

in the far West, however, should learn before too late that this store of fertility is not inexhaustible and that the export of grain results in soil exhaustion which must be met by the application of manures and fertilizers if the present conditions are to be preserved. Undoubtedly, the climate there prevailing is one that assists in the conservation of soil plant food, but this factor, obviously, is not one that should be relied on to the neglect of replacing plant food.

The difficulty of obtaining in Ontario samples of virgin soil representative of large areas has prevented me hitherto from being able to draw any conclusions that would be of general importance and value. As data accumulate, we may be in a better position to speak more definitely and probably to map out this province into districts according to the original character of its soils. In the meantime, we can report that in most instances the results we have obtained show a sufficiency of plant food for lucrative crops yields.

Unfortunately the practice of "burning" when clearing up land has been most disastrous over large districts, destroying vast stores of humus and nitrogen, a loss that can be replaced only by many decades of skilful procedure and care.

From the Province of Quebec both heavy and light soils have been received. Many of the frontier lands are in a condition of partial exhaustion, owing to the one-sided method of farming that has been in vogue. These must be built up with green manuring and by application of barnyard manure and fertilizers, thus replacing those elements that many years of cropping have taken away. Undoubtedly, the virgin soils of the areas here referred to were just as rich in plant food as those of any province in Canada, a statement that receives corroboration from results obtained in the examination of certain newly broken Quebec soils.

Hitherto, the soils from the Maritime Provinces examined by us have been few in number. Such data, as we have however, would go to show that their virgin soils are capable of giving excellent crops under proper treatment.