

# Crosscut

Newsletter of the Witwatersrand Woodworkers' Association

◀ Rolly Munro (from [www.rollymunro.co.nz](http://www.rollymunro.co.nz))

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**Next General Club Meeting on Wednesday, the 10<sup>th</sup> October 2012** from 18h00 at WWA clubhouse at the Living Link Hall. South African Wood – Allan Swarz - Timber Grower from Mozambique

**Next Turner's monthly meeting is on Monday, the 1<sup>st</sup> October 2012** at 18h00 at the WWA clubhouse at the Living Link Hall. Router Lathe – Martin Rossouw, Vermont Sales. Buddy Lawson on how to make a Vacuum Chuck.

## News

### September Turner's Meeting – Rolly Munro Tool

**demo.** Steven Barrett showed the basics of using a Rolly Munro tool for hollowing out an end grain vessel. As Steven showed, the Rolly tool is able to rough turn the outside of a vessel, but it requires some skill and a conventional bowl gouge is better suited to this. The Rolly tool really excels when deep hollowing an end grain vessel. The cutter guard prevents dig-ins when set correctly, although it can be

prone to clogging in some types of wood. This can also be caused by the cutter becoming blunt.

Go to <http://www.rollymunro.co.nz/> for more information on Rolly - the tool picture is from his website. There is very little information on the tool there, try

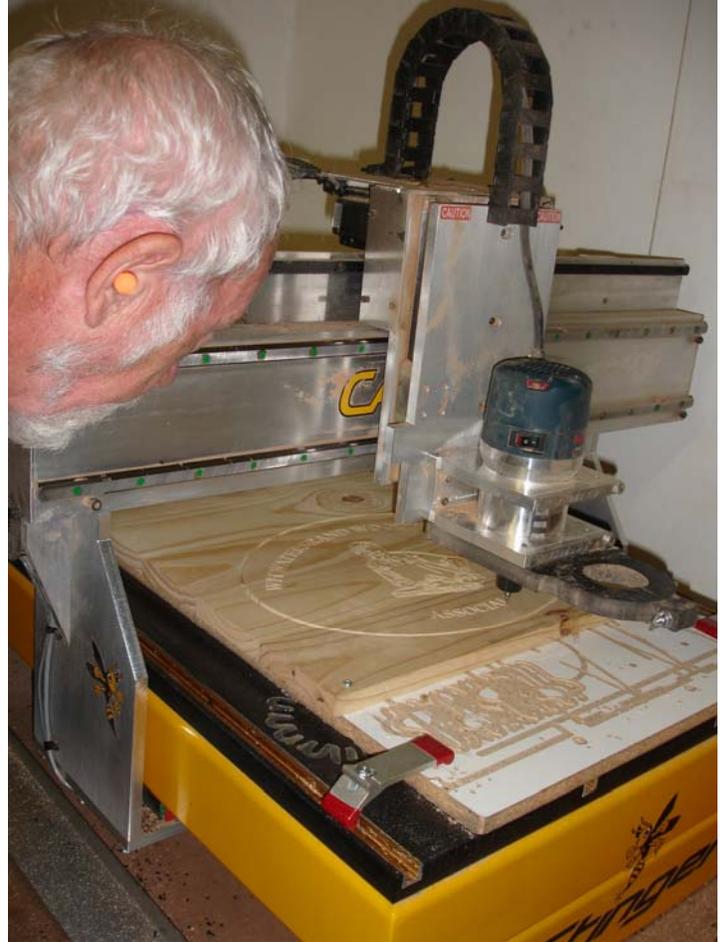
[www.axminster.co.uk](http://www.axminster.co.uk) for more information – search for "Rolly".

