

# Make your own bike trailer workshop.

## Coming soon to a night class near you???

By Steven Muir 24/6/07

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On Saturday 23 June 2007, eight keen people gathered in the Middleton Grange School's workshop (Christchurch) to construct their own bike trailers. Steven Muir from Cycling Church organized the event and provided all the materials, instructions and the essential pipe-bender tool. The trailers were made from square aluminium tube and angle, custom bent to fit whatever bins and wheels were brought along, with the most popular design being a trailer to fit two recycling crates. The hitch mechanism is based around an 8 mm rod-end bearing which gives excellent strength and maneuverability. The two wheel trailers are significantly stronger than the popular one wheel trailers that are available, and much more convenient for shopping, with removable bins that require no securing. They are by far the cheapest way of obtaining a good quality trailer, particularly when second hand wheels are used.

The event started at 9am and, after half an hour of head scratching as people came to grips with the instructions, the bending got underway which took a couple of hours. Lots of holes were then drilled over the next couple of hours and the trailers bolted together, with all trailers being completed by around 3pm (6 hours total).

This workshop worked very well indeed and would be easy for any school, polytech, or other facility with a large workshop to host. One bench and vice per participant is recommended and a drill press or two is very handy. Access to a pipe bender is probably the biggest issue, as it is handy to bend tubes on the day to fit whatever design people wish to make. The disadvantage of this is that it takes longer to design and make the trailers. If it is not possible to obtain a bender then a standard kitset trailer can be purchased from Steven Muir, pre-bent to fit a limited range of bins. The participants could then bring along their own wheels and bolt it all together in less than three hours (i.e. could be done in one evening). There would be six holes to be drilled and bolted. The costs of the kitset are outlined below.

If you would like to host a workshop or obtain a trailer kitset then please contact Steven Muir [thepope@cyclingchurch.org.nz](mailto:thepope@cyclingchurch.org.nz) or phone 03 3658238.

Hitch base (powder coated)	\$20
Rod end bearing	\$15
Aluminium tube and angle	\$45
Bolts & nuts	\$15
Bending, drilling fee (3 hours work)	\$45
Postage	\$30 approx
Total	\$170 or \$140 with no postage
New 26" front wheels with tubes and tyres provided.	\$150



Using the pipe bender requires a bit of muscle and technique.



It's a fast way to make a good strong frame.



Some custom modifications to attach billboards.



The kids were impressed with Mum's effort – the first trailer to be finished in less than 5 hours.



Wire bins for \$2 from the supershed.



They make very good trays but required some extra length bends.



Telescoping the two halves of the frame to get the right width for the bins.



Fitting the completed trailer to the bike.



The standard two recycling bin trailer ready to leave.



The schools facilities were fantastic, with benches, vices and drill presses all set up ready to go.



The hitch base bolts onto the rear axle and the rod end screws in.



Vices are great for holding things.



One person came to join the fun with their own single wheel creation that benefited from the tools and workspace available.



One of the new 24" wheels that graced this trailer. Most were second hand.