NZ Community Bike Workshop Newsletter

Contents

Introduction	2
The Crooked Spoke (Dunedin)	2
Timaru	3
RAD Bikes (Recycle A Dunger) Christchurch	3
L.J & Friends (Christchurch)	5
ICECycles (Inner City East Cycles) Christchurch	6
Sumner Bikery (Christchurch)	6
Mechanical Tempest (Wellington)	7
Porirua Green Bike Trust	8
ReCycled Rides bicycle library (Lower Hutt)	8
Paekakariki Bike Library	9
Green Bike Trust (Manawatu)	11
Whanganui green bikes	12
New Plymouth Bike Kitchen	14
Kids on Bikes (Hamilton)	15
Tumeke Cycle Space (Auckland)	15
Roskill Bike Kitchen (Auckland)	17
Whare bikes (Whangarei)	18
Council and Police Bikes?	20
Bikes & Parts Storage	20
Universal derauilleur hanger by Steven Muir.	21
Recycled Trampoline Workstands by Steven Muir	23
Space saving workstands	24
Tool Transport by low cost bike trailer by Steven Muir	24
Turning old frames into mobility trikes	26
Pedal Mania Crazy Bikes	27

Introduction

This newsletter is an attempt to share news of what is happening around New Zealand with community bike workshops – spaces where people can get help fixing bikes, old bikes are restored, and bikes are passed to people on low incomes, all for as low a cost as possible. Some of the news has been supplied by the coordinators of the various groups and some has been cut and pasted from websites or facebook pages, so may not be up to date. If you spot errors or need to update contacts, please let me know and it can be corrected in the 2020 edition. The idea is to circulate the news around your own networks & hopefully be encouraged by all the great work that is happening around the country and get some ideas on how to do things better. The workshop news is roughly in geographical order South to North, then random issues after that which I hope will stimulate some further conversations for 2020 edition (if there's sufficient interest). I'm Steven Muir, involved in free bike workshops in Christchurch for over a decade, and enjoy making bike trailers and towing kayaks to the West Coast behind my bike. Contact me at steve@cycletrailers.co.nz or thepope@cyclingchurch.org.nz 0210619296.

The Crooked Spoke (Dunedin)

tod.coxhead@gmail.com https://www.facebook.com/TheCrookedSpoke/

Everything is going well in our central Dunedin workshop. We've just come through the busiest period and survived with bike stocks left over - usually we're stripped bare by Uni students arriving in town. At the end of 2018 we set up an arrangement with a local organisation called the Malcam Charitable Trust; we've been working together to fix and rehome bikes that the Dunedin City Council no longer sells at it's landfill recycle centre because of silly safety regulations. The basic deal we have is that the bikes can't be 'sold' by us, instead many have been repaired and gifted to recently arrived former-refugees from Syria and Palestine. We have seen lots of enthusiasm from these new Dunedinites to both acquire and maintain bikes themselves, and were lucky enough to have at least one of them return to help with bridging the language barrier and teaching bicycle repair in Arabic. So far volunteer numbers are stable, there are three of us who consistently attend our two weekly evening sessions, and another three who attend intermittently. Recently we have been having preliminary discussions about setting up an additional workshop in South Dunedin, to more effectively service the population of the city - more on this in the future!

My big question should be an easy one for someone to answer: where do the best floor pump replacement heads come from? We've struggled with multiple different designs, all seem to be un-intuitive and short lived.



Timaru

A group used to be active as Mustache Cycle Space, but do not currently have a work space, so are not operating, but there is interest in starting up again if suitable space can be found.

http://i.stuff.co.nz/timaru-herald/news/8351038/Bike-mates-seek-community-use-workshop

RAD Bikes (Recycle A Dunger) Christchurch

http://www.radbikes.co.nz/ https://www.facebook.com/radbikes/ admin@radbikes.co.nz (Jess Smale)



We offer a space in Central Christchurch for people work on their bikes including all the tools and a plethora of spare parts. We work with the principle of Do-It-Yourself we will teach people where we can and we heartily welcome users with little or no previous knowledge about bike mechanics, we have great bike repair manuals too. At various time we have provided women only hours once a week to help create an accessible learning environment for everyone. We provide a depot for bikes and bike part donations. Far too many bikes and bike parts in excellent condition end up in the dump, and we consider ourselves part of the solution. Still, some parts are difficult or impossible to repair, but we do our best to recycle everything we can. We gift bicycles to local charitable organizations. When local charities need a bike, we try to help them out including a pre-christmas kid's bike fixup. RAD bikes hosts a cycle powered cinema, where movie watchers take turns on bike powered generators to generate the electricity to run the cinema.

