairies that qualify them to hold permanent licenses for town milk-supply would together supply all-the-year-round wholesome milk that could be subject to the highest recognized degree of control designed to safeguard quality and standard. But such a supply requires organization and suitable contracts.

Shortage of Supply

The supply to schools was suspended for three weeks last winter. This year the Milk Department imported from factory suppliers outside the normal areas of supply quantities in excess of 2,700 gallons a day, and there was still a daily shortage of 2,500 gallons. As a result of this shortage milk-supplies to school-children were rationed in February and March and, except for a partial supply to children at kindergarten, have since been entirely cut off. Supplies to the Armed Forces and to milk-shops and milk-bars have also been rationed. The milk from outside suppliers has been brought from factories as far afield as Bunnythorpe and Pahiatua.

As in other areas, so in Wellington war conditions have created special difficulties. It has increased the demand, and the increase has been irregular and has fluctuated severely. It has added to the difficulties of production by causing a reduction in the fertilizer available and a serious shortage of labour. Wellington has not suffered as Auckland has suffered from a prolonged drought. The difficulties are real. But in the opinion of the Commission they are not due solely to war conditions. The population has been increasing steadily. A scheme to supply milk for school-children has been developed and put into operation. The value of milk as an article of diet has been urged and is likely to have appreciable effect. Even had there not been an outbreak of war a crisis in the milk industry seems to have been likely. In any case, these difficulties for the current year ought to have been foreseen. The increased demand and the greater difficulty in production have been growing for several years and are still present. Their continuance must be expected and provision made accordingly. In the opinion of the Commission the policy of the Milk Department of the City Council is responsible in no small degree for the shortage. The cows are in the fields and a source of supply more than sufficient to meet all the needs of the area is available within reasonable distance of Wellington. But it cannot be expected that it will be forthcoming unless the dairy-farmer has the assurance that can come only from contracts covering appropriate periods. The regular suppliers at Rahui complain that the City Council persists in refusing to make contracts covering its real requirements.

The worst feature of the situation, in the opinion of the Commission, is not the shortage, though that is serious enough, but the resort to sources of supply beyond the areas in which standards for city milk-production have been established.

Methods of Production

In the Wellington supply areas Jersey and Jersey crossbreds predominate. This is due no doubt to the fact that milk is purchased on the basis of its butterfat content.

There is no systematic attention to the elimination of T.B. and other bovine diseases. A limited test was made when it was required that the raw milk supplied in a military camp should be drawn only from T.B. tested herds, and, as noted later, this showed a percentage of reaction of 5.4 per cent.

The problem of replacement of stock is as urgent in this as in other areas. As elsewhere, the mischief consequent upon purchase from saleyards is recognized, but the urge to keep on the farm only cows that are in or about to come into profit checks the development of breeding one's own replacements, or of limiting purchases to those from well-known and high-standard herds.

The problem of winter feeding is more acute in this area than it is in Auckland and Christchurch, owing to the low fertility of much of the soil. Winter feed must be purchased at considerable expense, and this inevitably checks winter milking.

Farm Dairies

The Commission did not obtain adequate first-hand information of the condition of the farm dairies in the area. One difficulty mentioned in evidence that has to be faced is that of providing satisfactory cooling arrangements. In the summer period the water available is not of a low-enough temperature, and the provision of refrigerating-plant and cool storage must ultimately be insisted upon as a necessary part of the equipment of every dairy used for town milk-supply in this area.

Standard of Supply

In spite of difficulties that have had to be overcome, the milk supplied to the Milk Department of the Wellington City Council is of a uniformly high standard. Tests made by the Milk Department for the year ending 30th June, 1942, on samples taken day by day on all milk brought in from farm dairies show the following results :—

Percentage of non-compliance—

Reductase test	..	..	..	..	..	1.422 per cent.
Sediment	..	..	..	..	..	0.12 per cent.
Added water	..	..	..	..	..	0.002 per cent.
Tests for other abnormal conditions	..	..	..	..	..	0.011 per cent.
Plate count average	..	..	..	..	..	92,000

These results compare favourably with comparable tests made on samples of milk in all the other areas. The system of tests and grading and of payment according to standard adopted by the City Council and the full co-operation of the Wellington Dairy Farmers' Co-operative Association, Ltd., have contributed to this result.

The Commission has been informed that the emergency supplies brought from the factory suppliers in outside districts have proved to be reasonably good. In general this appears to be true; but it is also true that a bulk supply from Bunnythorpe comprising the produce of a considerable number of dairy-farms was subject to the reductase test and that it stood under the test for five hours only. This must be regarded as very far from satisfactory for a bulk supply in mid-winter.