



# Katoomba Men's Shed

*Building Better Blokes*

## Noise from the Shed

No. 19 November 2018

### Building a 'magna bender'

Work has started on a project to build a sheet-metal bending machine at the Shed. The need for a sheet-metal bender is secondary to the challenge that the project presents and the opportunities that it creates for members to get hands-on experience with precision metalwork and electronics.

The idea is based on a design that was commercially produced for a number of years. The inventor has now retired and has made all the specifications available on the Internet. The project leader at the Shed (Russell) has made contact with the inventor to sort out the details and clarify the options available.

### Shed member Russell is leading the magna bender project.



The design relies on a powerful electromagnet to clamp the work between steel plates. Because the work is sandwiched between the steel plates, the bender can be used on a wide range of materials, including those that are not attracted to magnets.

Key components include the hinge mechanism, the electromagnet and the electronics that control the magnetic clamping. If you thought a hinge was a simple concept, ask Russell or Kevin to show you the wooden prototype that Russell made to test that we could build the hinge correctly.

The magna bender project is running on Wednesdays and Thursdays.

### Christmas arrangements

We will be holding a Christmas barbeque at the Shed on Wednesday 12 December. The lunch will start at noon.

The regular monthly Management Committee meeting will follow the barbeque at 1:00 pm and members are welcome to sit in on this meeting if they wish.

The Christmas operating arrangements will be as follows.

The Shed will be closed on Christmas Day, Boxing Day and New Year's Day. Operations will be as normal on other days, although if there are insufficient members on any particular day, the Day Coordinator is entitled to close the Shed.

- Tuesday 25 December 2018 – CLOSED
- Wednesday 26 December 2018 – CLOSED
- Tuesday 1 January 2019 - CLOSED

## Mental health

### Peter Kinkead, President

I am the first person to admit that I do not have any qualifications in this area but I have had a lifetime of observing, experiencing and listening to friends, family and colleagues as we are all on our life's journey and dealing with all its challenges. What strikes me at the moment is the increase in the community and media focus over the last year or so on Mental Health and although there are some over-the-top examples, the extra attention this is receiving is good, in fact it's bloody good in comparison to what used to be the case.

I can remember what our community's and governments' attitudes used to be as exemplified by the treatment given to returning Servicemen and Servicewomen.

In my work life I had first hand experience with people suffering from extreme anger, frustration and Post Traumatic Stress (PTS), and I was frustrated by the lack of treatments available for these issues and not knowing the right way for me to deal with and respond to these situations.

What can be done about Mental Health in our community?

I think the first thing is to be kind to yourself. I was a firm believer that when I was a young parent, I had to be fit and healthy to ensure I was in a good position to give my family the best advantages available to them as they grew up. As an older person I still believe in the philosophy of being healthy so that you are better able to assist others when and where the opportunity arises.

As well as being kind to yourself, I think you should also be kind to and have an understanding for the feelings of people you come across in your daily life, not critical, because you do not necessarily know their whole story.

I am very much aware that if others do not seem to me to be 'normal', it may be me that is the issue, or it may be there is a very real reason for that person's behaviour.

On a broader scale the Shed has been actively promoting information sessions on both physical and mental health over the past year and it is hoped that some of this information is assisting our collective awareness that mental health issues don't always happen to some distant person we may have heard of; they can

sometimes be very close to home without us realising it.

The Mental Health issue does not always have to be a doom and gloom story. There are lots of examples of people who have successfully managed their own particular 'black dog'. The INVICTUS Games is a good example of what can be done with a good family and friend support network in place.

There will always be Mental Health issues in whatever community we live in but it would be nice to be able to say at the end of the day that we tried to make a difference and we left our little corner of the world a better place.