Jess Smale is employed a few hours a week to coordinate volunteers and keep things ticking over. Workshop is typically open Wednesday evenings and Sunday afternoons. In a typical year there are over 1200 people fixing their bikes with RAD bikes resources plus hundreds of visitors having a look. There are usually 5-6 volunteers involved per session putting in well over 2000 hours of volunteer time each year. Last year there were almost 800 bikes passed on to people to be restored and thousands of parts passed on. There was also over 200 hours of teaching time given to upskill volunteers in bike maintenance skills.

Pop up fixups

A recent development from RAD is mobile fixups, where we partner with local community centres who promote and host a fixup, and several RAD volunteers turn up with tools & parts to repair bikes for people & teach repair skills where appropriate. Over the last year or so these have been held in Shirley Bromley, Addington, and Hornby.



RAD popup fixup at Addington Church Square 2018

The pop up volunteers also helped with a kids bike fixup where 23 bikes were restored and passed on to familes via the pay it forward facebook page "it takes a village" (Canterbury) https://www.facebook.com/groups/ItavCanterbury/. https://www.facebook.com/ItTakesAVillageHubNewZealand

Sometimes its hard to find homes for bulk kids bikes but this site had plenty of takers.

L.J & Friends (Christchurch)

https://www.facebook.com/groups/ljandfriends/

contact Antoine Houle nibs.ah@hotmail.com

L.J & friends started in 2017 when a pastor at South West Baptist Church had his bike stolen by a local lad known as L.J, who was later apprehended. Antoine Houle, a member of the church, began mentoring L.J including teaching bike fixing skills, and this has grown to a youth mentoring program with a caravan and container on the church grounds used for storing parts. They mostly operate on a Sunday afternoon with 10-20 young people typically taking part. Antoine works closely with RAD bikes for support.

They have restored bikes for three refugee families that the church were helping to settle into the local community. Antoine is currently struggling to run teaching sessions for 50 kids with two broken arms (trying to keep up with kid on MTB jumps) but that didn't stop him running a marathon with two casts on.



ICECycles (Inner City East Cycles) Christchurch

https://www.facebook.com/icecycleschch/

ICECycles is a project of community development trust Te Whare Roimata. Te Whare Roimata provides grass-roots neighbourhood responses to the needs and concerns identified by local residents from the Inner City East neighbourhood and urban Maori, with the view to creating a Treaty-based, more self-reliant community better able to meet its needs. ICECycles provides free public bike maintenance workshops for the people of the Inner City East neighbourhood, who are transport disadvantaged and on low incomes. We also provide bikes. Donated bikes are carefully restored and maintained by a team of volunteers.

A new workshop based at the Linwood Tiny Shops is open Thursday afternoons and typically does 15-20 fixes in that time. Bikes for donation are restored at the Philipstown Hub. Workshops are also run in conjunction with the Anglican City Mission once a month or so. ICECycles volunteers have also produced some excellent cargo bikes including clip on bakfiets style ones similar to this

https://www.kickstarter.com/projects/argocargobikes/the-lift-cargo-bike.



Sumner Bikery (Christchurch)

Mark Wallace-bell

mark.wallacebell@gmail.com 027 518 4789

http://www.sumnerhub.nz/sumner-bikery

Opens Saturday and Sunday mornings, 57 Nayland Street, Sumner Village for help & tools to restore bikes

Mechanical Tempest (Wellington)

http://www.mechanicaltempest.co.nz/ https://www.facebook.com/MechanicalTempest

from the website...

