

# STEAM LINES

NORTHERN DISTRICTS MODEL ENGINEERING SOCIETY (PERTH) INC.

May—June 2008

## AMRA Exhibition 2008 by Milton Smith

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The first thing that needs to be said about this year's show is that it was a success because a large number of members contributed in a variety of ways.

The major task was the building of the new Ground Level Portable Track. This was designed by Ken Austin, but the building of it was achieved by a dedicated group of members, including Paul James, John Shugg, Clive Chapman, and Andrew

Above: Ed Brown on duty giving rides on the new portable track. Photo: Milton Smith

Manning. The Society owes a particular vote of thanks to Ian Huxtable for the extra work that he put in to ensure that the track was ready by the Exhibition. Ian did quite a lot of machining at home.

*(Continued on page 2)*

CALENDAR OF EVENTS			
<b>Public Run Day</b>	Club Track Site Vasto PI, Balcatta	11:00 am—3:00 pm	Sunday 29 June
<b>General Meeting</b>	Club Meeting Room Vasto PI, Balcatta	8:00 pm	Friday 11 July
<b>Public Run Day</b>	Club Track Site Vasto PI, Balcatta	11:00 am—3:00 pm	Sunday 27 July
<b>General Meeting</b>	Club Meeting Room Vasto PI, Balcatta	8:00 pm	Friday 8 August

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## May General Meeting

The May General Meeting was held on Friday 9 May 2008 at the Society's meeting room commencing at 8:00pm, chaired by Milton Smith.

The full Minutes of Meeting are enclosed with Steamlines as a separate Supplement for members. Some highlights of general interest are reproduced here.

### Model Engineering:

**Clive Jarman** displayed two 5" Gauge Bogies (with brakes) made from castings acquired from Queensland. Bearings are needle rollers, the inner side of each bearing being sealed with an O Ring.

**Ken Austin** displayed Eccentrics and Straps for his Burrell Traction Engine.

**Milton Smith** displayed Stainless Steel clamps for super heater tubes.

**John Haggarty** displayed his valve links, wire cut by Ron Collins.

**Paul James** showed die blocks wire cut by Ron for Paul's Heilan Lassie.

The formal meeting closed at 8:45pm, then after tea and coffee a DVD provided by Ken Austin was screened on "Hobby Run Amok" featuring Tom Millers' private 7½" Gauge track in Oregon USA .

## June General Meeting

The June General Meeting was held on Friday 13 June 2008 at the Society's meeting room commencing at 8:00pm, chaired by Ken Austin.

New members Paul Arney, Ron Bradley & Joan Bradley, Les Harris, Nigel Mammatt (re-joining) were accepted by the General Meeting with a show of hands. Also, new member Nigel Sales who was accepted at the May Meeting. Welcome to the Society!

### Model Engineering:

Visitor **Richard Turner** showed the wheels he is constructing for his 2" scale traction engine.

The meeting closed at 9:15pm and members enjoyed refreshments and discussion.

## Work in Progress

One of the highlights of the monthly General Meetings is the display of member's work in progress during the Model Engineering part of the meeting — after all, that's what the Society is about.

Why not bring along something from your workshop: part of your current project, a tool or jig you made, or something useful you bought. Share it with us all!

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## AMRA Exhibition 2008 (cont)

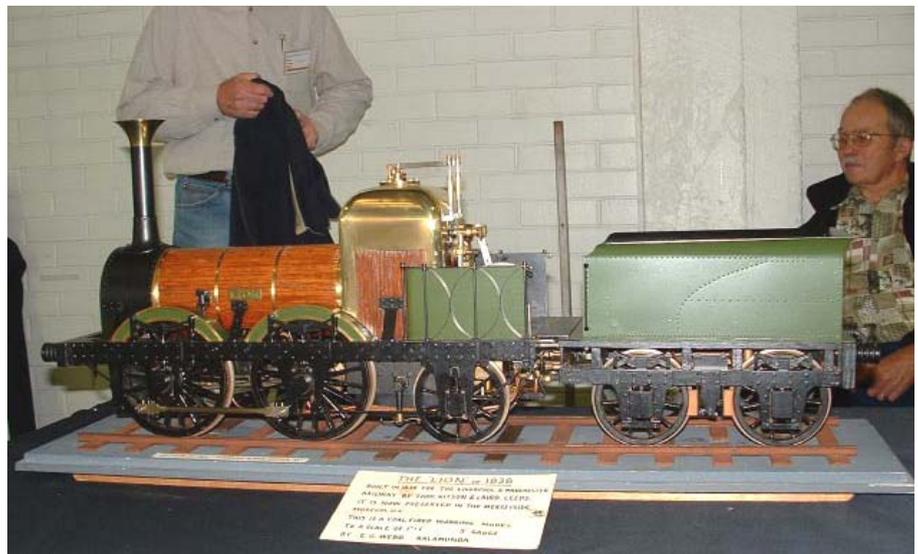
by Milton Smith

*(Continued from page 1)*

The jigs were made by Ken Austin and Jim Clark. I hope I have not left any member off the list of workers. The track proved to be easy to manoeuvre and to assemble, and gave a very smooth ride. It looked good too.

