

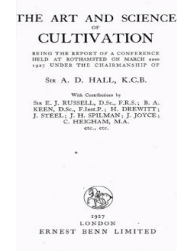
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

# The Art and Science of Cultivation

[Full Table of Content](#)



## Cultivation Operations in the Yorkshire Wolds

**J. H. Spilman**

J. H. Spilman (1928) *Cultivation Operations in the Yorkshire Wolds* ; The Art And Science Of Cultivation, pp 21 - 25 - DOI: <https://doi.org/10.23637/ERADOC-1-198>

## CULTIVATION

21

Rothamsted could tell me how much I was indebted to these busy little creatures for such a bumper crop of seed.

Never despair. You never know where golden treasure may be hiding, but keep your eyes open lest you miss it.

## CULTIVATION OPERATIONS ON THE YORKSHIRE WOLDS

By J. H. SPILMAN

*Gardham Farm, Beverley*

It is only with the very greatest of misgivings that I venture to address you this afternoon. I am very far from considering myself either an authority on cultivation or yet a public speaker, and I must ask you to deal leniently with me as "a first offender."

It has been said that the best speakers are always the worst farmers, so I shall not trouble you with any further apologies, except to say that my only excuse for addressing you at all is a sense of gratitude for the help and assistance I have for many years received from Sir John Russell. Much as I appreciate the honour of addressing you, I should have hesitated to take advantage of the opportunity so kindly extended to me had it not been for a feeling of indebtedness and a desire to try to show my appreciation, if only in a very small and inadequate way.

I need perhaps only add, in justification of my presence here, that any information I may be able to give you is the outcome of a lifelong experience in the district of which I speak, farming on both light wold land and on heavy warp alongside the Humber Estuary.

The remarks which I am about to make apply to the East Yorkshire Wolds, which, for the most part, consist of only some 4 in. of soil overlying the chalk. There is considerable variation in the texture of this soil and there are at least three different types. The first contains a large proportion of small loose flints, and whilst spoken of as light land is nevertheless very heavy on implements in wear and tear. The best types of barley land are, however, those on which what we call chalk grits are freely mingled with the soil; while the third type, free of both flint and grits, is, contrary to what might be expected, generally the poorest of the three—so much so in fact that it is often referred to as "deaf" land. Such land as I am speaking of is generally farmed on the four-course system, the most favoured rotation being Roots, Barley, Seeds, Wheat or Oats. On some of the heavier lands at the foot of the Wolds a five-course system is often adopted, a second white crop



being taken, with the assistance of artificial manure, after the wheat.

Before going any further it would perhaps be as well to point out that it is quite common for farms on such land as I am speaking of to run up to 600, 700, 800 and even 1000 acres, practically all of which is under the plough, pasture grasses being practically unmet with. It is on such land that sheep supply the keynote to the whole system followed, and the old axiom has it that a sheep to the acre is an essential to good farming. Cattle, which play a necessary part, are bought in in the autumn and wintered in the yards, where they are fattened and sold in the spring, often, unfortunately, at a very considerable loss in these days.

Throughout the winter the sheep are folded and fattened on the turnips, the treading and manuring which the land thus receives being a very essential feature of the rotation; it is on such land that the value of the golden hoof has probably its deepest meaning and significance. The manure left in the yards by the cattle is carted on to the land for the root crop, the greater part of which is generally swedes, which are also given a dressing of perhaps 3 cwt. of bones and 3 cwt. of superphosphate or other phosphatic manure. There is a common impression that bones in a dry form are preferable to dissolved bones or finer forms of bone-meal, the prevalent idea being that the decomposition of the bones is hastened and controlled by the amount of chalk in the soil, the coarser forms of bone manure consequently leaving a greater residue, which acts beneficially on the following barley crop. Some of you may perhaps be able to enlarge on the scientific aspects of that suggestion.

When manuring follows the lines I have just outlined, it is not as a rule found necessary to introduce any further artificials in such a rotation as I am speaking of, though a spring top-dressing may of course at times be found necessary for a backward corn crop.

Turning to the rotation as outlined, we are commencing with a bare fallow in preparation for roots in the form of swedes, white turnips and perhaps a few mangel.

When harvest is early and any part of the land is full of couch grass, or, as it is termed in Yorkshire, "Wicks," we plough over lightly and work the land down so that the fallow harrows will pull out the grass, which is rolled into heaps by a Parmiter harrow or a chain harrow, the rubbish being then loaded into carts and tipped into one huge heap and burnt, or in some cases raked into small heaps and burnt without carting; but I prefer one large heap, because the ash, when laid a year, is most useful to mix the artificial manures with, and when drilled with the seed helps it to germinate very much better.



## CULTIVATION

23

It might perhaps be as well here to explain that the method of sowing turnip seeds, almost universally followed, is by means of a drill known locally as a "Kirby Moorside," which combines the two operations of drilling and manure-distributing in one.

After the rubbish is heaped up and burnt the land should be ploughed over and left until mid-winter, when, if it is still dry enough, or slightly frozen, it should be again ploughed, thus leaving all weeds such as buttercups and the short couch grass to be more easily worked out in the spring.

Before the war it was customary to row and manure with farmyard dung, which had been in a hill for some time, all the land required for swedes, and to sow the soft turnips on the level; but now the greater quantity of roots are drilled on the level on account of the saving of labour and time, and by getting more rows to the acre quite as much weight is secured, but the individual roots are not so large.