Mechanical Tempest is a community bike workshop and is now open 4 days a week Mon to Thurs 6-8pm @ 228 Riddiford St in Newtown. You can come here to fix your bike, build one out of our bits and pieces, borrow a bike, and learn about what you need to do to keep your bike running smoothly and safely. We exist to rescue bikes and parts that would otherwise go to landfill, to promote cycling as sustainable transport and make it accessible for as many people as possible, and to provide an alternative to commercial bike shops. We offer a space for you to work on your bike, all the tools you will need, and a small mountain of spare parts, and there is always a mechanic on hand to assist you. We're always happy to help you learn, no matter what your skill level. But we won't fix your bike for you – we're a workshop, not a shop. We do not charge a fee for using the workshop or any of our parts, but we ask that you leave some money (or snacks!) as koha, which goes towards keeping the shop running. This is not compulsory and there is no minimum or maximum amount. Another way to give back is to come along to a working bee (held every month) and help to keep the place tidy and organised. Mechanical Tempest is run entirely by volunteers and the good will of the community. We always accept donations of bikes and bike parts – you may be surprised at what we can salvage. And we are always on the lookout for more volunteers to be mechanics or come up with ways to make the workshop more awesome.



Porirua Green Bike Trust

https://www.nzgreenbikes.co.nz/ Contact: John Poppleton 022 176 1276 jpoppleton@xtra.co.nz



Porirua Green Bike Trust is now based at a workshop and storage area next to Trash Palace. Broken Hill Rd. Porirua. We have been there 2 years and 4 months. In January we had recycled 1000 bikes - a great milestone. We have a Partnership with Trash Palace where they collect the drop offs and sell our bikes. We also donate bikes to people who can't afford them with Red Cross and a voucher system. We survive on the goodwill of our tireless volunteers.

ReCycled Rides bicycle library (Lower Hutt)

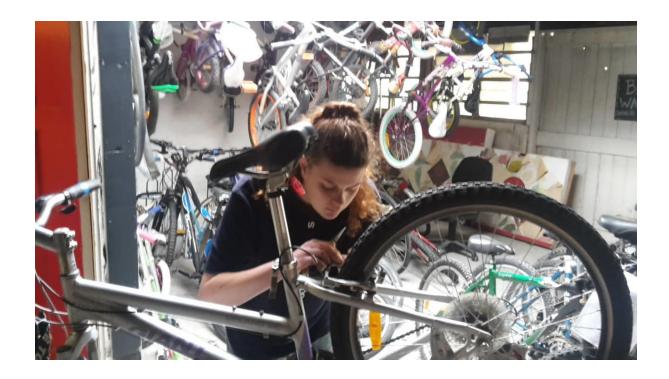
04 260 3343, email admin@cupa.org.nz

https://www.commonunityproject.org.nz/recycled-rides

https://www.facebook.com/ReCycledEpuni?fref=nf

ReCycled Rides bicycle library

Based at The ReMakery, ReCycled Rides is a community bike library offering rescued, fixed-up bikes to Epuni and the wider Hutt Valley community. ReCycled Rides takes bikes destined for landfill and refurbishes them for loan to anyone in the community who wants to ride a bike! In exchange, borrowers are encouraged to koha an hour of their time to any of our projects at The ReMakery. Or perhaps you have some other skills to share? We recognise that everyone has something to offer in return for the loan of a bike. We've built a bike track with our friends at Epuni Primary School for the free use of our community, and in school holidays we explore our neighbourhood on whānau bike rides.



Paekakariki Bike Library

jan nisbet, <u>bikeridenz@outlook.com</u>, 027 358 5611 https://www.facebook.com/paekakarikibikelibrary/
https://dailyencourager.co.nz/the-pedalling-capital-of-the-kapiti-coast/



Founder, Jan Nisbet, began the Paekakariki Bike Library in the spring of 2015 to take advantage of new cycle tracks on the Kapiti Coast. It's her mission to make Paekakariki 'The Pedalling Capital of the Kapiti Coast.' While there are many schemes in New Zealand that fix and give out bikes, Paekakariki's is the only one Jan knows of that operates as a library. A particular goal is to save parents spending up to \$1,000 a year for their children to catch the train or bus to college in Paraparaumu, about 9 km away. By the end of 2017 more than 300 locals of all ages have been helped onto loan bikes from the library. Customers pay between

\$25 and \$35 per annum, depending on their financial circumstances. And, as children grow or their needs change, they simply swap the bike for a larger one. All the bikes have been donated. Some were located in garages and sheds and, even, under hedges. Bikes beyond repair are stripped for parts. The Paekakariki Community Board gave a grant to help with the set-up and to buy tools and materials. Because they repair and re-use bikes that would otherwise be scrapped or sent to the landfill, the Library received a waste minimisation grant from the Kapiti Coast District Council through the Ministry for the Environment's Waste Levy scheme.