Another particular vote of thanks must go to Steve Reeves who for several years now has been responsible for our display and liaison with AMRA. There is a lot of ringing up and checking to be done to make sure that there are members rostered to provide the necessary staffing. All the jobs are important. It was good to see an enthusiastic band of members doing duty.

Quite a lot of interest was shown in the loco pulling the train. Thanks here to Steve Reeves and Ian Huxtable in the matter of riding cars—particularly the anti-tipping rail which worked a treat. It is amusing to have to deal with the question "Where is the motor?"



Above: Tony Jones on the display stand looking after a fine model of "Lion". Photo: Milton Smith

This year's display at AMRA created much interest, particularly with old railwaymen. The financial results were also quite pleasing.

**Milton Smith**

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## President's Report for June

by Milton Smith

**RAIL BRIDGE** — I think that the painting of the bridge in heritage green has now been completed by Paul James and Clive Chapman. The checker plate is in place, and only needs the addition of some angle cut pieces to finish the job. It looks good. Again this was a bit of a team effort, with Ian Huxtable taking the checker plate down to a local business for cutting.

**MEMBERS HEALTH** — Ron Date recently became seriously ill and a few weeks ago a letter was sent out to him acknowledging his work for the Society over the years, both as a member and as President. Unfortunately Ron passed away on 16 June.

It was during Ron's presidency that the club house was built and he was the project manager. He did a good job. Pretty well all the welding on the building was his work. Many other pieces of his welding are also around the track site. Our thoughts have been with him and are with his family. Tributes to Ron appear on pages 4 and 5.

**MEN IN SHEDS** — The major task that has happened in this project by the City of Stirling has been the making of a complete survey of the BMX and NDMES sites to locate where the current services are and to help them determine where additional or new services need to go.

**GROUND LEVEL TRACK** — Site works and tree surgery are soon to commence. The turntable is now in position and looks good. Tony Jones, George Palmer, John Hudson and John Shugg have been seen in the area. Some work is in progress attending to the alignment of the track(s) to the steaming bays.

**BIRTHDAY PARTIES** — After a lull, these seem to be coming on apace. One has been organised for 22 June, at pretty short notice. There is another on 6 July from 2-4pm, and another is booked on 10 August also from 2-4pm. Your assistance would be appreciated.

**Milton Smith, President**

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## Some Recent Items of Interest

Welcome to all our new members, including our first family member Joan Bradley.

Things are happening quite quickly at our grounds:

- The coach should be off site in the next two weeks.
- Earthworks are well underway for the Ground Level Track and new vehicle path, this work will continue for a couple of weeks more.
- A large amount of rubbish is being removed from site to the dump. The small shed will be removed.

- Tree pruners will spend 2 days onsite during the 1st week of July pruning and removing troublesome trees.

The price of steel is due to increase by up to 75% in the next week. Ken Austin and I have committed the Society to a purchase of \$2,000 of track material ahead of the price rise. This will give us a further 132m of track. We will seek member's approval at the July General Meeting.

