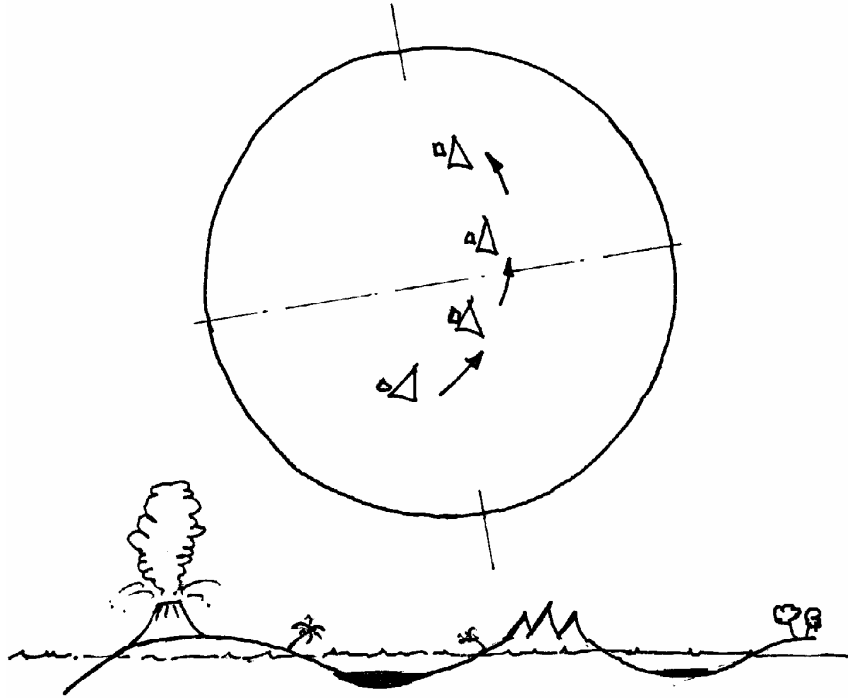


IN THE BEGINNING THERE WERE BASEBOARDS.... AND
THEY WERE WITHOUT FORM.

LANDSCAPE AND THE MODEL RAILWAY

Bob Alderman © 2005

The British landscape is the result of the whole of geological time and the subsequent influence of man on it.



A Brief History of Britain.

Some 450 million years ago what was to become Britain was down near the South Pole, present day Antarctica. At this time continental collision created mountains, these are now the Scottish Highlands.

A little later, in our drift across the planet, about 280 million years ago we just south of the equator, there was another mountain building event. The remains of these mountains can be found across Europe. Its effect on us can be seen in South Wales and the Mendips.

The final mountain building event that affected us was 65 million years ago that produced the Alps. Its effect upon us can be seen in the hills along the Dorset coast.

Throughout our drift northwards we have been slipping under the sea, re emerging with new sediments, located in the middle of a continent and suffering desert conditions, whilst all the time being subject to folding and twisting.

The results of all this have been subject to erosion; wind, rain, sun and glaciers have all remodelled the land to create the landscape we know today.

... and Man. In the last 4500 years has stripped the tree cover, fenced it in and covered it in concrete and tarmac.



Flood plain of the River Blithe nr Lichfield.



The Blackdown Hills from Ham Hill nr Yeovil. The Fosse Way crosses the centre of the picture.

The railways we model have been strongly influenced by the landscape. Like the early canals the railways choose the easy route through the landscape.

The Great Western route between London and Bristol was laid out by Brunel to follow a straight and level route, largely down the Thames Valley. As the skills and locomotive power developed so more difficult routes could be contemplated. The LSWR line to Exeter is known as the “high speed switchback” where a direct route was taken at the expense of gradients. Perhaps one of the boldest is the Settle and Carlisle line. The last mainline was the Great Central. Here the landscape was a lesser obstacle, as the engineers were able, for the first time, to call on major earthmoving machinery.



At Yeovil Junction, looking south towards the line to Weymouth. An embankment created for a link line that was never laid.



Nr Millborne Port, Dorset



Ais Gill Settle & Carlisle line.



White Birks Common Settle & Carlisle Railway.



A bridge near Somerton, the GW line avoiding Bristol Note this bridge is unusual as the embankment continues across it.



Detail of the bridge near Somerton. A succession of staggered arches – there's modelling challenge!

As modellers we follow in the same footsteps... but perhaps not. Ours is a reverse process. We create our railway first and add the scenery last.

Nevertheless our scenery should follow the original.

Look the British landscape, we have high hills and mountains and flatter rolling scenery. In the peak District we have high flat-topped hills, these are limestone plateaus perched on softer grits and shales. In Eastern England the rock, which can barely be called that in places, are newer. These are the erosion products of central Britain deposited by the retreating glaciers.

So our scenery should reflect the areas we model. Even if we only model between the boundary fences the local landscape will have some effect on our scene. The can be soil colour and the local building stone. The underlying structures and types of rocks, strong rocks or soft rocks, determine the shape.

