Lawsonianas doing well on peat land and providing valuable shelter. The shelter belts run north and south to avoid undue shading of the pasture.

mixed farming. One modification of the English system was that fertilisers such as rock phosphate, guano, superphosphate, and bonedust were used instead of farmyard manure. Lime was also available as far back as 1876.

History of Development

Mixed farming was continued for a number of years and it was the practice to sow one of the fields of 60 to 80 acres each year in wheat at the rate of 2 bushels per acre with 2½cwt. of bonedust and superphosphate in the proportion of 2 parts of bonedust to 1 part of superphosphate. In 1889 a field of about 70 acres was sown in wheat, which when harvested was shipped to Sydney. The yield about this time was between 30 and 36 bushels per acre, varying according to the season. Swedes were also grown for sheep and oats for the horses. In 1889 a field was sown in swedes at a seeding rate of ½lb per acre and sown with 2½cwt. of bonedust and superphosphate per acre. Algerian was the type of oats grown and 2½ bushels per acre were sown with 1cwt. of fertiliser per acre. In those days the farmer mixed his own manures, especially the swede manures, because the custom was to mix the seed with the manure and sow the mixture through one box. This did away with the watching of the seed when sowing, and better results were claimed. The fertilisers gave the swedes a good start, so that good crops were secured. In those days bonedust was very coarse compared with that used today and the farmer felt that when the crop had been taken off there was still some manure left if bonedust was used, and this would help the young grass that followed the crop. In October, 1889, 394 ewes were on the property as well as horses for farm work. In 1892 work was started on the development of the 60 acres of swampland, which was cleared of manuka and drained, using manuka drains. Some of these drains are still working today after being down for over 50 years. Later, and over the years, tile drains have been laid to replace the old manuka drains.

Further subdivision was not carried out until about 1920, some 8 years after topdressing began, and today the farm is in 20-acre paddocks with smaller holding paddocks near the homestead. The introduction of electricity had its effect on subdivision, since it made possible the laying on of water to all paddocks, the old windmills not proving very successful.

Of recent years lawsonianas and gums have been planted for shelter, but hedges have not been put in. Some of the old hawthorn hedges and rows of pines planted over 70 years ago still remain. One old pine which was milled in July cut over 7000ft. of timber.

The grass-seed mixture used since 1910 consisted of cocksfoot 8lb., Poverty Bay ryegrass 10lb., Italian ryegrass 6lb., timothy 4lb., meadow foxtail 1lb., red clover 2½lb., cowgrass 2½lb., white clover 2lb., and rape ½lb., making a mixture of 36½lb. per acre. This was sown with 2cwt. of a mixture of 2 parts of bonedust and 1 part of superphosphate per acre.

The pasture sward in 1906, just before topdressing started, consisted predominantly of sweet vernal and cocksfoot with little or no clovers.

For the period of the table on this page no sheep were bought in for fattening. From 1886 to 1910 wheat and oats were grown and manure was

STOCK-CARRYING CAPACITY ON MR. A. MAIN'S PROPERTY OF 482 ACRES

Season	Area in grass (acres)	Area in crops (acres)	Area in hay and silage (acres)	Fertiliser and lime (cwt. per acre) Fertiliser	Lime	Stock carried Breeding ewes	Dry sheep	Cattle
1886	320	60	—	3*	—	323	391	97
1890	320	74	—	3*	—	238	697	110
1900	410	60	—	3*	—	280	533	116
1910	420	60	—	3*	—	282	331	159
1920	482	—	6	2½	—	—	250	244
1925	482	—	12	2½	—	—	200	380
1930	482	—	12	2½	—	576	232	370
1935	482	—	12	5	2	850	225	263
1940	482	—	12	4	2	1,775	—	166
1942	482	—	16	4	2	1,945	—	200
1944	482	—	20	2	2	1,892	—	173
1946	482	—	—	2	2	1,900	48	160
1947	482	—	—	2	2	1,900	60	180

* Cropping area only.

NOTE: Before 1912 fertiliser was used for cropping only and bonedust, blood and bone, and superphosphate were sown with the seed at the rate of 3cwt. per acre. In 1920, 1925, and 1930 A.F.F.C.O. A1 fertiliser was used while in 1935 superphosphate, Seychelles, and blood and bone were applied together with Clark's No. 1 potash mixture. Superphosphate, blood and bone, and Clark's No. 1 potash mixture were applied in 1940 and 1942, but owing to fertiliser rationing the phosphate applied was reduced and in 1944, 1946, and 1947 cobaltised serpentine superphosphate was applied together with 30lb. of muriate of potash.