Bundaberg Fowler Steam Locomotives

Background

The products of John Fowler & Co (Leeds) Ltd were well respected for their robust design and good steaming qualities and eight of the twelve steam locomotives built by Fowler between 1933 and the end of construction in 1936 were supplied to Queensland Sugar Mills.

In 1935, the last John Fowler 0-6-2 tanks were supplied to Kalamia Mill, Ayr (Airdmillan, JF 20764) and Pleystowe Mill, Mackay (No 8, JF 20764). An 0-4-2 Tank (JF 22752 of 1938) was subcontracted to Hudswell, Clarke & Co Ltd (HC 1705 of 1938) and supplied to South Johnstone Mill as their No 5.

In the post Second World War period there was still a demand for steam locos despite the potential for dieselisation. The Bundaberg Foundry Co Ltd (Bundaberg, Queensland), an established general engineering company to the sugar industry had repaired steam locomotives and constructed eight Bundy Fowlers in 1952 and 1953 using designs licensed from John Fowler.

The seven 0-6-2T and one 0-4-2T locomotives were based on the design of the John Fowler 0-6-2 tanks 20763 and 20764 of 1935. Major design changes included welded rather than riveted side tanks, roller bearings and similar post-WWII engineering improvements. The 0-6-2 tanks weighed approximately 20 tons compared to 16 tons for the 0-4-2 tank.

They were introduced in 1952 and it is a credit to their rugged design that most had reasonably long working lives despite the dieselisation of the industry. The last three were finally withdrawn from cane haulage in the Bundaberg area in 1979. All eight locomotives still exist, several are still operational and in regular use by preservation societies and the tourist industry.

During August 1997, No 5 helped to celebrate Moreton Mill's centenary, returning to active cane haulage for one week that year and in several subsequent years. In 2000 it travelled to many of Queensland’s sugar mills filming a TV special, Bundy’s Last Great Adventure. Although it’s normally the operating steam locomotive for ANGRMS Durundur Railway (Woodford) it was recently withdrawn for maintenance.

Number 3 is one of two steam locomotives on ASCR’s Botanic Gardens operation (Bundaberg).

Nipper (BFC 3 of 1952, 0-4-2T) and Dobbin (BFC 6 of 1952, 0-6-2T) double head into Qunaba Mill with a full rake of cane bins, 1977. Ross Driver photo.
and in 2002 number 1 was also donated to them for restoration. Numbers 2 and 6 are in regular use operating the Ballyhooley (Mossman) tourist trains and number 7 has been restored to operating condition at the Coal Creek Historical Village in Korumburra, Victoria. Numbers 4 (Victoria) and 8 (Queensland) are both slowly being restored by private owners. The table below shows the dates, name and/or number used at each mill, and the current location and name for each of the eight Bundaberg Fowler locomotives.

<table>
<thead>
<tr>
<th>Number</th>
<th>Type</th>
<th>Mill Ownership and Name</th>
<th>Current Location</th>
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<tbody>
<tr>
<td>BFC 3 1952</td>
<td>0-4-2T</td>
<td>Mourilyan Mill, Innisfail: No. 8 Millaquin Mill, Bundaberg, 1966: 8 Qunaba Mill, Bundaberg: 6, Nipper</td>
<td>Australian Sugar Cane Railway (Bundaberg), 3, operational</td>
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<tr>
<td>BFC 7 1953</td>
<td>0-6-2T</td>
<td>Binga Mill: Kolan Boyd’s Antiquatorium, Bundaberg, 1975: Kolan Coal Creek Historical Village, 1997</td>
<td>Coal Creek Tramway, VIC, Count Strzelecki, operational</td>
</tr>
<tr>
<td>BFC 8 1953</td>
<td>0-6-2T</td>
<td>Proserpine Mill, Proserpine: 8,6 J Hawkes, Airlie Beach (on loan), 1978 Proserpine Mill, Proserpine, 1980</td>
<td>Graham Chapman (Murrumba Downs), 1986-</td>
</tr>
</tbody>
</table>

Collections and Preservation
Museums must constantly balance the desire to collect every example of a particular item against its availability in other collections and their ability to preserve/restore the item. To this end museum collections policies defines what and how they collect materials, how they store materials, and under what conditions they attempt to restore an item to its original condition.