Strong rocks allow steep sided cuttings, often bare rock. Softer rock and soils give shallow slopes in cuttings and on embankments.

So how do we recreate what we see?

I have two methods that I favour. They are similar, only differing in the “foundation” work.

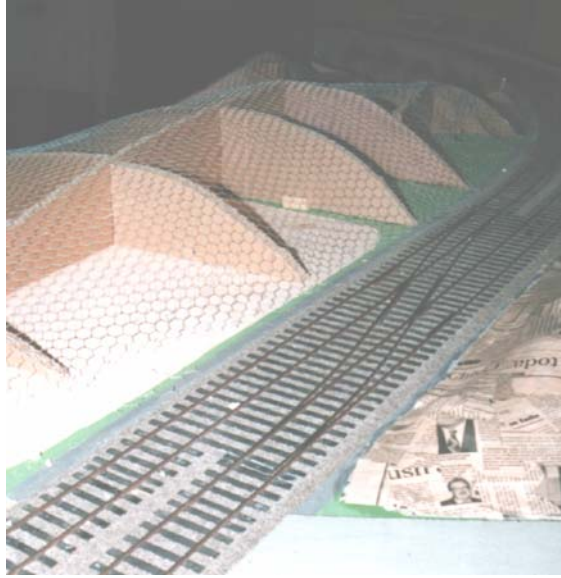
In the example shown the Mendip scenery is being reproduced.

My first method is to set out the shape of the ground by using formers, in card or plywood, the choice of material is largely determined by the scale of the model. Across these formers a latticework of thin card is stuck on. For a lot of this work a hot glue gun is an ideal tool, it as the advantage of creating an almost instant joint. Friends in Yeovil MRG have referred to this as “Bob bird nesting”!



A demonstration piece. It covers several different finishes. The initial form is from card strips, this is covered with newspaper. The newspaper is covered with Artex. The Artex can be finished in a variety of textures and responds well to acrylic paint for colour. The retaining wall is based on card and plasticard.

The second method is to substitute chicken wire for the thin card. This, I think, is more suitable where large areas have to be covered. Also the baseboard structure should be such that it can accept staples to hold down the wire.



Laying the foundations. Thick corrugated card has been cut to various profiles and covered with 1/2" mesh chicken wire.

Having established a notional surface I now cover it with squares of newsprint, about 2". I recommend "The Times" and "Financial Times". This is because of the colours, having stuck down one layer of white; the second layer can be clearly seen in the pink, or vice versa. I use watered pva adhesive, about 50/50 to fix the paper.



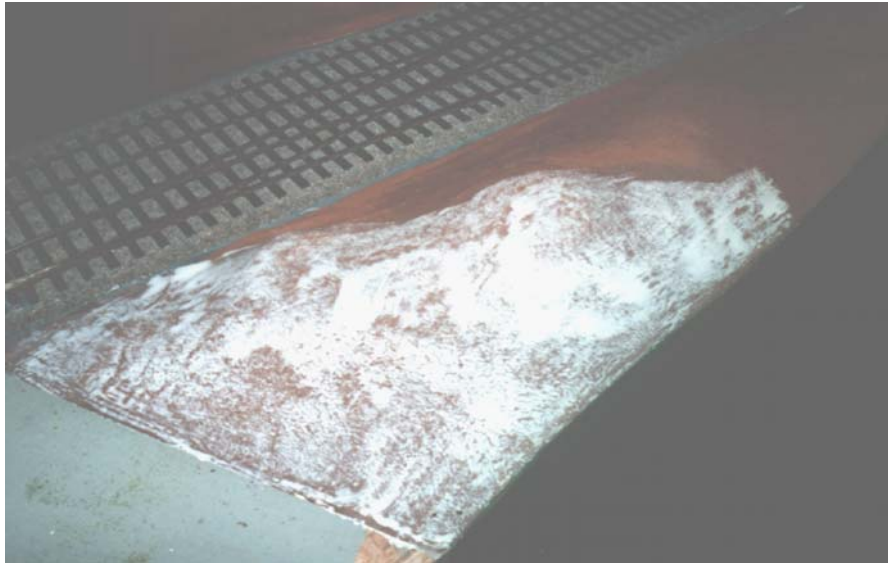
Laying the foundations next stage.

Once this is dry I cover this with Artex or its equivalent. I use a consistency that can be brushed on. I also add about 25% pva adhesive to the thinning mix to plasticise it. You can substitute emulsion paint of a suitable soil colour, for water to thin the original mix. This can dry considerably lighter than the intended final colour so painting it later may be better.



Artex-ed surface.

The Artex can be worked up with a brush to create various textures. I have heavily stippled areas where I was to have longer grass and used a lesser stipple for pastureland. Rock surfaces can be worked up too, more on this later. A helpful side effect of this stippling is that it helps hold thinned pva adhesive before adding the scenic scatter.



Adhesive sitting on the stippled surface.



The first application of scatter.



Building up the scatter, different greens, yellows and browns.



Structures like viaducts and bridges need to be in position before the land surface. A real reversal on reality!



