

LANDSCAPE MODELLING

by Brian Champion

Ploughed fields

"I made a ploughed field by gluing down some corrugated cardboard and painting it brown"

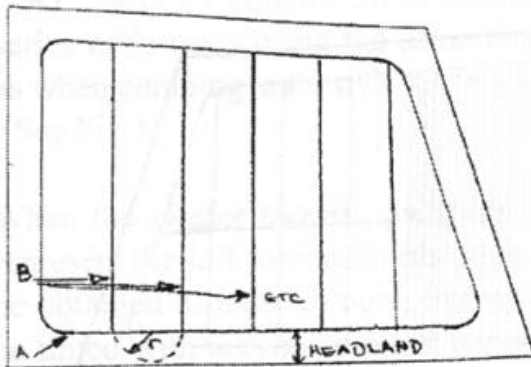
How many times have you read something like this in a layout description written for the model press? You may have thought, "there must be a better way" ; there is, read on. But first, as in most prototype modelling, it helps to have an understanding of the real thing.

Many, many years ago, I worked on a farm near Newport Pagnell, now probably under the M1 service area ! One of the many tasks I undertook was ploughing, both with tractor and horse. Styles and methods of ploughing have regional variations, and these notes may be applicable only to Buckinghamshire, circa 1956, but they are based on personal experience, albeit with a fading memory. Hopefully, people will write in from all over the world, saying "we don't do it like that, we do it like this"; to the benefit of all. To those who know, please write in.

Firstly, it is somewhat unusual to see a completely ploughed field as such. After the last furrow is ploughed, the whole area is usually further treated with harrows or cultivators to continue to breakdown the soil ready for replanting. Sometimes, due to weather conditions, or for other reasons, the field is left over winter, to allow frost to break the soil, but how many people model winter scenes? Secondly, to ensure efficient use of man, machinery and horse power, the field is commonly worked in the following sequence.

1) A single perimeter furrow is made, parallel to the limits of the field to form a headland. This is set in from the field limits by a distance calculated to allow the plough and power to be turned.

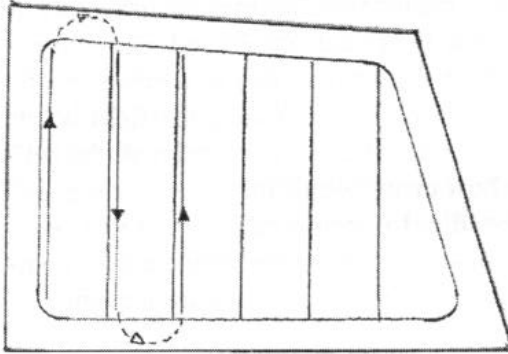
PLOUGHING - STAGE ONE



- A / MARK PERIMETER FURROW
C - TURNING RADIUS OF PLOUGH/POWER
- B / PARALLEL FIELD DIVISIONS - 2xM
APART
- N.B. FIELDS ARE SELDOM REGULAR
AND MAY NOT HAVE STRAIGHT EDGES

- 2) Furrows are made alternatively up one division and down the next. This usually has the effect of turning the earth the opposite way in alternate sections.

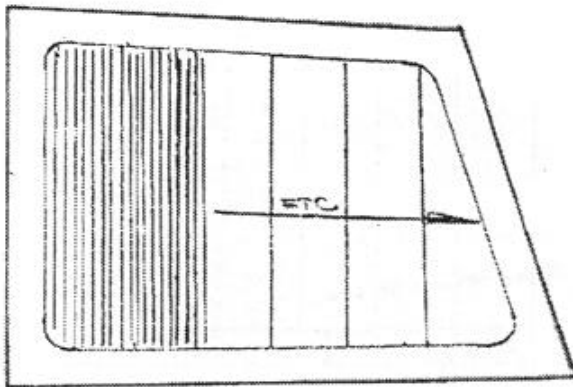
PLOUGHING - STAGE TWO



FIELD IS PLOUGHED UP ONE SECTION & DOWN THE NEXT

- 3) This process continues until all sections are ploughed.

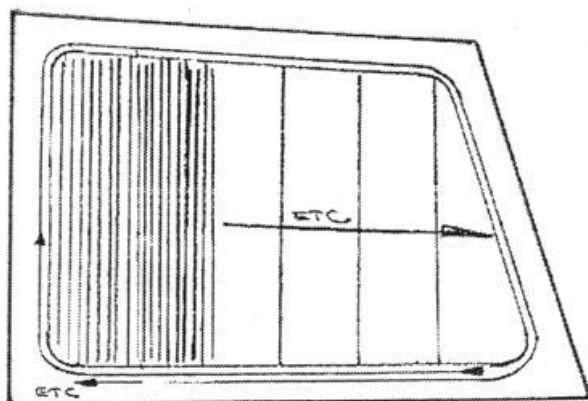
PLOUGHING - STAGE THREE



STAGE TWO TAKEN TO COMPLETION

- 4) A series of concentric furrows are made to reduce the headland width as required, either to allow access or up to the field boundary. The intention is to avoid making a furrow.