Green Bike Trust (Manawatu)

06-560 2150, greenhub.manawatu@gmail.com

https://www.facebook.com/Green-Bikes-Palmerston-North-530389980432302/

The aim of the Green Bike Trust is to provide sustainable transport, zero waste and environmental services within the Palmerston North community. Green Bikes provides services including bicycle rentals and repairs. It also sells recycled bicycles. It is situated behind the Square Edge Creative Centre and is also accessible via Jersey Lane (off Fitzherbert Avenue).

Thanks to Green Bikes thousands of bikes have been given a new lease of life and are back on the streets instead of lying in landfill.

Whanganui green bikes

https://sustainablewhanganui.org.nz/green-bikes/

https://www.facebook.com/Whanganui-Green-Bikes-163062927057372/

https://www.nzherald.co.nz/wanganui-

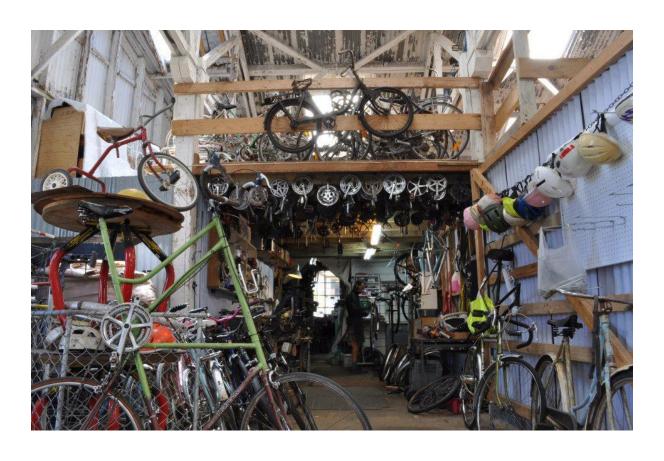
chronicle/news/article.cfm?c id=1503426&objectid=11257417

sustainablewhanganui@gmail.com, 06 345 6000.

Green Bikes/Pahikara Matomato



Want a good bike, but would rather recycle one (pun intended) than buy a low-quality, cheap one? Visit the Green Bikes team and they'll sort you out. The Green Bikes workshop presently operates out of at the Resource Recovery Centre, 83 Maria Place, Whanganui, next to the fire station, behind the WhEB (Whanganui Environment Base) office on Fridays from 9am to 4pm. Green Bikes' success can be attributed to the extraordinary commitment of its workshop managers and willing enthusiasm of a small group of volunteers who, past and present, generously donate their time. Their support has meant hundreds of donated bikes have been made road-worthy and sold for a nominal price. Donated bicycles are repaired to a high standard, and then offered for sale at special discounts for children, pensioners and beneficiaries. In the process a valuable resource is recycled, and the skills and knowledge used in bicycle repair and maintenance are cultivated and retained within the community. The workshop provides cheap bicycles, used bike parts, and repairs as services to people on low incomes. The workshop also provides valuable opportunities for people to work alongside skilled staff and learn about bicycle maintenance and repair. Since its inception in May 2008 over 700 bicycles have been recycled. Green Bikes also works with local interest groups and agencies to increase cycle awareness, and promote cycling as a cheap, healthy and environmentally-friendly transport option. Green Bikes, an initiative of Sustainable Whanganui Trust, was set up in 2008 with funding from Whanganui Community Foundation and NZ Land Transport Agency and continues with funding from Lotteries and other agencies.





New Plymouth Bike Kitchen

Liang Chen

https://www.facebook.com/pg/NPBK2015/posts/

The Bike Kitchen is open Wednesdays from 5.15 and Saturday mornings from 10am in the bus station on Ariki St.





Kids on Bikes (Hamilton)

Roschad@xtra.co.nz. 021 682 231

Tumeke Cycle Space (Auckland)

5 Cabbage Tree Swamp Dr, Sandringham, Auckland 1351 https://tumekecyclespace.org.nz/ hello@tumekecyclespace.org.nz

https://www.facebook.com/TumekeCycleSpace/



Sundays 13:00-15:00

After eight years at our Edinburgh Street, Newton digs, Tumeke is moving shop. We have to leave, because our building is for sale and Tangleball, our cohabitants, are closing shop. So we're moving to <u>Gribblehirst Hub</u>, aka Ghub, in Gribblehirst Park, Sandringham. Thanks to funding from the Lotteries Commission and the Albert-Eden Local Board, we're getting our own shop on the GHub Commons (the bowling greens). We're stoked about that and about synergizing with the energetic group of makers at GHub. We moved in January. We won't get our container for a few months so in the meantime we'll be operating in miniature under a tent on the GHub Commons Sundays 13:00–15:00, starting Sunday 3 February.