## Shed highlights



**A photo from the Shed open day. (L to R) David Bowskill, John Stanley, David Christie, Cr Romola Hollywood, Bruce Ward and Peter Kinkead (Pres.).**

- We held a successful open day during Men's Shed Week in September. Welcome to the new members who joined on or soon after the open day and we hope you enjoy your Shed experience.
- Shed members completed all of the posts supporting plaques in the ANZAC Memorial Garden. The project was carried out in conjunction with the Katoomba Hospital, Leura Gardens Festival, Central Mountains Rotary and the Katoomba RSL Sub-Branch and was part of an overall restoration of the garden in time for the centenary of the end of WWI on 11 November.
- We are trialling opening the Shed on Saturday afternoons. The trial will run for five weeks until 10 December. If there are enough men interested, and a permanent coordinator can be found, the Shed will open permanently on Saturdays.
- The Shed received a donation of some surplus workshop furniture from the new Bunnings

store in Katoomba. There was a workbench with pegboard tool racks and several storage cabinets. They were the display versions of a redundant line of garage storage equipment.

The donation has been put to good use tidying up the metalwork area at the Shed and the rickety old metalwork bench has been retired to the scrap yard. Thank you Bunnings!

- The Shed supported a mental health activity in Katoomba during Mental Health Week. Organised by the Katoomba Community Health Centre, it was an open-air activity to focus on Older Persons' Mental Health.
- A number of members also staged an activity for children at a 'grandparents and elders day' activity organised by Blue Mountains City Council at Wentworth Falls Lake. Jim displayed some of his models and allowed children to sail one of his model ships. Children were let loose with hammers and encouraged to pound nails into wood and make nail art.



**A young participant at the grandparents and elders day making an echidna with nails.**

- About 25 members enjoyed the annual Melbourne Cup sausage sizzle and stayed on for the running of the race on the big screen.

## Computer room

The Shed has a new addition to its technology area with the purchase of a 3D printer.

A 3D printer can be used to create three-dimensional objects that have been designed on a computer. The printer takes a plastic filament and builds up the object by depositing melted plastic in successive layers.



The new printer will be available for members to use once they have learned the basics. It is anticipated that this will be an interesting challenge as it combines a range of computer skills.

If you are interested in learning about 3D printing, come along to the Shed on Fridays and ask for Stephen. A training day will be organised soon and will be publicised to members via email.

## What's on

**Each Saturday until December 10, 1.00 pm to 4.00 pm, Shed open for trial period.**

**December 6, 1.00 pm:** Health talks program – Mental Health and Men and Depression.

**December 12, 12.00 pm:** Christmas BBQ at the Shed.

**January 19, 2.00 pm to 5.00 pm Repair Cafe,** Junction 142 Op Shop Building, 142 Katoomba Street, Katoomba.

**February 16, 2.00 pm to 5.00 pm Repair Cafe,** Junction 142 Op Shop Building, 142 Katoomba Street, Katoomba.

## An interesting few weeks

### Michael Dale

It all started with a bad cold/cough. So I went to my new GP who put me on antibiotics. The antibiotics didn't shift it so my doctor tried another course of treatment. Still no improvement and we all started to worry that it might be **Man Flu**. Really serious stuff!

Next the doctor ordered a chest X-ray. Let's call that day 1. The results were through on the afternoon of day 3 and showed up some issues in my lungs. He then ordered a CT Scan, which was done late the same day. The CT results were through on day 4. The doctor said 'let's forget about the lungs for the moment and focus on these *white spots* up here on your heart! I need you to see a cardiologist'.

Day 4 I'm in with my wife and the cardiologist, having a stress test, which I failed miserably. The cardiologist then phones a colleague who books me in for an angiogram on the following Monday (day 10). So I went down to Westmead in the afternoon of day 10 thinking, worst case, I will have a stent or two inserted.

After the angiogram I am told that stents aren't going to get the job done and that I need 2, possibly 3, by-pass grafts, and I'm booked for admission on day 12 to be prepared for surgery on the following day.

