

# Crosscut



◀ Flattening a yellow-wood log using a #4 ½ handplane

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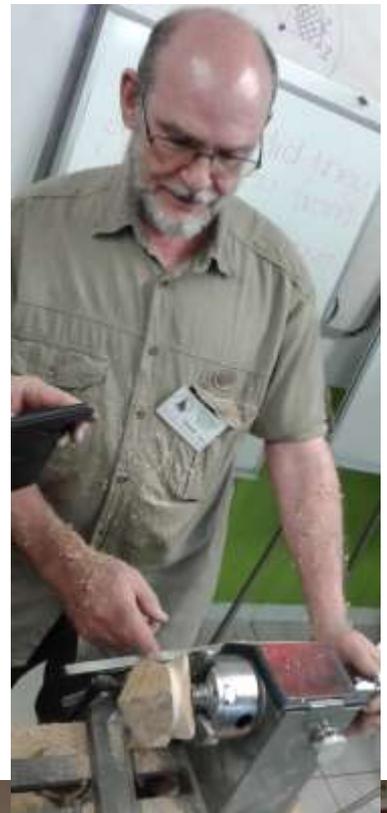
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Next Turners Meeting on **Tuesday, the 2<sup>nd</sup> May 2017** from 18h00 at the Living Link Hall – Specialist Cuts on a Lathe by assorted Turners  
Wood of the Month - Cedar  
Next General Meeting on **Wednesday, the 10<sup>th</sup> May 2017** from 18h00 at the Living Link Hall – AGM and New Triton WX & Workcentre & Armor Clamps by the Vermont “A” Team

## News

### 3<sup>rd</sup> April 2017- Turner’s meeting. Turning a 3-cornered bowl – by Herman Potgieter.

Herman showed how to turn a 3-cornered bowl from a cube of wood. By mounting the cube diagonally between centres, he showed how to turn a spigot for mounting in a chuck, and then to turn the outside and inside to make a three-cornered shape. He explained the key points for making a successful shape. Suggested homework project for the May meeting is to make a similar shape.



### 12<sup>th</sup> April 2017- General Club meeting. Jig showcase. Herman and Clive showed how they made and used

jigs to aid cutting accurately on the bandsaw and tablesaw.

**Bandsawing and Resawing Demonstration** – Herman and Clive showed some techniques for sawing and resawing logs on the bandsaw at the Albertskroon Clubhouse on Saturday 22<sup>nd</sup> April 2017. Herman showed how his wood cutting sled worked. Some practical resawing exercises on a block of poplar were shown. Clive showed how to split a log of yellow-wood and how to true the faces. The log was too wide for the 6” jointer, so Clive tackled it with a Stanley #4 ½ hand plane





## Club Notices

**Toys for Charity.** For many years, the WWA has supported a number of crèches under the umbrella of the Westview Clinic, organised by Daphne. These crèches are in under-privileged areas, and are poorly resourced. One of the conditions for assistance is that the crèches demonstrate self-help by establishing a vegetable garden. The WWA members have been making toys for the crèches. Access to toys is important for child-hood development. Unfortunately, Daphne is taking well-deserved retirement, so Westview is unable to continue the program. The WWA is looking a similar program to continue this work. We would prefer to work with the less well-resourced charities. If you know of any opportunities, please contact the committee.

**Castleburn timeshare week raffle** – the last chance to buy tickets will be at the Turner’s meeting on the 2<sup>nd</sup> May 2017! The draw will take place at the meeting. If you wish to buy a ticket and are unable to attend the meeting, please contact Alistair.

**Spring Challenge** – This will take place on Saturday, the 2<sup>nd</sup> September 2017 at the Albertskroon clubhouse. There will be two competitions. One is a homework task to make a kitchen gadget out of wood. The turning challenge on the day will be a Ring Stand – to hold small jewellery such as rings. Prizes for the best items will be judged by the attending members. This will be followed by a bring-and-braai.

**AGM and Annual Subs.** Don’t forget that the AGM will take place as part of the 10<sup>th</sup> May 2017 meeting and demo. Your annual subs of R400- are payable before the end of May 2017. If you are unable to attend, please tender your apologies and submit a proxy form so that we can reach a quorum.

### IMPORTANT DATE CHANGES

Due to public holidays the following changes will be made to meeting dates:

1. The Turners meeting in May will take place on **Tuesday 2<sup>nd</sup> May 2017**,
2. The Cabinetmakers meeting in August will take place on Thursday **10<sup>th</sup> August 2017**.

### **Regular Events:**

**Toymakers.** The toymakers meet on the first and third Mondays of every month, at 09h00 till 12h00 at the Albertskroon workshop. Meetings will be cancelled if they coincide with a public holiday. Contact Eddie Marchio on 011-678-8062 or [rm22 AT mweb.co.za](mailto:rm22@web.co.za) for more information.