Tumeke Cycle Space is shutting down for a few weeks while we wait for GHub and Auckland Council to negotiate a Landowner Agreement to formalize the rules for using the GHub Commons, the site we operate on. Hopefully should take just a couple of weeks. Stay tuned!





Roskill Bike Kitchen (Auckland)

Richard Barter, richard@seacliffe.co.nz

https://www.facebook.com/Bike-Kitchen-Auckland-216230118812624/

https://www.facebook.com/watch/?v=507096509725982

The <u>Roskill Bike Kitchen</u> has fixed and given away almost 300 donated bikes to local families, the majority are former refugees we connect with through a partnership with Red Cross.

The Cool Ride programme in Partnership with Global Hope Missions enable young people in the area to learn how to do life on a bike, go to the supermarket, the beach, downtown, take a bike on a train. The new Heels on Wheels project is getting young mums riding, providing childcare enables them to do this.

We are in the early stages of starting the Wesley Bike Train that will enable children who want to ride to school but for various reasons can't do so. They will get a bike and helmets, hi viz etc. The conductor and drivers will use our set of refurbished ex Postie bikes if needed. We are converting some of these into tricycles for those who are not up to a two wheeler. Our vision is to involve seniors as volunteers in the Bike Trains





Whare bikes (Whangarei)

ash.holwell@gmail.com, wharebike@gmail.com

http://wharebike.org/

https://www.facebook.com/wharebike/

https://www.facebook.com/pg/wharebike/photos

022 151 7305

Whare Bike launched in early 2013 in an unused warehouse in Whangārei, owned by one of the cofounders father. At the time a bunch of people lived and stayed there, into and creating various community projects. In the first years, because of the proximity of our space to people living there who volunteered, and the longer hours we could open, a strong community built up around the space - with workshop nights always followed by shared food and social time. At this time we also organised events such as our Sunset Cruises and Bikers Breakfast (on census day to get 'by bike' numbers up). We've always had a very relaxed set of procedures for Whare Bike (some would say none). This has done a few things, on one hand it has enabled us to access some of the most needy in our town, with roughly 70% of our users Māori, and from the lower socio-economic areas of Whangarei, and complete many bikes for the relatively little time that we have actually been open. Whilst on the other it has left us open to our tools and resources going missing, and worn out our volunteers. In the years 2013 - 2016 we opened in the summer months, and closed over the winter due to the conditions in the warehouse, and low usership. We have become a charitable trust, and are working through what that enables us to do - with one small piece of funding coming from Manaia PHO enabling us to build shelves, moveable bike racks, and other fitout in 2016. In 2016 we had six artists create custom illustrations for Whare Bike - with these being printed on poster card and second hand t-shirts for sale. An initial burst of sales made a good amount of money, and we are only just now doing another push of these. We've struggled because Whare Bike has been largely

driven by a single person who's found it hard to empower others to take the initiative with the project; volunteers leaving Whangārei; and some of our work ending up being childcare and not being able to engage suitable partners and volunteers to help us with this. Over the past six months we've partnered with Habitat for Humanity, who have started a ReMakery in the warehouse we inhabit - with their funding covering the development of programmes to reduce waste, they have taken Whare Bike under their wing as an easy win to get humming and reduce waste to landfill. We've recently opened again for the first time in 18 months, on weekend afternoons with small turnouts allowing us to have meaningful contact with those who are there to fix their bikes. Through this partnership we now have a surplus of bikes which volunteers are fixing to sell, which is slow though going well so far. We estimate we've help people fix around 300 bicycles, with approximately 200 of these otherwise destined for landfill. We were recipients of an Inspiring Stories award in our first year which provided for a short video to be made about the project - https://vimeo.com/86134653 We've written a trust deed, and formed "Trust Whare Bike." We recently completed our Health and Safety, Youth, and Complaints Policies, along with creating a

https://vimeo.com/86134653 We've written a trust deed, and formed "Trust Whare Bike." We recently completed our Health and Safety, Youth, and Complaints Policies, along with creating a basic bike WoF checklist. We've had one funding success with \$5,000 given to redevelop the workshop and buy tools.





