

December 2007

## Sandgroper's Gathering

by Milton Smith

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The 4th Sandgroper's Gathering was held at the South West Model Engineers Association track site at Forrest Park in Bunbury over the weekend of 10-11 November. It was also the SWME's 25th anniversary celebration.

Above: Gathering at Forrest Park — Clive Jarman with his ever-popular Ransomes, Sims & Jeffries traction engine. Steamlines Editor Jim Clark taking photos (and making notes for his own Allchin traction engine that he is building). Clive Chapman in the background.

Photo: Milton Smith

*(Continued on page 3)*

| CALENDAR OF EVENTS (2007 into 2008)   |   |  |  |
|---------------------------------------|---|--|--|
| <b>Christmas Function and Meeting</b> | Club Meeting Room<br>Vasto Pl, Balcatta | 8:00 pm  | Friday 14 December<br>(details—see page 2) |
| <b>General Meeting</b>                | Club Meeting Room<br>Vasto Pl, Balcatta | 8:00 pm  | Friday 11 January<br>2008                  |
| <b>Club Run Day</b>                   | Club Track Site<br>Vasto Pl, Balcatta   | Working Bee<br>9:00 am—11:00 am<br>Run Day 11:00 am on | Sunday 13 January<br>2008                  |
| <b>Public Run Day</b>                 | Club Track Site<br>Vasto Pl, Balcatta   | 11:00 am—3:00 pm                                       | Sunday 27 January<br>2008                  |

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## November General Meeting

The November General Meeting was held on Friday 9 November 2007 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 only. This new arrangement is intended to keep Steamlines as a general interest newsletter for both members and interested non-members, while more detailed Society business is contained in the separate Supplement.

Some highlights of general interest are reproduced here.

### Model Engineering:

Phill Gibbons – Showed a very small lubricator of novel design. Cylinder is soldered to base, shaft bush slotted in from top of reservoir to facilitate assembly. Further discussions might result in an even simpler design (with no ratchet or roller clutch?).

Jim Clark - Photos of his recent trip east, to Timbertown (see November Steamlines) and DVR. He tabled some example operating and safety procedures provided by DVR for our information.

Jim again – Showed his Allchin expansion link and die-block wire cut from hardened gauge plate by Ron Collins to a fine finish and fit.

The meeting concluded with supper with a further episode of the London Underground construction DVD shown by Milton Smith.



Two views of Phill Gibbons' novel lubricator. The whole mechanism is removed by undoing the three screws and sliding it out of the slot in the case. The actuator spring was made using the technique described by Phill in the November issue of Steamlines.

Photos: Jim Clark

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## Working Bees & Club Days

There is a Working Bee at the Society's Vasto Place track site every Saturday morning, except for the Saturday immediately after the General Meeting, when Sunday morning becomes the preferred time.

The Working Bee on the Sunday following the General Meeting starts at 9:00am and goes until about 11:00am. This is followed by a Club Run Day, which is a chance to run your own (and other people's) locos and wagons without the public being in attendance.

The Club Run Day is an ideal time for gaining experience in managing a *steam locomotion device*. If you are hoping to have a drive of a particular loco, it would be a good idea to check with the loco owner beforehand to be sure that he will be able to be present on the day.

Please come down! There are always jobs of all sizes, big and small to help with, and it's a great opportunity to catch up with other members for a chat and cup of tea. See you there.

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## Christmas Function

The last General Meeting of the year, on Friday 14 December, will be a social occasion as has been the custom in past years. Friends, relations and children/grandchildren are most welcome. Please bring some food to share, either hot or cold, or sweet. If the weather is suitable it is planned to eat outside, but don't forget the insect repellent. Proceedings are planned as follows:-

4:00pm Preparation of track for running.

5:00pm Running of locos and road vehicles.

7:00pm Running to conclude to allow locos and road vehicles to be cooled down and packed away, and passenger vehicles returned to tunnel.

7:45 – 8:00pm Evening meal.

Come along and help make this a great end to the year.

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# President's Report

by Milton Smith

The last month has been particularly busy with several extra functions. A very sincere thanks to those who have provided locos and road vehicles and prepared the track site for these public revenue raising runs (including grass cutting, sweeping up leaves and twigs, putting out signals and sundry other jobs, such as seeing that the toilets are serviceable). Thanks also to those who drive. Ian Allison and Denis Lord also attend to gas supplies and battery charging respectively. Without your support nothing could happen. Special thanks must surely go to Ron Date for the locos he supplies.

In an effort to share the work load, both on locos and drivers, it is planned to prepare a roster well before the next public run day in January 2008. It will be broadly planned for the 12 months, but issued quarterly. Please let me know when you are able to bring a loco and/or drive.