Day 14 dawns with me in the Intensive Care Unit (ICU), the proud owner of 5 by-pass grafts! I know it's pathetic one upmanship. What can I say?

Here's a lesson - when they finally take all the tubes from down your throat and you get to swallow for the first time in a while, who knew little ice cubes could taste so fabulous?

Out of ICU on day 15 and working hard on getting my lungs strong again, doing what the physiotherapist tells me.

All in all - quite a ride.

My main observation? We all know we have wonderful nurses and doctors in this country but it's not often you get the opportunity to sit in ICU for 36 hours - not at death's door and not in severe pain - just laying there watching. Seriously impressive. I, like many others, have sat in on team meetings, management meetings and senior management meetings and all too often they are less than effective and marred by politics and power plays. I watched in awe as the doctors and nurses listened to each other, discussed options and above all else showed

respect for each other's contribution. Quite a humbling experience.

My take-home message for everyone is that you need to keep going when there seem to be no easy answers. There might be an underlying problem that is not immediately obvious. I am sure if I put my symptoms to Dr Google, it would not have suggested a quintuple bypass!

In closing, a very big and sincere 'thank you' to everyone at Westmead Private Hospital for their care and professionalism. And another even bigger 'thank you' to my family and friends for their love and support.

## Sussex Inlet Men's Shed

### David White

Tucked away down the South Coast is the sleepy village of Sussex Inlet, population 3,575. Well, sleepy except for Xmas/New Year, when the population quadruples with hordes of happy holiday makers.

But there is nothing sleepy about the Sussex Inlet Men's Shed. It has been going for about the same time as Katoomba's Shed, has about the same number of members on the books, and about the same number of active members. Many of their activities are of a similar nature. What is different to our Shed is its growth trajectory.

It is a very successful enterprise - that success seems to rest on two important factors:

- They have perfected the art of grant application, and
- They have developed a regular source of income.

The Sussex Inlet Shed started on a greenfield site set aside by the Council for community developments. The large site houses the relocated public school, the ambulance station, the swimming pool and other sporting and community facilities.

The Shed itself was built with an initial government grant, then later on, another grant was obtained to effectively double its size. Yet another grant enabled further extension until it is now triple its original size. There are dedicated areas for woodworking, metalworking, welding and storage. A further grant was secured to build an outside entertaining area and disabled toilet facility, which were specifically constructed to allow outreach activities for the residents of the nearby retirement village and nursing home.

And finally a grant was obtained to build a community garden, where local residents can rent a plot for \$50 a year, and Shed members can operate their own plots for growing vegetables.



### Sussex Inlet Men's Shed

The Shed has developed a novel source of income – it propagates plants and sells them. Things that can grow from cuttings are especially good items for sale, since there are zero costs in obtaining the raw material. We have a number of succulents and cactuses now happily growing in the garden of our family holiday home which were sourced from the Shed. The secretary told me that the income from plant sales is generally around \$1,000 a month.

Not every initiative has worked – the Shed bought the old courtesy bus from the local RSL Club to enable group outings. These have not taken off, but the Shed rents the bus back to the RSL Club in peak holiday times so running costs are at least offset.

As with any community activity there are inevitably political issues. These seem mostly to arise as a result of envy of the achievements of the Shed by other community groups on the site. Nothing like being a victim of your own success.

While we can be proud of what we have achieved at the Katoomba Shed, there are always things we can learn from others. I'd encourage you to drop in for a chat at a Shed where you

may be visiting. You can be confident that the blokes there will be happy to share the story of their Shed.



The entertainment area at Sussex Inlet Men's Shed.

## Safety snippets – power boards

### Bruce Ward

I was in the kitchen at the Shed one day this winter when another member complained that the kettle and the electric heater were both broken. When I checked, I found that the overload button on the power board had been triggered. The kettle and the heater were both plugged into the same power board.

To understand what happened, we need to understand a few basic electrical terms.