Council and Police Bikes?

A lot of bikes end up at the council rubbish dump and occasionally these are onsold, but many are put into scrap metal with good parts on them, which is a big waste. Is there a way we can address this at a national level? Porirua have managed to get access to bikes from Trash Palace. Can this model be replicated in other centres? Another source of bikes is unclaimed bikes from the Police. In Christchurch we have had mixed messages but generally the answer is 'no' to receiving the old bikes, even though it's not considered worth the Police time to auction them or dispose of them otherwise. Has anyone else had any bikes donated from the Police?

Bikes & Parts Storage

What tips do you have for storing parts & bikes – anything that makes life easy to get more organised? Removing pedals and turning handlebars makes it easier to get more bikes in a small space.

Liability Issues

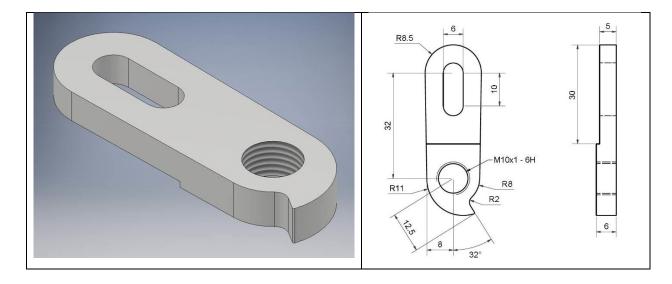
It's a nightmare scenario – you volunteer your time & fix up someone's bike for free, then a few days later their brakes fail & they have an accident, then the blame for it comes back to haunt you with a big legal health & safety consequences. What are the ways to minimise the risk? In Christchurch we have found having a second person check the bike over has often picked up more issues and is very worthwhile, and having a basic warrant of fitness checklist ticked off to show what state the bike is in when it leaves is good. Anything else people do?

Universal Derauilleur Hanger by Steven Muir.

I come across lots of reasonable quality bikes with a broken derailleur hanger. Invariably the dozen or so 2nd hand ones in my collection don't fit, I can't identify it on the bike wholesaler's chart or Aliexpress, to buy a hanger at \$25, so I know my only option to get the bike going is to buy one retail at \$50 or so. For an average quality bike this is not worth the outlay, so I pull the parts off the bike & scrap the frame, thinking sadly about how much of a waste it is, all for the sake of a 60mm length of weirdly shaped aluminium.

This has all changed with the production of a new universal hanger which I am getting CNC milled from 6mm aluminium plate for a very small cost per hanger. The hanger does not screw into the frame, but sits under the 5mm quick release skewer, relying on the pressure of the skewer nut to prevent it rotating. It has been field tested by a high energy 12 year old with multiple jumps, crashes, BMX, hill and forest rides and has performed very well. It was easily installed and required no adjustment to get the full range of cogs selected. It could be drilled out to fit a 10mm axle. If rotation is a problem I figure a small self-tapping screw into the frame at the side of the hanger would stop this occurring.

I am happy to send a few free samples to bike workshops and would like feedback on how they go. Let me know an address if you are keen to try them out. 0210619296 or steve@cycletrailers.co.nz





Recycled Trampoline Workstands by Steven Muir

If you do much work on your bike, a workstand makes life so much easier — no back strain bending over, and the pedals can be turned making gear and brakes adjustment and chain oiling much easier. But they cost a fair bit and some designs are pretty flimsy, so you can't put much pressure on the spanners. I have designed a very sturdy workstand based on old 50 mm trampoline frames which have all the telescoping tubes to enable easily removable feet and a rotating clamp. With a bit of hacksawing and basic welding the frame can be produced relatively easily. The clamp is trickier so I have produced a lot of galvanised steel clamps which fit onto a standard 50mm trampoline frame tube and can be rotated and locked with a bolt, meaning you can clamp to the top bar or seat post as required. The clamp costs \$25 to make and are galvanised so can be left outside if storage space is an issue. It has a thin butynol pad on the jaws to prevent damage to bike paintwork. If you would like a clamp contact steve@cycletrailers.co.nz. Courier cost is \$15 for 1-5 of them.



Space saving workstands

RAD Bikes make use of the Parktool PRS4W workstand which has a base that bolts onto the support pillar of their workshop verandah. The base stays on permanently and the clamp is easily removed and locked away when not in use. It makes a very sturdy workstand and very easy to store and setup.