Formers and netting as before.



Newspapers and Artex as before.



In this case the Artex has been finished in reddish brown to represent the soil cover of the area being modelled. Some say this should be green in case it gets knocked! I'm not so sure about that.



Grass in a multiple of textures.



The finished result with additional features.

Where I have created rock surfaces these have been built up of corrugated cardboard to represent the faces. In quarries these faces are often stepped, especially where harder stone is being removed. The small diorama was a practice for a larger Portland Stone quarry that will be one of the main scenic features of my own layout.

Here there are distinct strata. At the lower levels there are the freestone or high quality beds. Freestone means that the stone, once worked, can be built into its structure without reference to its original bedding in the quarry. Other stone has to remain in the same orientation as it was deposited. Above this are other beds the top one being known as "Roach". It is highly fossiliferous with noted long conical shells known as the Portland Screw. This can be seen in the Cobb at Lyme Regis. Above this is a band of chert or flint, seen as the blue-black layer and finally above this the dirt beds and soil cover.



These have been modelled by differentiating the beds as steps as in reality. The card substructure has been painted with the Artex mix. Some of the structure has been worked in with the brush whilst it is still wet. The remainder once it has dried. I have found that a stiff wire brush is particularly useful for creating the general horizontal bedding lines in the surface. The other lines between the major beds and the joints have been scribed in. The limestone modelled naturally tends to form blocks and it is the junctions between the blocks that the quarrymen exploit to remove the stone.

Casting a block of Polyfilla and cutting it up when set made the separate quarried blocks. The loose rubble is cat litter!

The various beds have been finished with acrylic paint and washes of poster and gouache paints. Different shades being used to emphasise the different beds.

Here it is in succession.



Stages of construction.



Card bedrock.



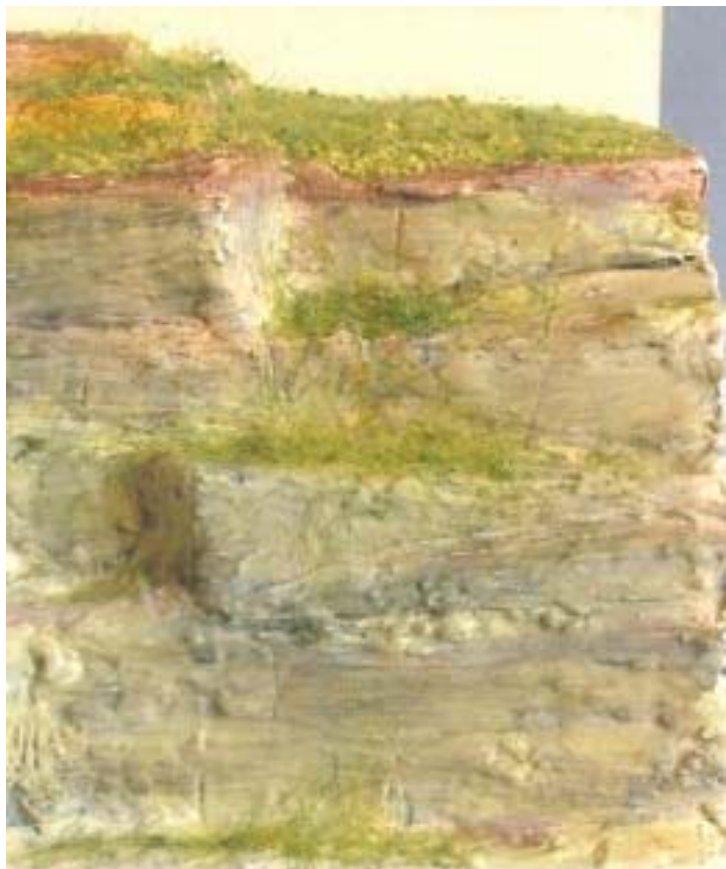
Newsprint cover.



Artex texturing.



Colouring with acrylic paints.



Grass texture.

On grass.

There are a variety of scenic scatters available, from dyed sawdust as Peco, to the ground foam from Green Scene and Woodland Scenics. The latter types are supplemented with other texture materials too. In addition there are fibres that can be “sprayed” on from Heki.

I favour the ground foam from either Green Scene or Woodland Scenics. The surface is prepared, as previously described, with dilute pva adhesive. The grass texture is scattered over the surface by allowing it to rain down from a height of around 6 inches (150mm). This gives an even spread. I follow with different greens, some brown and as we usually model summer scenes, some yellow. As the foam soaks up the adhesive I use a garden spray to mist water over the area. The adhesive then spreads more fully through each application of scatter.

Look across pasture and only from a distance does the colour look even. Of course this is actually true of a modern pasture as only a single species of grass is grown. But if it is not grazed or cut it will turn brown towards the end of the summer.

I have recently had some good results from following the foam scatter with the Heki fibres. These are puffed on from a plastic squeeze bottle. The puffing action creates a small static charge that causes the fibres to stand on end.

This is only an outline of the process. It is something best tried and adapted to your personal style.