- We should all know that our domestic electricity is 240 volts. Volts is a measure something like water 'pressure'.
- The power requirements of electrical devices are measured in watts. This is the amount of energy used. In our water analogy, it is like the volume of water coming out of the tap. You can usually find the wattage of a device on the compliance plate.
- The total current over an electrical circuit is measured in amps. Most of our household power circuits are rated at 15 or 20 amps and if you try to draw more than the circuit capacity, the fuse will blow or the circuit-breaker will trip.
- To calculate amps you divide watts by volts (this is a simplification, but good enough for this purpose).

- With 240 volt appliances, there are roughly 4 amps of current for every 1000 watts of load, and 10 amps is about 2400 watts.
- Devices such as heaters, kettles, microwaves, fridges and dishwashers are usually 'high wattage', meaning they draw a lot of power.

In the above case, the heater was rated at about 2000 watts and the kettle was 1500 watts. So the total load (when they were both on) was about 3500 watts, or almost 15 amps. The power board was rated at 10 amps, as are most power boards and extension cords.

So it was lucky that the power board was fitted with an overload switch! If there had not been overload protection, the power board could have overheated and possibly caused a fire.

Lessons for us all:

- Power boards are for low wattage devices.
- Devices that draw more than 1000 watts should be plugged directly into an outlet, not through a power board.
- Don't plug a power board into another power board, or use double-adaptors in a power board.
- Overload protection is a good thing to have on a power board.
- Practice good maintenance. Check power boards regularly and keep them clean, dry and well ventilated. If they are cracked or have cracked or frayed wires, throw them away. Check that plugs are properly seated.

All electrical equipment at the Shed is regularly checked and tagged. This includes extension cords and power boards. If any device fails a physical or electrical examination it is repaired or decommissioned.

If you don't have enough power points in your home or workshop consult a licensed electrician rather than resort to power boards. The same goes if you regularly blow fuses.

## Tool tips – hollow grinding tools

### Bruce Ward & Kevin Wallace

To a woodworker a blunt tool is worse than useless. It will probably damage the work and, by increasing the effort needed, increase the risk of injury.

Hollow grinding is one technique that can be used to sharpen cutting tools such as chisels, plane blades and woodturning tools.

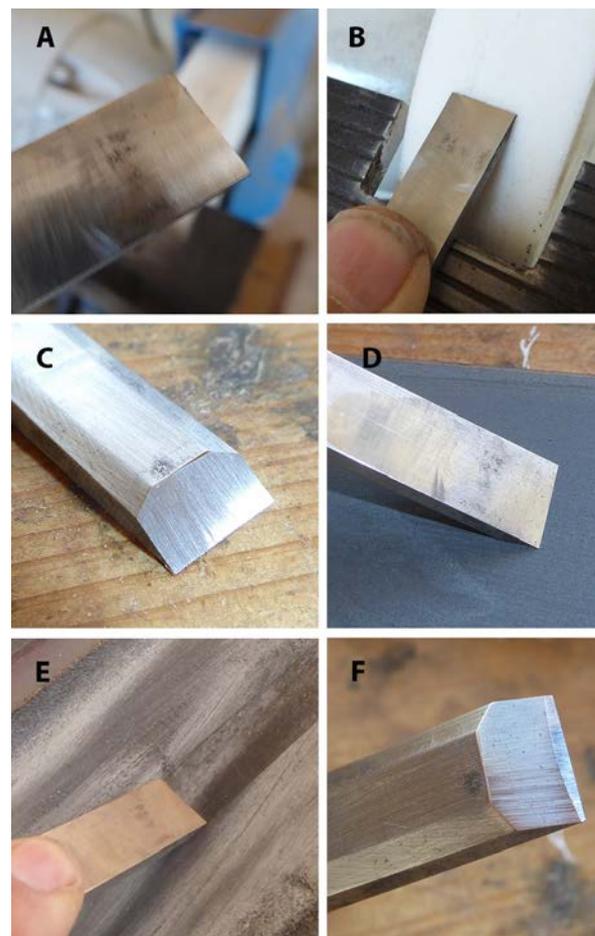
Three essential steps are involved as follows:

1. Flatten and polish the back of the blade.
2. Grind the main bevel to the required angle.
- 3.hone the blade, adding a secondary bevel.