Tool Transport by low cost bike trailer by Steven Muir

Several of the volunteers around Christchurch have found bike trailers are an excellent way to transport tools and parts around to bike fixups and Steve Muir is keen to get more people using them. It's a great way to make use of leftover smaller wheels too.

As part of Biketober activities he ran a workshop where fourteen people constructed a bike trailer using up-cycled pallets for the frame, with Steve's locally made aluminium towbar, dropouts and steel quick release hitch. The workshop was run in conjunction with A Rocha, a Christian conservation organisation who had a conference the previous weekend encouraging people of faith to take the responsibility of caring for the planet more seriously. A big thanks goes to Oxford Terrace Baptist Church for providing the venue, Placemakers for the glue and screws, Ground Effect for subsidising the costs to make it super-affordable, Frank PKS for lots of the pallets, and RAD bikes for some of the bike wheels.

Participants had varying levels of woodwork skills but all successfully managed to deconstruct the pallet, cut the wood to the correct lengths and construct a strong wooden trailer frame. Frames were mostly sized to suit old recycling crates which are very convenient to carry loads in. The wheels, towbar and hitch were then attached and test rides enjoyed. Steve had been collecting old 20 and 24 inch bike & wheelchair wheels (with threaded rod as an axle) for

many months before the workshop and had a good selection available. Average construction time was about three hours, although the most complicated trailer took a while in the planning phase and was completed in five hours. Everyone thoroughly enjoyed the afternoon including the refreshments for afternoon tea. Two more people couldn't make it on the day and will complete their trailers in their own time.

Wooden trailer kitsets can be purchased any time from Steve, and he also has a wide range of custom built aluminium trailers and cargo bikes available at www.cycletrailers.co.nz. Discounts are available for community bike workshop volunteers is cost is a problem.

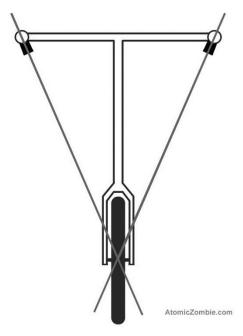


Turning old frames into mobility trikes

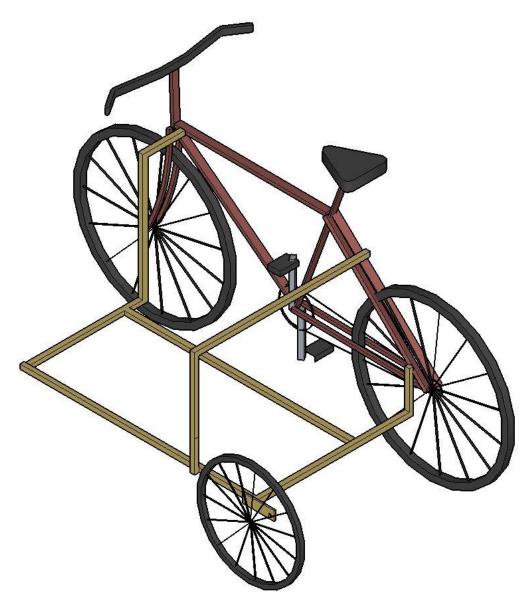
Old frames are never hard to find in the community bike workshop world and often end up getting scrapped. There are lots of people who struggle to balance a two wheeler and adult size trikes cost around \$1000 which is too much for some. Building a hammerhead trike is easier than the traditional two wheels at the back design as all the drive chain & gearing is unchanged. The only tricky bit is getting the Ackerman angle on the steering pivots so the wheels steer around corners ok. Some instructions are found on.

http://www.atomiczombie.com/Tutorial%20-%20HammerHead%20Trike%20-%20Page%201.aspx





The other easy option is an adult trainer wheel. Technically sidecars on bikes are illegal in NZ so best to describe it as a trainer wheel to reduce the chance of any liability issues. Welding it to a bike frame is easiest but you might be able to do a clamp/bolt arrangement if you wish. Great for carrying some load too.



Pedal Mania Crazy Bikes

If you are looking for inspiration on things to do with old bike frames, Clive has been getting lots from the Christchurch community workshops and creating vast numbers of wacky bikes and is run off his feet hiring these out to events all over the South Island.

http://stewartsgully.co.nz/pedalmania.html

https://www.facebook.com/groups/299509765366/