



# Crosscut

Newsletter of the Witwatersrand Woodworkers' Association

PO Box 411346, Craighall, 2024

Stanley #78 Rebate and Fillister Plane

Secretary: Kenneth Jackson ([kennethj@mweb.co.za](mailto:kennethj@mweb.co.za) 083 256 1823)  
Editor: Trevor Pope ([tpope@iafrica.com](mailto:tpope@iafrica.com)). All written content and opinions are those of the editor, unless stated. © Copyright reserved.  
Go to <http://mysite.mweb.co.za/residents/tpope/homepage.html> for back issues of *Crosscut*.

**Annual Braai.** Don't forget the annual braai on Saturday, the 25<sup>th</sup> November 2006 at Greenside High at 12h00. Lunch will be served at 12h30. Remember your salad or pudding and your own plates, cutlery and glasses. (You should have bought tickets already – see below.)

**Next Main Club Meeting on Wednesday, the 13<sup>th</sup> December** from 18h00 at the new WWA clubhouse at REEA – see map below. Bring and braai, show and tell and sell old tools. (January: Wednesday, 17<sup>th</sup>: Talk on Cabinet Making Design Software and where the industry is going. (Gavin Naylor) )

**Next Turner's monthly meeting** is on **Monday, the 4<sup>th</sup> December** at 18h00 at the new WWA clubhouse at REEA – see map below. Braai (wors and rolls provided), sell tools and wooden blanks. No January Meeting.

## News

**November Main Club Meeting.** Chris Stevens who is a qualified paramedic and first aid instructor gave us an enlightening talk on safety and first aid in the workshop. Although he showed a few gruesome pictures on injuries that can be expected from the negligent use of machines in the workshop, there was also a useful refresher on the ABCs of first aid. Some shortcomings in our safety practices were noted and these will be discussed and actioned by the committee.

**November Turners' Meeting.** A DVD by David Ellsworth was shown. The Ellsworth grind is a shape of bowl gouge that is very versatile. He showed a range of cuts from roughing, to scraping, slicing, shearing and hollowing, that are useful for bowl turning. With practise, it is possible to use a single gouge for the whole process of turning a bowl, with only fine sandpaper required for final finishing. See [www.ellsworthstudios.com](http://www.ellsworthstudios.com) for examples of his work.

## From the committee:

**Work sessions.** These have started and produced a number of items for the REEA craft market. The sessions are as scheduled below. If you have ideas for items to make, please bring the materials (wood, etc) to the work sessions. The following sessions have been scheduled and people allocated to them. If you were not at the meeting and wish to volunteer, please select the dates that suit you and contact one of the team leaders.

Workgroup One (Saturdays 28 October and 18 November @ 9h00)

Team Leader = Eddie Marchio (Tel: 011 678 8062)

John Speedy, Norman Cheerin, Dave Fincham, John Allen, Ross Thompson

Workgroup Two (Wednesdays 1 November and 6 December @ 17h30)

Team Leader = Clive Stacey (Tel: 011 447 2969 Or 083 407 8008)

Ian Fairweather, Glenn Lopich, Paul Moldovanos, Costa Carastavakis, Humphrey Tedder, Graham Rudings, Louis Slabbert, Peter Shaw

Workgroup Three (Wednesdays 18 October and 15 November @ 17h30)

Team Leader = Frans Joubert (Tel: 011 704 2846 or 084 574 3500)

Norman Cheerin, Sam Norval, Alan Young, Tim Ivans, Danie De Clerk, Rose Spurr, Louis Slabbert, Peter Shaw

**Toymakers.** The toymakers meet on the first Monday of every month, at 09h00 till 12h00 at the new clubhouse. Contact Eddie Marchio on (011) 678-8062 or [renato@pixie.co.za](mailto:renato@pixie.co.za) for more information.

**Wednesday Workshop.** The Wednesday evening workshop is on the first and third Wednesdays of the month, from 18h00 till 20h00. Contact Winston Klein on (011) 674-1513 for more information.

**Craighall River Market.** (next door to REEA) The second craft market on the 11<sup>th</sup> of November was slightly more lively - several bird feeders were sold. December the 9<sup>th</sup> is the last one in 2006. Jenny bought a budget gazebo (R90-) which Steven and I erected after some heads-scratching to provide shade. It is just strong enough, although I wouldn't like to see what happens in a strong wind. The picture shows Eddy expounding on the craftsmanship of the bowls on the table. (Still didn't manage to sell any this time!) There is a nursery next to the market and a variety of stalls and pony rides for children, so make a note in your diary for the 9<sup>th</sup> Dec from 8h30.