Flattening the back of the blade is very important. You cannot get a really sharp edge unless both the back and the front of the blade are honed to the same level of fineness. See Image A. The polished surface does not need to extend far from the edge, but must be the full width of the blade.

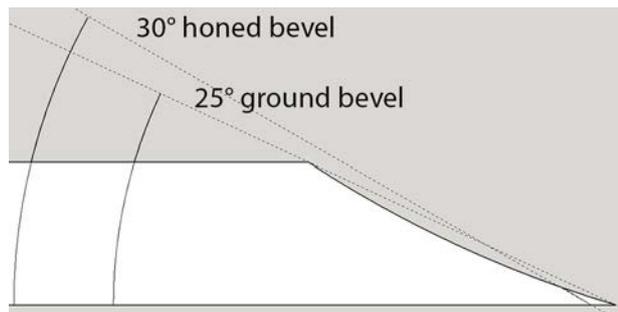
To flatten the back, lay the blade flat on a honing stone and rub firmly until the whole edge is polished. This may take some work to establish, but once it is done, it is much easier to maintain.

Once the back is flat, the next step is to grind the main bevel. See the diagram and image B. The angle may vary depending on the tool and the nature of the work being done, but a main bevel ground at 25 degrees is normal. At this point you need to be very careful because it is very easy to overheat the steel on some grinders. Grind



**The whole process (with extra options). A: Flatten back. B: Grind main bevel. C: Nice clean grind. D: Hone secondary bevel. E: Strop (optional). F: Completed chisel showing secondary honed bevel.**

gently and quench the tool in water frequently. If part of the blade turns blue it has been overheated. See the note about tool steel at the end of this article.



**The primary bevel is 'hollow ground' to 25° on the grinder. Then a second bevel of about 30° is established on a honing stone.**

After grinding, the bevel should look like Photo C. Note there is a single clean, slightly hollow face. Very experienced people can achieve this on a basic grinder, but for the less experienced, a deep tool rest with adjustable angle makes this much easier.

Woodturning tools are usually used straight off the grinder without honing, although honing stones are often used to refresh the edge between grinds. Chisels and plane blades usually require further honing on a sharpening stone before they are ready to use.

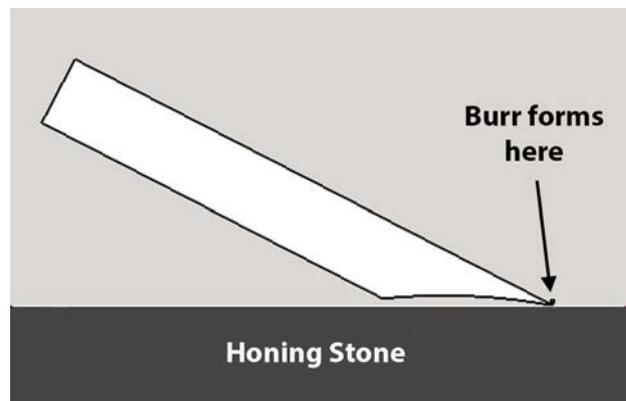
To hone freehand, lay the primary bevel flat on the stone as shown below, then lift the back of the blade slightly to raise the angle. Maintaining this angle, rub the tool up and down the stone (image D) until you can feel a slight burr on the back of the blade at the very tip. Once the burr extends across the full edge, flip the tool over and place the back flat on the stone and rub gently to remove the burr.

The aim of honing is to refine the cutting edge. By raising the bevel angle slightly, you only hone a very small area of the blade. You can use an oilstone, water stone or diamond plate for honing.

