



could be too wet to cut the grass which rapidly reaches a length that clogs the mowers.

During the last two years we have bought a couple of wheeled trimmers which help us cut longer grass. This is particularly helpful at the Incline and Snibston No 3 sites, as we cut the grass there less frequently than we used to.



Control of scrub

During the last couple of years we have been encouraging the growth and regeneration of the gorse bushes in the Gorse Field. There has been a lot of progress in some areas. We will continue to focus on the gorse bushes that are swamped by brambles. Clearing these areas also allows the grass to grow around the bushes.

We are eliminating the bracken and breaking up the large concentrations of brambles. Not to eradicate the brambles, but to create paths through them for the benefit of birds, animals and blackberry pickers.

We are also trimming the brambles, nettles and bracken on the sides of the paths to create wider grass paths. Wider paths will reduce the wear on the central areas.

Unmanaged Areas

An important element of our overall woodland management strategy is to deliberately leave parts of the Gorse Field and Califat Spinney in an unmanaged state. Likewise the upper banks of the Incline cutting and the lower banks of its embankment.

of woodland, about 100 metres of ditch was hand dug by our hard working volunteers. This is another of the "unseen tasks" that visitors rarely notice have been completed, only the consequences of not doing them.

Grass Mowing

Letting the grass grow long gives flowers a chance to grow and seed, as well as providing a habitat for small creatures. This has to be balanced against the needs of our visitors. We feel that an important feature of our sites is that visitors can walk through them in normal shoes at any time of the year. Our volunteers contribute 3,000 hours a year on preserving and maintaining our heritage and visitors are important. Monitoring statistics suggest that over 13,000 visitors walk through our sites each year (10 times the recorded number at the mill). Our main paths are mown regularly, often weekly, during the summer. This is because we only have two cutting windows per week, Wednesday and Friday mornings. We therefore mow regularly as the following week or two

Midland Patterns - Main Street

Midland Patterns were based in the former Primitive Methodist Chapel in Main Street. The firm supplied wood patterns to iron foundries for the manufacture of cast metal products.

The pattern maker converted a two dimensional design from the drawing board into a three dimensional replica. The foundry placed the pattern in a steel box that was filled with special sand that was rammed tight. The sand was treated to make it rock hard. The pattern was then removed and hot, molten metal was poured into the space.



Obviously, some castings were very complicated. Imagine a car engine block with induction and exhaust ports and lots of other protrusions, making it necessary to have removable ports, dovetailed on, to allow the withdrawal of the pattern from the sand.

The wood pattern is made using a special ruler that is slightly larger than normal, this allows for the contraction of metal while cooling. Where a casting is to be machined extra metal must be left on to ensure it can be milled to a precise fit.

Some work in the old Swannington Chapel may surprise some:
CONCORDE airliner - the metal moulds patterns for its tyres.

ROLLS ROYCE - the jigs for producing fuel pipes on their RB211 aircraft engine
BRITISH GAS - pressure reduction pipes
FOOD PROCESSING - canning industry machines
GO Karts - wood bodies
RACING YACHT - had to remove part of the front of the building to get the yacht inside for repairs.

We once turned a six foot six inch (i.e. door height) diameter heavy wooden ring on our lathe.

To produce a large pattern and core boxes could use 40 to 50 separate pieces of wood and would entail weeks of work.

One customer wanted half of a large outer casing for a bearing. We built a four foot diameter circle, with curved segments, like a brick wall, then turned it on the lathe before cutting it in half like a half moon. One half was scrap, but it made a wonderful rocking boat for my kids!

Colin Baker



Editor's Note - Colin made the post mill model that is on display at Hough Mill.