There was a good attendance of members down at Bunbury for the annual Sandgroper's Meet. A report of this function with photos is elsewhere in this issue.

The sea container is still being worked on. Andrew Manning has pre-cut the side for the fitting of the southern access door. The shelves that are in place are already holding material. Today (the 27<sup>th</sup>), 27 and a bit lengths of steel bar for the ground level track were picked up from Ernie Redford with the help of Geoff Winsor and his truck, and placed in storage.

An informal meeting was held on site to discuss matters concerning the GLT. This proved to be helpful and helped clarify a number of issues concerning the steaming bay, track layout, track laying, ballast. Track construction and sleepers.

Jobs that need to be done include the following:-

1. Complete the securing of south side fence (it is 50% done).
2. Establishment of the machine shop.
3. Install BMX side toilet access fence.
4. Complete and commission passenger car traverser.
5. Paving of grassed area outside workshop.
6. Complete and possibly adjust station fencing to keep patrons out of the weather.
7. Petrol driven loco (see report on page 6).
8. Additional elevated track passenger cars.
9. Replace floor planking on railway overpass.
10. Complete safety fences in cutting.
11. Refurbish reticulation system and document it.
12. Establish the container as a store and clean up junk on site.
13. Dispose of or demolish the old coach.
14. Complete the rail fabrication jig in steaming bay.
15. Construct a new vehicle path/passenger area at NW corner of block.

A number of the above items are in progress, and though probably mentioned before are included to remind us all that there is plenty to do and that members are assisting.

Despite some work having been done on the bore pump on test today, it did not produce a good flow. The motor appears to be satisfactory, but according to Shenton Pumps, the pump itself is only 60% efficient. Total Eden are coming to give the bore itself a check tomorrow. We await developments with interest.

An air compressor and power saw have been purchased for a total of \$550, thanks to Paul James.

**Milton Smith, President**

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## Sandgroper's Gathering (cont)...

by Milton Smith

*(Continued from page 1)*

A goodly number of people from NDMES attended this two day event, which is now seems to be an integral part of the West Australian live steam calendar. Jill and I were only there for the Saturday. It was good to see both Clives there, together with Andrew and his new loco which did not run due to a number of problems. Andrew is now doing a "Maid of Kent" overhaul — it is now stripped down and a number of the problems that made themselves manifest are being attended to. Linda Jennings spent a lot of time driving a large 7<sup>1/4</sup>" diesel.

It was a good opportunity for our members to meet with the Bunbury members, and discuss things of mutual interest, particularly concerning the building of their

track and how their ways of construction could help us.

Jeff Clifton from the Bunbury Club is building a Mason Bogie in 7<sup>1/4</sup>". These locos in full size were first built around the 1890's. It is quite impressive, and large. The wheel arrangement is 2-6-6 (see photo on page 4). The tender is rigidly attached to the main frame. Jeff, when asked how long he has been building it, said "Too long!". In actual fact it has been about 3 years, and he hopes to have it finished in 12 months. I know of one or two locos that have taken a bit longer!

The members down at South West Model Engineers, as usual, put on a good show. Congratulations and thanks to all involved.

**Milton Smith**

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## More from the Sandgroper's Weekend...



Left: Andrew Manning approaches the level crossing on his Foden Steam Wagon. That's well before his ashpan and grate bounced out at the same location, and ended the day's steaming... Photo: John Shugg



Right: Clive Chapman with his GWR loco on the steaming bays.

Photo: Milton Smith



Left and right: Jeff Clifton's "Mason Bogie" in 7 1/4" under construction.

Photos: Milton Smith



## Wireless Signals

Seen at the Sandgroper's Weekend at Bunbury on 10—11 November.... wireless operated signalling. One of the several signals used is shown in the photo at right.

The signals are battery powered and communicate to the next signal by transmitter and receiver.

The signals are simply carried to site, spiked into the ground, and switched on. An inbuilt sensor on the signal post detects the presence of a train. No hardwired installations are needed. An excellent idea which bears further investigation for our own track development. Castledare Miniature Railway have been testing the practicality of the idea in actual service.

**John Shugg**



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## Stu Martyn Does It Again

Many people will be familiar with Stu Martyn's Stanley Steam Car replica, which he built a few years ago while a member of NDMES. It was described in the March 2005 edition of Steamlines and later in AME.

Stu is now a member of SWME, and he wowed onlookers at the Sandgroper's meeting on Sunday with his latest project, a replica of one of Henry Ford's first internal combustion engine cars.