In a very dry season there is a custom in Yorkshire which has proved successful—that is, to only top-work the land in the spring and, just previous to sowing the swedes, to manure with well-rotted dung and instead of ploughing in to drill the seed amongst the manure and follow with harrows only, thus saving the turning up of the soil and the consequent loss of moisture.

Plumage is the favourite barley at the present time in the East Riding, followed by Plumage Archer, but the last two or three seasons have not favoured the growing of best malting barley in that district, the cause being unfavourable weather at a particular period, possibly a slight frost at ripening time.

During the war, tractors were used a great deal for the preparation of the root land, but since the price of horses and oats have fallen so much, it is found cheaper to depend upon the latter, except in very busy seasons and dry periods.

After the turnips have been eaten on by sheep, to which oil-cake and corn have been given, the land is ploughed very lightly; in fact there is a saying in the East Riding that "the more baulks the more barley," signifying that the lighter the ploughing the better. I perhaps should say here that the clovers are sown along with the barley, and they are usually the best plant where sown early. Frost does not appear to injure the young plant, and they get established before the long dry days. The custom in regard to grazing seeds is to sow rye-grass (Italian) upon half the land, the other half being sown with clovers only, and at the end of the four years the seeding is reversed, so that wheat follows the clovers and oats the rye-grass.

Very little clover or grass is cut for hay upon the Wolds, both usually being grazed by sheep and cattle, so that fog or aftermath



is very scarce; and thousand-headed kale, rape and mustard are usually sown for the first eating, followed by a break of beefheart or early mammoth turnips.

This being a period (August) when the lambs are difficult to manage, the best and safest food is early turnips, even if a few have run to seed.

After the clovers have been summer-grazed, half are sown with Little Joss Wheat, the land being ploughed with double-furrowed ploughs, harrowed down and drilled at the rate of 3 bushels per acre early on, and increasing the quantity as the season becomes advanced; if the land is wet enough, 1st October is the time to commence.

Should the weather be very unsettled, the press-drill is used, so that all may be kept worked close up to the plough. The remaining old seeds are useful to run the ewes on when the turnip land is extra dirty, where they are usually folded behind the hogs. The hogs are folded in front of the ewes and given the first bite of the turnips, which the following ewes eat down and clean up. The greater number of ewes the more quickly the ground is travelled over, which is of considerable advantage to the hogs and brings them to market at an earlier date than when left for any considerable time on any one fold.

In the large folds of sheep it is now customary to use a combined petrol-engine and turnip-cutter, which greatly assists in getting the sheep quickly fed.

About January the rye-grass seeds are ploughed and pressed, double-furrow ploughs being used and three horses to a plough, or the seeds are left until early February, and should the weather be open they are press-drilled, preferably with Goldfinder oats; but should the season be later for any reason, an earlier oat such as Abundance or Victory should be sown, and the surface well rolled to ensure solidity, as it is very seldom old seeds are solid enough, particularly when containing rye-grass.

I mentioned earlier that the deeper Wold land or land at the foot of the Wolds is farmed on the five-course system, where sugar-beet, potatoes and beans are grown, but the four-course is considered to be the cheaper way and less labour is required, the land being automatically kept clean by the quick recurrence of the fallow or root crop.

Having endeavoured to give you some indication of the methods followed on the Yorkshire Wolds, it will hardly be necessary for me to point out that the Wold farmer is at present going through a very trying time, with his necessarily heavy labour bill and fat sheep, cattle and barley as his main sources of income. He has to seek consolation in such remarks as those of Mr H. German, an



## CULTIVATION

25

ex-President of the National Farmers' Union, who, after an extensive tour of the district last spring, stated publicly that he was prepared to go into any county in England and say that nowhere had he seen land better farmed than on the Wolds of East Yorkshire.

## SPRING CULTIVATIONS IN THE WEST

By J. JOYCE

*Preston Bowyer, Milverton, Somerset*

IN the successful cultivation of a farm no idea can be entertained of cultivating it intermittingly, spasmodically, or as an off-and-on business.

The farmer's watchfulness, attention and desire to do what is needful to be done must constitute a continuous weight of responsibility on the mind. To do the right thing in the right time, or as near to that time as possible, involves keen personal watchfulness of every operation for every crop, and that attention must be unceasing.

The novel, *Sussex Gorse*, by Sheila Kaye-Smith, which I read a year or two ago, if stripped of its slight exaggeration describes truthfully, I think, what takes place in the life of a successful cultivator of the soil. His care and love for the farm and the continuous pressing forward with the work even when things look their worst is a good description of his life's work.

*Spring Cultivations in the West* must mean, I take it, cultivations applied to the soil by farmers in the West of England from after Christmas each year until the late summer.

Taking over from the autumn in describing spring cultivations, no matter whether in the east or in the west, it must be taken for granted that the previous autumn cultivations on the farm have been attended to and that we take over in January, say, lands that have been properly managed during the previous four or five months. We must assume, for instance, on the heavier land, that that portion of it which has not been planted in the autumn and which is intended for spring crops has been ploughed up rough and deep, so that the hoped-for frost and thaw have what we call "weathered" this exposed soil and rendered it amenable, with a very little scratching, to the production of a fine tilth and an ashy surface.