If you require a razor-sharp edge you might polish the newly honed edge on a leather strop – see photo E.

Photo F shows a completed chisel. You can now see the secondary bevel that has been formed by honing.

A blade can be honed and stropped repeatedly without re-grinding. Some people re-grind after honing 4 or 5 times, others only grind when the cutting edge is damaged.



**Honing a freshly ground chisel.**

### **A note about tool steel**

A range of different types of steel are used in making cutting tools. The aim is to get a steel that is soft enough to be sharpened to a fine cutting edge, yet hard enough to hold that edge for a good amount of work. Tools such as plane blades and chisels are often made from carbon steel that has been subjected to special heat treatment to harden the steel. If this steel is overheated during grinding, it can lose the hardness, meaning it will get blunt very easily.

Most modern woodturning tools are made from High Speed Steel (HSS), which is naturally harder than carbon steel. HSS tools are less likely to be damaged by overheating.

Some tools are made of tungsten-carbide (often just called carbide), which is an extremely hard material. You cannot sharpen carbide tools on a standard grinder.

### **New sharpening setup at Shed**

The Shed has recently invested in a new grinding setup to make it easier for members to sharpen tools. The setup includes jigs and toolrests to make it easier to get reliable and consistent results on the grinder.

There is also a CBN grinding wheel specially made for tool steels. CBN stands for Carbon Boron Nitride, which is the type of abrasive crystals used on the wheel. The abrasive crystals are embedded into a steel wheel, which never needs dressing like a normal composite grinding wheel. With appropriate use, it should never wear out with the sort of use it will get in our Shed.

With minimal instruction, we hope that the new grinding setup will enable members to get reliable and repeatable sharpening, without damaging the tools. A big advantage of CBN is that you are far less likely to overheat the tool, as a lot of the heat is absorbed by the wheel.

## Repair cafe to cut waste

### Bruce Ward

A new 'cafe' has popped up in Katoomba, but it is not your normal venue for a cuppa and cake. It is a 'repair cafe' devoted to promoting a repair culture. In our throw-away society, many people have forgotten how to undertake even the simplest of repairs to broken household items.

The Katoomba Repair Cafe is coordinated by the Blue Mountains Tool Library and is held on the third Saturday each month at the Junction 142 Op Shop in Katoomba Street.

When I dropped in to the first cafe in September there was a quiet hum of activity. In most cases the volunteers were helping the customers to do the repairs themselves.



### The needlework and jewellery volunteer at the Repair Cafe.

There were repair desks for woodwork, electronics, general mechanics and clothing/jewellery. While I was there, there was a wooden drawer waiting for repair; a toaster; a sewing machine; some sort of radio or cassette player (slowly being disassembled); and a trolley. There had been a few things that were not repairable, but overall it was a resounding success.

From what I saw, the Katoomba Repair Cafe is well organised and well thought out. I would encourage anyone who liked tinkering and fixing things to think strongly about volunteering at the Repair Cafe.

The organisers are hopeful that they can eventually reduce rubbish going to landfill by 100 tonnes each year!

## About Katoomba Men's Shed

This newsletter is produced by:

Katoomba Men's Shed Inc.  
6 Orient Street, Katoomba

Ph: (02) 4782 7433

Email: [secretary@kms.org.au](mailto:secretary@kms.org.au)

Website: [www.kms.org.au](http://www.kms.org.au)

The Katoomba Men's Shed is a not for profit community organisation that promotes the health and well being of men by providing opportunities for men to share time together, swap yarns and work together on community or personal projects.

### Disclaimer

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## Thanking our supporters

The Katoomba Men's Shed thanks the following organisations who provide ongoing in-kind support to the Shed and its operations.

- Blue Mountains City Council
- Digital Mountain
- Blue Mountains Burglar Alarms
- Cleanaway Katoomba
- Bunnings Katoomba