In Stu's inimitable fashion, he has taken the details of the original design and added his own improvisations and refinements. This has resulted in something that is not an exact replica, but certainly looks the part. In fact, it goes as well as it looks, and Stu was kept busy during the morning giving rides round the grounds to many interested people.



It has a two-cylinder engine (photo, left) in which only the exhaust valves are operated by cam, the inlet valves being "atmospheric", that is, they open automatically under suction from the cylinder to admit the fuel/air mixture. It has open cranks and a central flywheel, a sort of hybrid between earlier steam engine practice and the newly developing internal combustion engine practice. It has spark ignition (to Stu's modified design) and the engine ran reliably if a little rough on idle. And it seemed to have plenty of power, at least on the flat.



The wheels and tyres are imported from a manufacturer in America that specialises in this type of heavy duty spoked wheel. Steering is of the "tiller" type typical of the period - it looked a bit twitchy but Stu had no problems negotiating the various obstacles (and people) around Forrest Park at a reasonable turn of speed.

Keep an eye out for a forthcoming article by Stu in AME describing the construction of this unusual and very interesting vehicle.

**Jim Clark**

Top right: Stu explains the finer points of the car to Clive Jarman and other interested onlookers.

Bottom right: "I hope this thing has brakes!!"  
Stu takes Linda Jennings for a spin round the park.  
Photos: Jim Clark



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# Club Petrol Engine Locomotive

by Jim Clark

A few months ago, the society decided to proceed with construction of a petrol engine loco to provide additional motive power for passenger hauling on Public Run Days and at Birthday Parties. With the large numbers of patrons now attending these functions, it is becoming difficult to get enough locos with good hauling capacity on track. The wear and tear on member's engines creates a significant maintenance burden for them, plus the time and effort needed to bring steam locos into service.

For those who are not familiar with what is being done on this project, the objectives of building this loco are:

- To provide a reliable, heavy duty passenger hauler.
- Easy to set up, start and run.
- Easy to drive (does not require a Steam Driver's ticket).
- Looks the part to the public (although it is obviously not a scale model).
- Low fire risk, easy to clean up and put away.
- Low maintenance and low running costs.

The loco is based on a design that Ken Austin built some years ago for his club in South Africa, which is still running reliably today. The new loco will be simple to operate, having a very basic forward/reverse gearbox (cannibalised from the leg of a boat outboard motor) and a fixed ratio chain drive. A centrifugal clutch on the petrol engine will automatically engage as the throttle is opened. It will be an 0-6-0 "yard shunter" outline, to no specific prototype, with external connecting rods.

A small Honda petrol engine has been purchased by the Society with the assistance of Paul James, as minuted earlier this year. Basic plans were drawn up by Jim Clark and are on file at the Society for inspection and comment by anyone interested.



The frames for the new club loco under construction at Ken Austin's workshop. Shown with the side frames assembled for 5" gauge — the buffer beams and top plate are drilled with a second set of holes allowing it to be re-assembled for 7<sup>1</sup>/<sub>4</sub>" gauge when we have a Ground Level track. Photo: Jim Clark

Thanks to Ken Austin who has donated the materials for the frames, wheels and axles. Phill Gibbons has machined the axle boxes, and Jim Clark has been working with Ken on machining and assembling the chassis. Thanks also to Ken's son Les who set up and machined the wheels on his big CNC machine.

For those of you who may be interested in lending a hand with this project, there are a number of machining jobs that can be done in your own workshop, and in the New Year Ken will be looking for some more volunteers to assist with fabrication and assembly at his workshop, probably on Saturday mornings.

**Jim Clark**

## Working Around the Track Site

Photos by Milton Smith



John Shugg working on the riding car traverser.



Geoff Winsor preparing to lay paving bricks.

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## 7.25" Ground Level Track Report

by Tony Jones



Tony Jones at work on the track jig.  
Photo: Milton Smith

I agreed to take out a little of the hump to prevent wheels from lifting off the rail. Tomorrow we hope to turn the rail over and paint the underside. Saturday morning before the 'run' I sat at the saw and cut off 22 pieces of 20sq. for the jig. John Martin kindly offered to drill them through and gave them to me on Sunday midday. This morning I made a small jig to hold these squares while being welded in the correct position.

Tomorrow we can fit the sliding tubes, place the sleeper former on them and hopefully finish welding the straight section of rail that is sitting on the main jig. Our technique is improving so that we get less distortion and we are keeping the rail straighter. The next endeavour will be to build our first curve.

Thank you to the boys that gave me assistance.