Obviously the availability of appropriate finances has a bearing on policy implementation but a
museum can usually find the monies to implement a well thought out collection policy.

The policy will first of all state the objective for the collection—in other words, what the museum is hoping to accomplish in the longer term with regard to the community that it serves and the type of material being collected. A state museum, for example, might have preservation of the social, technological, cultural and political history of the state and its people as its objective. On the other hand a community-based, museum might restrict itself to just the history of a single family, institution, industry or building. Both institutions will likely have an educational role and community involvement as secondary objectives.

The policy will then go on to detail how items will be collected and catalogued, stored and preserved. Depending upon the size of the institution, the policy document may be just a few pages or several volumes, but it should always provide enough detail to guide staff (professional or volunteer) as they carry out their jobs.

Unfortunately, many specialised or local museums begin collecting before they have articulated their long term objectives. While this may save one or more items that were in immediate danger of being lost, the lack of policy can lead to an unbalanced collection, a field of rusting hulks or community hostility. However, too bureaucratic an approach can be equally dangerous.
Restoration

Dieselisation occurred fairly rapidly within the Queensland sugar industry, but a number of far-sighted individual and groups managed to acquire a range of the steam locomotives that operated within the cane fields. The initial priority may have been to save these locomotives from the scrap heap, but for many the ultimate goal was to return them all to operating order, leading to a range of public and private museums and tourist operations in Queensland and interstate. The Australia Narrow Gauge Railway Museum Society (ANGRMS) at Woodford has the largest
collection of locomotives (including the John Fowler 0-6-2T *Airdmillan*) and other artefacts from the sugar cane railways but seldom has more than one steam locomotive operating at one time. BFC 5 is the pride of their collection and has both returned to the canefields on a number of occasions.


*Speedy* (BFC 6) in new colours on the BallyHooley Steam Railway, Port Douglas, 2005. BSR photo.
BFC 5 drawn by Jim Fainges, 1997. Scale approximately 3.5mm = 1’.

BFC 5 west of Gordonvale on Mulgrave’s Little Mulgrave line during the shooting of *Bundy’s Last Adventure*, 2000. Martin Wiltshire photo.

occasions and toured many of Queensland’s sugar mills during the production of a travel-oriented commercial TV program.

The Australian Sugar Cane Railway (ASCR) has a much smaller collection of locomotives, including two Bundaberg Fowlers, and either has or will restore all to full operating condition.

Mossman Mill conducted mill tours long after most other mills had discontinued them because of the insurance costs. The mill also operated two Bundy Fowlers, one of which had operated on the Mossman Mill lines but had been sold and then repurchased for its tourist train. When the mill discontinued the tourist train it was operated as a commercial venture with variable success but has recently (2005) reopened with the two locos.

Interestingly, while some of the Bundy Fowlers have gone interstate and others are in private hands, neither the Queensland Museum nor the Australian Sugar Industry Museum (Mourilyan) have examples of these locomotives.

Restoration of a steam locomotive is a major undertaking and can easily cost several hundred thousand dollars, especially if asbestos insulation must be removed or new boilers and other major components must be fabricated. For this reason many locomotives are restored cosmetically for static display rather than full operation.
Whatever the level of restoration desired, it is very important to settle on a target date and to collect as much information as possible to ensure that the finished product is as accurate as possible. Typically projects restore a locomotive to the same condition, and appearance, that it had when first introduced into the cane fields or as it appeared at the end of service. The ASCR restorations, for example, include one ‘as new’ locomotive with others representing various eras in local sugar cane history.

Acknowledgement

This document is an update of Ken McHugh’s 2001 presentation Bundaberg Fowlers: Then and Now, subsequently posted on the web as a stand-alone presentation. Some photos came from that presentation, others are from the Queensland sugar cane railway photographic collection accessible via the CaneSIG web site. The Background section was adapted from an article by Greg Stephenson, January 1998 in the 009 Society newsletter and reprinted in the Australian Narrow Gauge Railway Museum Society’s DRB 257, August 2001. pp 8-9. The table was adapted from the table accompanying Greg’s article and from Browning, John; Preserved Australian Sugar Cane Locomotives, Light Railway Research Society of Australia, http://lrrsa.org.au/LRR_SGRc.htm, downloaded 22/4/05, 3:00 PM. John also provided additional details and checked the text for accuracy.