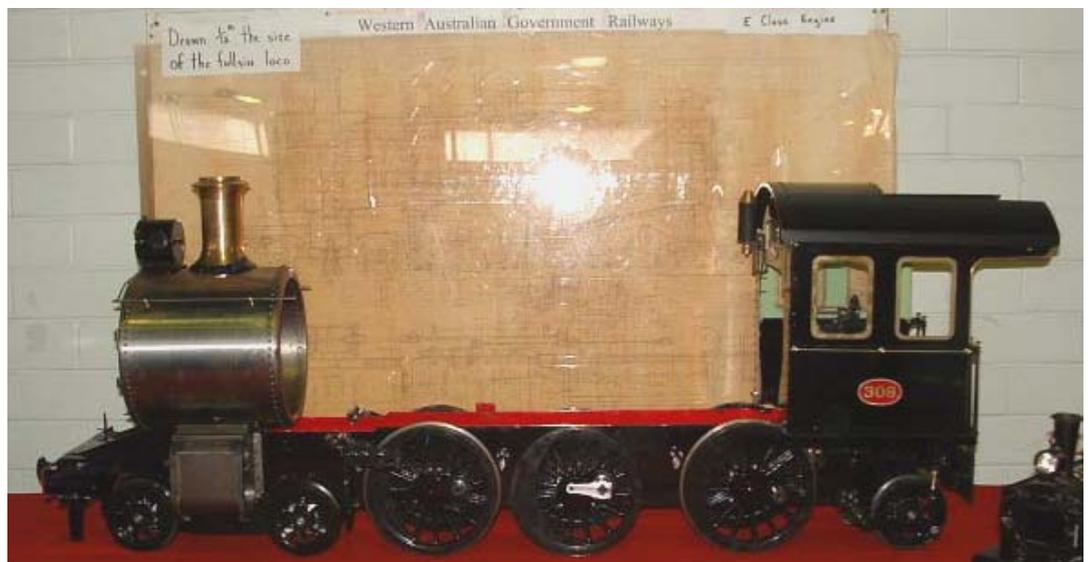
**Andrew Manning, Secretary**

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## MORE FROM AMRA 2008

Right: One of the two fine scale WAGR E Class locos being built by Ed Brown and John Haggarty.

Photo: Milton Smith



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## Farewell Ron Date 1935—2008

Ron Date was a great club man, who worked tirelessly for the NDMES whether on construction projects, grounds maintenance, or building locomotives and rolling stock to support our run days — and he gave up his interest in golf to do all this!

It was Ron's leadership from the front that kept us going building our clubrooms over the long 3 years plus of that project. He was President of the Society during the bulk of this period, and remained on the Committee until 2006.

He was able to overcome what seemed to be very difficult or complex tasks through his ability to simplify or innovate. He was not put off by the size of a task — he would just make a start and keep on going. His actions and his leadership encouraged other to join in and we completed many projects that way.

Examples readily come to mind — welding the footbridge railings and stairway into position, also the replacement of the main load bearing ties on the elevated railway, welding in all 680 or more of them. These were projects that took many months of work.

On recent run days there would often be three of his locomotives hauling passengers on riding cars that he had constructed, one set painted with animals.



Above: As we knew him: Only recently completed, "Tsetsefly" is readied by Ron for a Birthday Party booking on 18 December 2005.

Below: A familiar scene in the steaming bays on run days: Ian Huxtable (left foreground) and Ron Date (right background) preparing three Ron Date built locos for the May 2007 run day.

Photos: John Shugg



Ron was always available to help others to get a job done or to advise a member on how he should go about a task.

Ron's interests were not restricted to NDMES matters; he was a keen ballroom dancer, participating in two or three sessions a week up until a couple of months ago. He was also a keen bird watcher and loved touring. In recent times he was able to travel overseas and thoroughly enjoyed himself in Thailand feeding elephants and riding a motor scooter into the countryside. When he was fit, Ron would also drive for Meals on Wheels on a voluntary basis.

Ron's sense of humour, his work ethic, hands-on leadership style, and most of all his friendship will be sadly missed by all of us at NDMES.

**Andrew Manning**

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## A Personal Tribute to Ron Date

by Jim Crawford



On another day, I complained to Ron about the displacement lubricators on “Bushfly” being over generous in oil delivery. Thinking that he would just tweak the regulating valves, I was amazed to find, next time I saw the loco, that it sported a newly built adjustable mechanical lubricator. It certainly did the trick.

Ron was not a builder of museum-type models. His models were built to work and work they did, very reliably. On his own admission, they may not have been the prettiest machines on the track, but they would always hang in there with the best of them.

Just before he became ill, Ron was thinking about his next project. Another steamer was not on the agenda, due to the ever-increasing cost of materials. He was developing ideas for an IC engined "diesel" locomotive. The motor type, already on hand, suggested that an 0-6-0 would be appropriate. His aim was to have a loco for Club use, that would be a good hauler on our grades and be instantly available for traffic.

Sadly, it was not to be.

**Jim Crawford**

I spent many pleasant hours with Ron, either in his workshop or just drinking coffee and solving both the world's, and model engineering's, problems.

He was surprisingly well read and had a great admiration for early engineers, inventors and artists. Among his favourites were Archimedes and Michelangelo and he occasionally loaned me relevant books covering the works of these men. Usually, upon returning the books, we would end up in a lengthy discussion of the subject matter which sometimes resulted in my being late to collect ‘SWMBO’.

I found early on, that you only had to suggest an idea to Ron and if he thought it had merit, it would suddenly materialise. He had been having problems with “Bushfly's” steaming capacity using gas firing. We talked about possible solutions and a smokebox water pre-heater was mentioned.

Not thinking any more about it, I had a call from him a few days later, to say that he had fitted a coil in the smokebox and it seemed to work fine. The concept was well proven on the next run day.