At last the 'Pansy' is being assembled for the last time, my brother did a fantastic job of paint spraying in 1928 'Chrome Green'.  
**Tony Jones**

During the week ending 20 November the 5" rails were welded in place on the loading viaduct and a bit more straightening was applied. Then we discovered a large drum of silver bitumastic paint in the coach which was duly applied to prevent rust. It also showed up good to the examining meeting that evening.

## Report on Track Site Projects

by Andrew Manning

### The Ground Level Track Project

Tony Jones, Ian Huxtable and John Hudson have been progressing with the completion of the first steaming bay line to the turntable, and working with the track jig (see the Ground Level Track report by Tony Jones above).

On Tuesday 20 November a group of members with Craig Belcher from Castledare Miniature Railway gathered in the steaming bay to discuss issues and experiences with Ground Level steaming bays and turntables. One of the concerns was the downhill grade on to the turntable of the unloading road, with the possibility of runaways.

To reduce the grade, we recommended that the turntable be lifted by 100mm above the currently planned height. We also recommended that the steaming bay road nearest to Vasto Place will become an unloading road at turntable level for the full length. The traverser will not service this unloading road.

The balance of the time was spent discussing track bed preparation and track fabrication. To use a jig or not? There seem to be a few options for us to consider.

I have been able to reduce the scope of earthworks required for the Ground Level track substantially, based on what I picked up at Bunbury and from Craig. It is planned to hold further informal meetings to learn from the experience of others with respect to fabricating and laying the Ground Level track.

### The Container

Racks have been fixed inside the container. The side doorway was cut in on Tuesday 4 December and we will arrange a ramp to the main doors.

We will then be in a position to start sorting out the contents of the coach and relocate those items for which we have a need into the container.

All of the grounds maintenance equipment will be stored in the container. The ground floor of our building will become the workshop at last.

**Andrew Manning**



Container and new fence from BMX side.



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## Merry Christmas

We wish all NDMES  
members and their families  
a very happy Christmas.

May the New Year of 2008  
be a safe and productive  
one for you all, with plenty  
of quality Workshop Time.

## SUBSCRIPTIONS NOW DUE

The final date by which annual subscription renewals  
must be received is 12 January 2008 in order to  
maintain your membership. Dues for 2007-08 are \$100.

If you have not already paid, please post a cheque c/o  
President, NDMES, PO Box 681, Balcatta WA 6914.

## POSITIONS VACANT

**Wanted — Treasurer** to maintain the Society's  
financial affairs. Urgently required!

At the present time the Society does not have a  
Treasurer. We seriously do need a volunteer.

If you think you might be able to help, please contact  
the President or Secretary for details.

**Painters** — We need to wire brush damaged areas on  
the storage container, then prime and paint the whole  
container. Volunteers are needed — please contact  
Andrew Manning for more details.

**Grounds Maintenance** — At this time of the year the  
leaf fall is beginning to build up to dangerous levels  
with respect to fire risk. 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.

## The Future of Steamlines

A comment often made by newsletter editors is that a  
newsletter can only be as good as the material that  
members provide. This is especially true in a small  
Society such as ours. Fortunately for us, there is a wide  
range of interests under the general heading of "Model  
Engineering", and we have a vast store of expertise,  
knowledge and life experiences amongst the members of  
NDMES. So how about sharing some of your interests  
and experiences with the rest of us?

I am now starting to accumulate a small selection of  
general interest articles which I will be able to publish  
over the coming months. Thanks so far to Bob Tanner,  
Phill Gibbons, Milton Smith and John Shugg. Others are  
also in the process of writing something up.

I need to have a bank of material that I can choose from  
each month, so that I can balance up the space available  
for reports and Society business with a variety of things  
that are just plain good reading. So don't feel annoyed if  
your article or photo doesn't appear right away. I will  
endeavour to publish everything I receive, eventually.

Obviously not everything appeals to everyone, some  
subjects are of no interest to one person but fascinating to  
another. So if you feel there is not enough of interest to  
you, or that your efforts are not getting the mention that  
they should, there's no excuse — send something in!

How about a few words and photos showing your current  
project? Or a short article on a recent run day, boat day,  
or show? Or anecdotes from your working life,  
especially if you worked in one of the great engineering  
works now long gone. Or some photos from places you  
have been, a bit of history, whatever.

You don't need to be a computer whiz — some of the  
best articles published in previous issues of Steamlines  
arrived as pencilled notes on a scrap of paper. I will type  
up the text and edit spelling and grammar, and produce  
simple diagrams. But you need to provide the material!

I will shortly be changing my email address, so best if  
you phone me first to confirm it (9446 5870), or you can  
post: c/o Secretary, PO Box 681, Balcatta, WA 6914

**Jim Clark, Steamlines Editor**

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