**Wednesday workshop.** 1<sup>st</sup> and 3<sup>rd</sup> Wednesdays, from 17h30 to 20h00 at Albertskroon. Contact John Allen on 083 457 4801 or Clive Stacey (See below)

**Ken’s Saturday Workshop.** Ken Bullivant holds a Saturday workshop at his house in Boksburg. The location is 13 Franklin Avenue, Comet, Boksburg on the first Saturday of the month from 09:00 to 12:00. They decide on an annual project and work throughout the year making it. Individual projects are discussed and problems solved. Ken also offers private lessons too. Contact Ken on 082 809 0020 if you wish to take part.

**Friday Morning workshop** - Winston Klein will be convening a workshop at the Albertskroon work shop on the 1<sup>st</sup> and 3<sup>rd</sup> Fridays monthly from 09:00 to 12:00. Contact Winston at 072 553 5045 or [kleins AT iburst.co.za](mailto:kleins@iburst.co.za)

### **SPIRIT OF THE WOOD - WOODTURNERS**

Offering Woodturning lessons, One-on One Training, Classes and Club, Willing to assist persons with limited physical/intellectual abilities. Contact Johan Kramer on 083 251 0183 or [Johankramer300@gmail.com](mailto:Johankramer300@gmail.com)

### Saturday meetings

1. Second Saturday of month - Eddie will open the workshop – 011 678 8062 [rm22 AT mweb.co.za](mailto:rm22@web.co.za)
2. Third Saturday of month – Clive will open the workshop – 083 407 8008 [stacey AT netactive.co.za](mailto:stacey@netactive.co.za) Clive will also open the workshop during the week “BY ARRANGEMENT”
3. Fourth Saturday of month – Graham will open the workshop – 082 900 0242 [grahamcr AT mweb.co.za](mailto:grahamcr@web.co.za)  
**“SHOULD NO ONE ARRIVE BY 10h00 THE WORKSHOP WILL BE CLOSED.”**

Please can the conveners complete the attendance register on the bar counter, so we can gauge attendance?

## Sharpening Old Files

Trevor Pope

After February’s article on reusing old files, Herman asked me for more information about sharpening or refreshing old files. There are a number of resources on the internet. I also found one in a book on making tools using blacksmithing techniques.

I have not tried this yet, so I can’t personally comment.

***Be aware that if the acid used is battery acid, this is medium-strength sulphuric acid, which is dangerous. If you are not careful, it will make holes in your clothes, burn your skin and severely damage your eyes. It will also make your tools go brown with rust if you store it anywhere near them. Work outside, use eye protection, gloves, acid-proof clothing and make sure you have a source of clean water to deal with any spillage.*** Battery acid is available from motor spares shops.

**By Gavin Baird - From: <http://www.mandolincafe.com/forum/showthread.php?40678-Sharpener-files>** (spelling and grammar corrected...)

“While sharpening my hand files, I thought it would be of interest to some of the builders, what method I use. If you look at a new file, under light, you will notice that the cutting surface appears matte. If you look at a dull file, you will see an irregular shiny surface. If you examine the cutting areas of the file with a x10 loupe you will see the worn cutting edges. Note that a good pattern makers hand cut file will cost in excess of CDN100- so...

“To sharpen the file it must be absolutely clean of all oil and ANY imbedded cuttings both metal as well as wood. This is the only hard part of the process. I use a very hard needle pointed sharp scribe, with the file held under good light and using a x5 or x10 loupe, remove all debris.

Once you are certain all has been removed, scrub the file using detergent and a stiff brass wire brush. Rinse well with hot water a couple of times and allow to dry. Re-examine for debris especially metal particles.

“The actual sharpening medium is phosphoric acid. This can be acquired in some of the grocery stores in the form of rust removers - check the label for contents. You can also go to a body shop supply house and purchase their equivalent called metal prep. You don't need a strong solution, 20% is adequate.

“To sharpen, select a plastic zip lock bag of a size that will accommodate the file. Place the file in the bag and add sufficient solution to completely cover the file. Seal the bag and allow the file to remain immersed for approx. 1.5 hrs. Remove and wash in hot water and scrub the file with the stiff brass brush. Examine the cutting surfaces with the x10 loupe. If there are no shiny edges it's done, if they still are visible give it another go, say 1/2 hr. or until you are satisfied.

“Once satisfied, wash well with hot water and scrub well to remove the oxide...That's it. I have found that this process leaves me with a file that is sharp or sharper than a new file.

**From: <http://woodworking.stackexchange.com/questions/3566/how-to-restore-old-files>**

“Is there a way to sharpen/restore old files?”

“Yes. The classic old method to sharpen a file is *vinegar sharpening* which is exactly what the name suggests, soaking the files in vinegar.

“Now that we know the active ingredient in vinegar is acetic acid we can make the obvious educated guess that it's an etching effect from an acid. And it is known that other acids do the same job and were

used in the past. Two of the best alternatives because of easy access are citric acid and sulphuric acid (e.g. battery acid). It's best not to use hydrochloric even if you already have some, many sources speak of the risk of *hydrogen embrittlement* when using HCl so it's best not to risk it since files are already brittle enough.