Above: Ron driving his favourite loco, his NSWGR 3246, named "Emily", in the March 2006 Loco Efficiency trials at NDMES. Photo: John Shugg

Below: Ron at one of his last running days, on 3246 at the 2007 NDMES Christmas function Photo: Milton Smith



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## The "B.E.W.A.T Bogie"

by John Shugg

Need a simple bogie, for either 7¼ inch or 5 inch gauge passenger cars? A "rattling good fit" is the secret to success and that applies particularly to full size N.G. mining or sugar industry skips, used on indifferent tracks. No springs, honest weight!

The 1980 design-name derives from the initials of the bogie's two designers, one, Brian, was a materials handling expert for the mining industry, the sugar industry and so on. The other contributor, Tony, then the President of Western Districts Live Steamers Co-op at Fairfield in NSW, was a time served apprentice mechanic in the years just after WWII ended, working on tractors, steam traction engines and road transport vehicles, in his father's business in distant Yorkshire. Tony certainly knew his stuff.

The design requires roller bearings to be recessed in the wheels, a "dead axle" to keep the wheels "in gauge" and a low level skid bar to hold the side frames together.

A low centre of gravity and a very flexible structure are the specifications needed to ensure the bogie wheels (of any vehicle) stay on the track, and the design ensures this feature is met, without springing.

Braking is by compressed air. If you prefer it, with some modifications obviously necessary, a vacuum

application could be arranged. The cast iron air brake cylinders, bolted to the side frames, pushed out a pair of 16 mm dia. Stainless steel rams with aluminium shoes onto the wheel tread, the thrust being set on the axle centre line.

Circlips and Locktite® were originally used to retain the bearings within the wheel recesses. One variant of the design evolved fairly quickly, steel wheels!

The MK II version of the design had steel wheel sets with a 1" nominal bore pipe welded to the backs of the wheel pairs, the pipe being turned to the required 6¾ inch (171.45mm) back-to-back dimensions. Also large washers were MIG tacked onto the wheel, retained the bearing within the recess in the wheel, to eliminate the cutting of circlip grooves. For some strange reason on my cast iron wheel sets the flange widths were machined to fine scale dimensions, more or less. The design concept could lend itself to 5" gauge bogies. Just reduce the width dimensions to suit, but keep the between-centre-distances for the axles to about 1.5 times the gauge.

To save more typing, the photo should make the picture a little clearer... the bogies now sit (without brakes fitted) under the dump truck Tony Jones has built for NDMES.

**John Shugg**



Left: One of John's BEWAT Bogies. Pictures of Tony Jones' Dump Truck using these bogies appeared in the last issue of Steamlines.

Photo: John Shugg

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# 7<sup>1</sup>/<sub>4</sub>" Rail Construction Report

by Tony Jones

The first real traffic ran on the 7<sup>1</sup>/<sub>4</sub>" rails on Sunday, 13 April, the club day. We used the dump truck to move a lot of surplus sand in the steaming bay. It coasted down the down grade with no problem at all.

On Saturday 3 May we welded the three joins on the circular rail for the turntable. It has now been ground flat and true. On the previous Tuesday we laid the circle and trimmed the ends and drilled and fitted all the Dynabolts. All that remained until the next session was to check and pack up level. Since then we have rolled the turntable into place and grouted the rail.

The pictures on this page tell more of the story so far.

**Tony Jones**



Above: Steve Reeves ready to shovel sand in the steaming bay.  
Left and below: Tony Jones' dump truck in action.

Photos: Tony Jones



Left: Tony Jones and George Palmer grouting the turntable track.  
Below: Tony working on a section of track up to the steaming bay.

Photos: Milton Smith



## POSITIONS VACANT

**Grounds Maintenance** — The leaf fall is continuing to build up with the onset of winter. Also weeds and undergrowth are sprouting with the good rain. It would be of great assistance if members could come down for an hour or so and help rake up and move the litter. We have all the kit you will need, just bring your own gloves. Come down any Saturday or Tuesday morning.



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## Out and About



Left: Paul James and Clive Chapman at work renovating the crossover bridge.

Photo: Milton Smith



Left: The tireless work crew (aka old buffers) at morning tea.

Photo:  
Milton Smith



Above: Nigel Sale and his wife Pauline. Nigel has just joined the club, but his 7 1/4" gauge loco is still on its way to WA .

Photo: Milton Smith



Above: Cathy McCafferty (nee Crawford) and George Palmer, seen at the NDMES model display at AMRA on Monday 2nd June 2008. Photo: John Shugg

## NEWS ITEMS WANTED

As always, I need more items for Steamlines. How about a few words and photos showing your current project? Or an article about somewhere you've been? Or a short article on how you solved some workshop problem?

It's your newsletter! So if you can help, please email your material to:

[jimclark@hardwareandsoftware.com.au](mailto:jimclark@hardwareandsoftware.com.au)

or post c/o NDMES Secretary,  
PO Box 681, Balcatta, WA 6914

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