If you wish to bring wooden items to sell, these can be left at the club house, safely packed in a box. Each item must be marked with your name, price and commission payable to the club. (20% is suggested.) A removable sticky label is suggested, so that when the item is sold, the label can be detached and stuck onto the sales record sheet. The members manning the stall will unpack and display your goods and sell them. All sales will be recorded, and reconciled afterwards. At the end of the day, your remaining goods will be packed in your box and stored in the clubhouse. If you are unsure of pricing, then ask at the meeting. This is your opportunity to expose your work to the public, to see what is popular and sells and how to price it. Display and selling of your goods is at the discretion of the members and we can obviously offer no guarantees that they will be displayed and sold.



**Pretoria Woodworker's Annual Show.**

Given the small size of the club, they still put on magnificent show, as those that attended will attest to. On the left is Anita Speedy demonstrating scroll sawing with John looking on. The picture on the right



shows Bill Parrack admiring some of the turned work.

**Annual Braai.** The annual braai is on Saturday, the 25<sup>th</sup> November 2006 at Greenside High at 12h00. Lunch will be served at 12h30. If you have not bought tickets yet, contact Glen before the 20<sup>th</sup> November. Costs are R25- per member and R35- per spouse or relative, children under 12 free. Tickets must be purchased in advance and will available at the next meetings or from Glen

Lopich (082 442 7792). Each member will be required to bring a salad or pudding – please indicate this on the booking sheet when you buy your tickets. Bring your own plates, cutlery and glasses.

**Toys for the braai** – don't forget to bring your toys!

**Clubhouse Projects.** The painting is mostly complete, some work remains on the cupboards, and the floor. Thanks to Harold for organising the repair of the fridge.

**Turning Courses.** The suggested topics for future courses are

- Beginner's introduction to turning
- Spindle turning
- Sharpening
- Bowl turning
- Hollow turning
- Box turning

The sign-up sheets will be at the meetings, and when enough people (usually 3) have signed up, a date will be agreed and that module will run. If you are interested, please bring your diary and approximately R50- per course to the meeting. The cost of each module is R50- plus the cost of materials, to be determined by the instructor for that course. For example, the beginner's course is set at R80- (R50- plus materials at R30-.) For all the courses, except the beginner's introduction, you will require certain minimum turning tools – discuss this with one of the turner's committee when you book.

## Morse Tapers

This article was prompted by Clive Stacey. He bought an interchangeable centre set in #2 Morse Taper at our open day on the 9<sup>th</sup> Aug. He discovered that it would not fit his Coronet lathe, which has #1 MT sockets, and he wasn't aware of the difference.

If you look at any of the lathes in the clubhouse, you will see examples of Morse Tapers. A Morse Taper is a narrow angle taper designed for interchangeable tooling. The tool has a conical taper that fits into a matching socket on the machine. The angle of the taper is narrow enough so that it is self holding and will not easily fall out. There are other standard tapers used in other applications, but the Morse Taper is the one you will encounter in wood lathes and drill presses. There is a range of sizes to suit different applications from the #1 which can be found on the Record lathe in the club, right up to massive sizes used only in large machine tools.



A table of sizes taken from my Machinery's Handbook (16<sup>th</sup> Ed) is given below. The tapers are designed to accurately hold a tool in the right position, yet be easily removable. Depending on the design of the machine, to remove the tool, a wedge can be knocked in from the side (see the drill press in the club) or a knockout bar from the opposite end (see the Jet and Nova lathes). The Record lathe in the clubhouse has a slightly more awkward arrangement that requires a collar to be screwed off to force out the taper. If you forget to fit the collar before you insert the #1 MT drive centre on the headstock end, and it wedges tight, it can be difficult to remove without tools.

The most common size found on woodturning lathes is the #2 MT, which is quite strong enough for the application. The Morse taper sizes are carefully arranged in sequence so that only one size will fit in a socket, to prevent misapplication: The next size up will not fit at all, and the size below is completely loose. You can see this in the table: the small end size D for a particular size is larger than the big end size A of the size below, so it won't fit in at all.

For severe applications, you will notice a tang on the end of the taper that is designed to engage in a slot to prevent the taper from turning under load. In milling machine applications, a draw bar is used to pull and hold the taper into the socket.

When installing a tool with a taper into a socket, it is important to remove any dust or swarf from the taper and the socket to ensure that the taper locates properly and does not spin in the socket. If it does spin, it is likely to pick up burrs and damage the socket, ruining the accuracy of the machine. Tools such as drive centres are relatively easy and cheap to replace. However the socket usually forms part of the lathe spindle or the tailstock and is expensive to replace, so it is important to avoid damage, such as may be caused by the taper spinning in the socket.

If you wish to fit a different size taper to a machine, such as a #1 MT into a #2 MT socket, there are adapters available.

Extensions are also available, which can be useful when drilling deep holes. Toolquip keep a range of these and some are very reasonably priced. ([www.toolquip.co.za](http://www.toolquip.co.za))

The adapters and extensions have a slot in the side as shown in the pictures, into which a wedge can be tapped to aid removal.



The story has a happy ending: Clive sold the centre set to me for what he paid for it, as both my wood lathes use #2 MT.

Table 1A. Morse Standard Taper Shanks

