

On the Land

GENERAL.

Farmyard mixture, besides its action as a direct fertiliser, has an important influence on the physical condition of the soil and its water-holding capacity.

For the building-up and nutrition of its structure a plant requires an adequate amount of available plant food, consisting of nitrogen, phosphates, potash, and lime.

Fowl manure is worth as a fertiliser about four times as much as horse-dung, weight for weight. It should be dried, pulverised, and mixed with coal ashes, gypsum, or rock phosphate.

In the case of cereals a too free use of nitrogen, either artificially or as dung (in which nitrogen is the predominating element) will tend to produce a crop of rank but weak growth, subject to disease and lodging.

A leading Sydney wood-selling house has worked out the average price per bale of wool sold during the past half-year, and the figure was £14 11s 2d, or £1 18s 4d per bale higher than in the corresponding half of last year, though the bales were lighter.

In four of the Farmers' Mutual Insurance Companies the following is the statements of losses made last year:—Hawke's Bay, policies in force £112,241, loss £16 10s; Otago, policies £175,769, loss £5; Taranaki, policies £234,454, loss £7 17s 4d; Wellington, policies £187,459, loss £250. Upon the policies aggregating £709,863 the loss was under £300.

At the stud sheep sales in Sydney, a ram, winner of the championship in the unhoused class at the show, fetched 350gns; others, to 60gns. Batches averaged 4gns to £17 5s. Stud ewes sold up to 31gns, and batches averaged £3 19s 6d to £8 10s; merinos sold up to 6gns. Rams from Uardry averaged 288gns, the top price being 560gns. Another brought 410gns. Mr. W. Rutherford, of New Zealand, paid 320gns for a Uardry stud ram. Other merinos brought from 6gns to 50gns.

Mr. W. McMillan, who some time ago purchased a farm at Clandeboye, on which there were some bad patches of Californian thistle, has carried out a very successful experiment by converting the thistles into ensilage. In January last (says the *Pemuka Leader*) Mr. McMillan cut about three acres of the thistles and, without using any other kind of fodder, made a stack of ensilage. His neighbors looked upon the experiment as useless, and predicted failure, but the results were in every way satisfactory. The cattle eat the thistles in this form greedily, and Mr. McMillan has found that this weed, so difficult to eradicate that it has been the despair of farmers, is not, after all, an unmitigated evil.

At Addington last week there were fair entries of stock and a good attendance of buyers. A sharp rise took place in the prices of fat cattle. Store sheep and fat lambs showed practically no change, the offerings of the latter being much smaller than last week. Fat sheep were firm at the previous week's prices, and fat pigs sold well. There was an average entry of fat lambs. Tegs made 20s 6d to 24s 9d; average weights, 27s to 28s 11d; and lighter, 13s 4d to 16s 6d. In the fat sheep sales extra prime wethers made up to 30s; prime, 21s 6d to 27s 6d; others, 17s to 21s; extra prime ewes, to 30s; prime, 19s to 24s 3d; medium, 16s 6d to 18s 6d; aged and light, 14s 1d to 16s; merino wethers, 16s 9d to 22s 5d; merino ewes, 13s 3d. Beef sold at prices equal to 27s to 34s per 100lb. Steers made £7 15s to £12; extra, to £17; heifers, £5 17s 6d to £8; extra, to £12 15s; cows, £5 7s 6d to £8 5s; extra, to £12. There was a medium entry of fat pigs, which met with a free demand. Choppers made £3 0s to £7; heavy baconers, £3 5s to £3 14s; extra, to £4; and lighter, £2 12s 6d to £3, equal to 5½d to 6d per lb. Porkers brought £2 6s to £2 10s; and lighter, £1 18s to £2 4s, equivalent to 6d to 6½d per lb. There was a representative entry of stores, and a good demand, the sale being an excellent one.

There were average entries in all departments at Burnside last week. The fat sheep forward totalled 4612. Good quality sheep met a ready sale, and realised up to previous week's rates. Medium quality sheep suffered a decline of 1s 6d to 2s per head compared with last sale, while unfinished sheep dropped in value fully 1s per head. Freezing buyers operated freely on light weight sheep of good quality. Heavy weight wethers, 25s to 28s; prime, 22s to 24s; medium weight, 18s 6d to 19s 6d; light, 17s to 18s; extra heavy ewes, 25s to 28s. There was an entry of 200 head of fat cattle, chiefly medium to inferior quality, with a small proportion of prime-finished bullocks. Prime cattle sold at a slight advance on previous week's prices, while other sorts were about the same. Quotations: Prime bullocks brought £13 10s to £15; medium, £11 to £12 10s; light, £8 10s to £10; prime heifers and cows, £9 10s to £11 10s; medium, £7 15s to £9. The bulk of the 1724 fat lambs penned were of medium and unfinished quality. Recent cablegrams from London of an adverse nature had a very material effect on the market, buyers in consequence having had their limits reduced, and prices showed an all-round decline of 1s 6d to 2s per head. No lambs of extra good quality came forward. Good lambs, 17s 6d to 20s; medium do, 14s 6d to 15s 3d; light, 12s 6d to 13s. There was a small yarding of 37 fat and 40 store pigs. Porkers and baconers met with good demand, at prices on a par with late values. Stores and small sorts were keenly competed for, and sold at advanced rates.

SOIL FERTILITY.

It used to be supposed that a chemist could tell whether a soil was fertile or not by chemical analysis, but the fertility of a soil depends quite as much upon the fineness of the particles as upon the chemical composition of those particles. Tillage is sometimes said to be worth a dressing of manure.

Then, the value of farmyard manure does not lie so much in the plant food which it contains, but in the fact that organic matter is added to the soil, and that thereby the amount of water that the soil will hold is greatly increased. What makes a crop of beets or a crop of grass possible is abundance of water—water to dissolve the plant food, and water to carry it into the plant.

It is safe to say that for every pound of matter in the crop there is required 300lb of water in the soil during the growing season. The importance of water, therefore, cannot be exaggerated, and any statement regarding the productivity of the soil that neglects its capacity to hold water, and second, to yield it to the growing crop readily, is certain to lead to serious error. Farmyard manure applied to clover soil, ploughed under and thoroughly mixed with the earth for a crop, serves to double that crop, not so much by the plant foods which it adds, as by changing the physical texture of the soil in the first place, and by thickening the water films about the soil particles in the second place.

Again, we used to regard the earth as made up largely or entirely of dead dirt. We have learned that quite the reverse is the case. Every clod is a mass of life, rather than a mass of dead particles. Recent investigations have shown that as far as nitrogen in the soil is concerned, its presence in available forms is due almost altogether to the work of bacteria.

To every man upon this earth
Death cometh soon or late,
And very few, if any of us,
Ever know our fate.
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