



Creating the ANGRMS Dioramas

The Australian Narrow Gauge Railway Museum Society (ANGRMS, www.angrms.com.au), operates weekly steam trains on the Durundur Railway about an hour from Brisbane. It has a large collection of artefacts from Queensland's early sugar mill railways (tramlines) but the 'museum' is small and located some distance from the cane fields, thus lacks a context for many visitors. The dioramas, showing representative cane railway equipment, help provide that context.

This note for museum visitors describes how the dioramas were created. Of necessity a certain amount of 'artistic license' has been employed in modelling to compress the scenes and add life to what otherwise could have been static displays.

The steam diorama features wholestick cane trucks and a steam loco, complete with open cab and diamond stack, as it might have appeared in the 1930s-50s. Rows of mature cane, an old tractor, a draft horse and the portable track sections help set the scene while the backdrop shows some of the locos on the ANGRMS rip track awaiting restoration.

The second diorama is more modern, featuring cane fields, a mechanical harvester and several loaded cane bins behind a model of a Jenbach diesel. The diorama's backdrop shows a two stack sugar mill in the Mackay area.

Cane trains in the Steam Era: hand cutting after burning and whole stick wagons...

This diorama is A4 size with an A4 backdrop image and uses standard picture moulding with a foamcore board insert. The backdrop is screwed to the base with angle brackets and was manipulated in Photoshop, printed on a photo-grade inkjet printer and laminated for protection.

The models are 'HO', ie 3.5 mm to the foot, running on 9 mm track. While this means that the track gauge is roughly 2' 6", rather than the 2' of the prototype, it is close enough to be realistic and allows modellers to use commercially available track and mechanisms. These are supplemented with scratch-built models—models constructed from brass, wood and styrene—where commercial items are not available.



The scenery base is 15 mm expanded foam board glued to the foamcore board with white glue. It's been sculpted with a saw-edged bread knife to create a track profile with a noticeable height difference between the 'main line' and navy tracks.



The 'hard shell' surface is a mix of patching cement (plaster) and coloured (Todd River Sand) flexgrout. Water colours were then applied with a sponge while ground cover and other details were fixed with white glue or epoxy. The cane is a mixture of fine broom straws coloured with gloss acrylic paint for a 'growing' look.

CaneSIG: Modelling Cane Railways

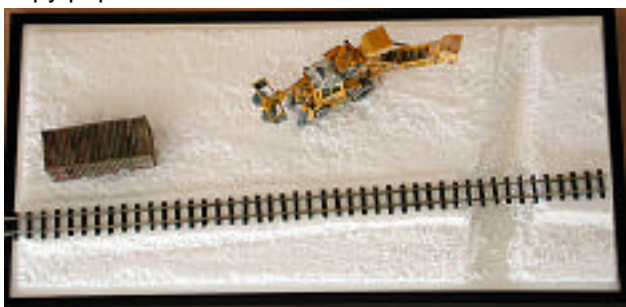


A close up of the modified Baldwin steam loco and an unpainted wholestick cane truck. The 'new' cab is the same size and basic shape as the original but is open to the tropical breezes. Models and workman were hand-painted with flat acrylic paints.

Queensland cane industry: mechanised harvesting, cut billets of cane transported by rail and truck to modern sugar mills for domestic and overseas consumption...



The diesel diorama has the same depth as the A4 steam diorama but otherwise is A3 in size. The sizes were chosen for ease of printing the backdrops and shipping. Disassembled, the dioramas fit into photocopy paper cartons.



The 15mm foam base (above) has been sculpted to leave the track raised above the field to represent a modern cane railway track profile and cut down for a small stream bed. The hard shell plaster mix was brushed on and coloured as on the steam diorama.

The harvester, a hand-built commercial model, is located behind and lower down than the track to prevent it over-shadowing the realistically scaled but diminutive train. The tool shed is a HO container set on sleepers and weathered. The door on the far end is open but not enough to see inside. An old tire, a 'wheelie bin', weeds and the workman complete the mini-scene.



The locomotive, modelled after the first Australian-built diesel loco used in the cane fields, is scratch built from styrene with a 'N' gauge mechanism.

Piles of wooden sleepers, spilled cane billets and weeds litter the front of the diorama. The dry stream bed is the final resting place for a wrecked cane bin (an older 4 ton bin, unlike the 6 ton bins behind the loco), an old tire, etc. The hand-built bins were commercially available in Brisbane until recently.



The bridge is constructed of two 'steel I beams with welded spacers' (styrene shapes) set on wooden supports (narrow gauge sleepers). The prototype for this bridge is much longer and set on concrete piers with the rail welded to the I beams.

The models on both dioramas were hand-built from scratch or kits by local modellers (Jenbach and cane bins by Bob Dow, the harvester by Tom Badger, and the remainder by the author). They have now been epoxied in place for easy of movement and cleaning at the museum.