PLOUGHING - STAGE FOUR



HEADLAND IS PLOUGHED IN SERIES OF CONCENTRIC FURROWS

when the semicircle is made between adjacent sections. The tractor I used to drive had a clutch pedal on the left and two independent, rear wheel brake pedals on the right (these could be linked together). A hand lever throttle was to the right and a hydraulic lift lever to the left of the engine, plus the usual gear box (no synchromesh) and twin speed drive. There was a steering wheel of course, but the whole was quite daunting to a teenager without previous driving experience. No doubt modern tractors have automatic gearboxes, power steering, air conditioned cabs and computer control !

The procedure approaching the headland perimeter furrow was fairly complex, and the sequence important.

- a) Lift the plough at the headland furrow (looking behind from the tractor).
- b) As (a) takes the load off the engine, throttle back smartly to avoid tractor 'lift off'.
- c) Looking forward, return through the semicircle and align with next section furrow.
- d) Looking behind, lower the plough at the perimeter furrow and increase throttle setting accordingly to avoid an engine stall.

Sometimes a gear change was required. Failure to observe the above could result in either semicircular furrows or a tractor in the hedge or ditch.

With a horse and plough, more skill was demanded of the ploughman, but the horse knows what to do and when to pull harder. Both man and horse work as a team physically, and to a certain extent with little words of command, more a sort of telepathy. One advantage is the ploughman is behind the plough, so is always looking forwards.

Ploughing competitions are a popular feature of country shows. I strongly suggest modellers have a look to check regional variations and methods of accomplishing one of the oldest, most important and basic of agricultural practices.

Seasons

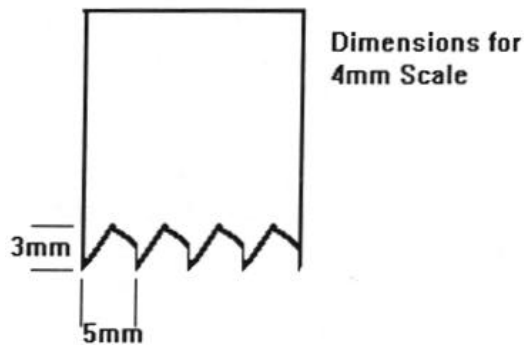
So when do farmers plough? It is all too common to see farming scenes that occur throughout the year, combined on a single model. The farmers year follows a fairly standard routine, but like all things, exceptions prove the rule. The purpose of ploughing is to turn the stubble of a harvested crop over and into the soil, in preparation for either further planting or a period of lying fallow; I think its called "set aside" under the E.U.

A dressing of fertiliser, either natural organic, or chemical can be applied at any stage before or during ploughing and cultivation.

After all that, the most common month for ploughing, is September.

How to model a ploughed field

The field is at its most modelogenic when it is partly furrowed, somewhere in stage three above. This gives a contrast between the colour of the underlying soil and any vegetation left. Apply a layer of slow set texturing plaster to the prepared landscape base (3mm thick for "00" gauge). Comb the moist plaster into a series of furrows using the same technique as when combing adhesive.



Plaster "Comb" to Reproduce Furrows

When the plaster has set, paint all over to represent the soil colour. Emulsion paint can be obtained in most colours, but white can be tinted with acrylic or other water based paints as desired. Apply appropriate coloured scatter to any non ploughed area to represent grass or stubble.

Note: A field is a large area, only the odd corner or edge need be modelled for the effect required. An acre is 4840 square yards, a ten acre field (by no means large), is 75ft square in 00 gauge, 7½ft x 110ft, the size of a small bedroom. For those who think metric, a Hectare is 2.471 acres.

Plastered

Finally, a plea! There are many kinds of plaster available, and all have a purpose. "Polyfilla" is a trade mark, the product is intended to fill small holes and cracks in walls. Plaster of Paris is most used with a cotton bandage to "set" broken limbs. It needs several layers and is heavy! It is intended to set quickly.

There are several plasters for wall finishing, ask any builders merchant. These have different adhesive qualities and final smoothness and hardness when cured. Again, they are designed for the job.

There are specific plasters designed to stay workable for some time, and to give texture. Try Set-Scenes Landscape Compound, or, at a pinch, Artex.

I strongly advise Modellers to use the product intended for the job. I'm sure a hospital patient with a broken leg would be upset if told ; "I'm sorry, we're out of Plaster of Paris do you mind if we use Carlite Browning?"

Many plasters are fairly versatile, but not many locomotive builders would write in their articles, "I did not have any brass or nickel silver, so rolled the boiler out of an old oil drum." I'm sure this will evince a flood of models, all made from old oil drums!

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