“Acid etching works best on files where they are not heavily worn but are just rounded from use and no longer cutting well. Where there is any scoring/scratches or the teeth are worn down so far that there are flat shiny patches (hard to believe but you do occasionally see old files that had been used that hard!) you won't recover a usable surface. But files are nearly always double-sided and because this is inexpensive and largely a hands-off process that mostly requires patient waiting it can be worth it for a file even if it only has one side worth salvaging.

### **Degreasing**

“You say you've used solvents and that is one good way to start the process off as a file must be thoroughly degreased before soaking in acid to give it unimpeded access to the metal, ensuring even results.

“In addition to organic solvents you can also soak in oven cleaner, or a hot solution of washing soda. Both will eat any form of grease and pose no harm to the steel.

“If you want to use solvents I wouldn't rely on mineral spirits/white spirit alone, soak in spirits to begin with then dry off and brush down or soak in acetone or lacquer thinner.

### **Cleaning**

“If the files have any clogging this should be removed before etching, again to give the acid full access to the surface of the file.

“In addition to using a 'file card' (a type of brass-wire brush specifically intended for cleaning swarf from files) there are other methods, including pushing in the direction of the grooves using the corner of a scrap of hardwood or the edge of a piece of brass. But some material clogging files can be very tenacious (a good example is aluminium) so you will sometimes have to resort to picking bits out of the teeth patiently with a needle or another sharp steel tool. If using a needle your hand muscles will thank you for chucking it up in a pin vice or permanently mounting it in a wooden handle rather than just gripping the needle in your fingers.

“This picking away is just as tedious as it sounds, and can take anywhere from a few minutes to an hour of concentrated work per side, but it's worth every second of the effort.

“You may want to quickly degrease a file again after cleaning, especially if you've done the work with bare hands.

“Note: you can clean first prior to the degreasing step, but I've found that clogging residue (esp. wood) can be much easier to remove from a file that was thoroughly degreased first, and it's easier to see it all anyway.

### **Rust**

“As you might expect if the file is rusted soaking in acid will simultaneously clean the rust from it, so this is a very useful technique for second-hand files picked up from various sources since you'll clean them of rust while also improving how they cut. But don't expect too much if the file has any heavy rust encrustations, after the rust is gone some pits can be left behind. While on some tools pits can be merely a cosmetic issue on files they can impact performance, in the worse cases leading to irregular abrading of the workpiece or scratches.

“After soaking in vinegar or another acid even after rinsing thoroughly the files may start to rust again very quickly (flash rusting) so it's advisable to give them a quick spray of something like WD-40 immediately after to help halt this process.

“So here are the steps:

- brush off any loose matter

- degrease
- clean off all debris
- degrease a second time if thought necessary
- soak in your chosen acid\*
- rinse *thoroughly* then give the file a quick scrub with a stiff brush (a toothbrush is ideal) using common hand soap
- pat dry
- shoot with WD-40 or another water-displacement agent, or dry thoroughly using a hairdryer or by placing in a warm oven

\*No real guidance can be give on the time needed to soak a file. Using vinegar for example while you can typically get some improvement with just an overnight soak, with some vinegars, on some files, you may need to soak for *two or more days* before you judge it has done all it can.

“The strength and concentration of the acid being used, the coarseness of the file and the amount of wear all have a huge impact on the time needed. So for stronger acids on finer files you may want to remove them from soaking after just an hour to check progress, with a weaker vinegar on a coarse file leave overnight to begin with and expect that it might take much longer to achieve the desired result.

“When the process is completed the file should be quite uniformly dull and grey, and rubbing a thumb over the teeth it should feel very 'grabby', much more so than many files straight from the factory.

**From the book: “The Recycling, Use and Repair of Tools” by Alexander G. Wygers, 1978, republished by Ten Speed Press in 1997.**

“If the file teeth are not too worn, they can be sharpened somewhat by immersing the files in a bath of acid. The acid seems to bite into the walls of the tooth serration, rather than into its edge, and thus sharpens that edge to some degree.

“I have successfully used acid from old car batteries for this purpose. ... To hold the files, use an acid-proof tray such as those used in photographic darkrooms. Carefully pour the battery acid into it. Immerse the files, leaving them in the bath for twelve to twenty-four hours. At once you will see little gas bubbles rising from the files; this indicates that the etching of the steel is taking place. When you think the steel has been etched enough, fish out one of the files with a pair of pliers, taking care that no acid drippings fall on the skin or clothes. Rinse it in running water for a few minutes and dry it. Put a handle on it and try it out on a piece of steel.

“If you are satisfied with the sharpness, rinse all the files for long enough to leach out the last trace of acid (an hour or more). The principle is the same as rinsing of photoprints to leach out the last trace of hypo so that no after effect of the chemical will spoil the prints in future. Any rust discolouration that shows on the files later will not affect their use.

“Over the years, I have restored dull files in this way at no cost except time spent.

“NOTE: Etching metal with acid need not be dangerous if safety precautions are taken. The main thing to keep in mind is never to handle the liquid with bare skin or breathe the fumes carelessly.

“Keep your eyes well protected against splattering from files as they are slid in the acid bath. Also, be aware that the gas emitted by the bubbles is more or less explosive if lighted by flame.