(Rolly Monroe is a New Zealand wood turner who visited South Africa in 2006 as a guest of the AWSA as the visiting turner at the AWSA congress at the Printers College in Honeydew. Rolly demonstrated his tool. He claimed it could deal with any wood, which he proved as the local turners produced some of the hardest local woods they could find for him to turn. He took orders for another 40 odd tools which were shipped later, so there are a number of these out there. He has also produced a smaller version, redesigned the cutter head, and offers a carbide cutter as well. If you are ordering cutters make sure you get the right version – old or new – for your tool. )

**Wood of the Month** was Matumi – Breonadia Salicina. Chris showed pictures of some of the magnificent trees to be found in the North-East of South Africa. Due to overexploitation, it is protected in South Africa, but not elsewhere in Africa. It is a hard, oily wood that has a wide range of uses, and is very sort after for turning.



**September Main Club Meeting - CNC Routing** at Woodfinish Management, Alberton. A small turnout of members attended a demo of a CAMaster Stinger Computer Numerical Control (CNC) router, driven by VisualCNC software on a PC. Importing an image, converting it to a black and white cutting image, and then into a G-code file, allows the image to be machined on the CNC router. The CNC router understands G-code which is a low-level list of instructions to move the cutter. CAMaster machines are available from Woodfinish Management, who can be found at 7 2<sup>nd</sup> St, Alberton. The picture shows Jeff Hollingdale watching the machine rout out a WWA logo. The earplugs were not really necessary.



### Club Notices:

**Summer Challenge.** Formerly the Spring Challenge. This will probably be on a Saturday in the new year and include a braai. Bring any education toys you have made to show for a competition. There will also be a timed turning competition, where you will be allowed a short time, such as 5 minutes to make an item on the lathe, so pick a design and start practising.

**Pretoria Woodworkers/Houtwerkvereniging** – Annual Exhibition – 13<sup>th</sup> October 2012 – 08h00 to 14h00 at the New Hope School, Cecilia Street, Ashlea Gardens. Go to [www.ptawoodworkers.co.za](http://www.ptawoodworkers.co.za) for more info or contact 084-515-2773.

**Toys, toys, toys.** Don't forget to start making toys for the annual braai – 10 per member is the target.

**Correction** – Denis Lock pointed out an error in last month's Crosscut, which referred to a melamine covered top. It should have described a formica top laminated to MDF, as this is a much more hardwearing and stable combination.

**Saturday Workshop.** Ken Bullivant previously held the Saturday workshop at the clubhouse, but when we moved from Helpmekaar, he decided to move it to his house in Boksburg. Currently 5 of our members attend these meetings and more are welcome. 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. They also make toys, several of which were displayed at the braai, and individual projects are discussed and problems solved. Contact Ken on 082 809 0020 if you wish to take part.

### Please Note:

**Toymakers.** The toymakers meet on the first and third Mondays of every month, at 09h00 till 12h00 at the new clubhouse. Contact Eddie Marchio on 011-678-8062 or [rm22 AT mweb.co.za](mailto:rm22@mweb.co.za) for more information.

**Wednesday Workshop.** The Wednesday evening workshops are on the first and third Wednesdays of every month at the new clubhouse, from 18h00 till 20h00. Contact Grant Mackay on 082-391-9769 or [mackay.grant AT gmail.com](mailto:mackay.grant@gmail.com) or [gmackay AT worldonline.co.za](http://gmackay@worldonline.co.za) for more information.

I'M AT HOME MOST SATURDAY MORNINGS  
FROM 9-00AM TO 12-00 NOON  
COME ALONG - BY ARRANGEMENT

- ❖ For coffee, biscuits and a chat
- ❖ No obligation to buy
- ❖ Creates good fellowship
- ❖ Word of mouth promotes sales

I have in stock a full range of Record Irwin Lathe accessories,  
Record Irwin wood turning tools, Record Irwin hand tools,  
Record metal/wood band saw blades  
AND MY OWN WELL KNOWN JIGS

**I CAN MACHINE TOOLING ACCORDING TO CLIENTS IDEAS, NEEDS AND DRAWINGS**

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## Reading Glasses

Trevor Pope

As you pass the age of fifty, amongst the things that life throws at you, you start noticing how much small print there is around. Must the product labels on food any more be printed so small?

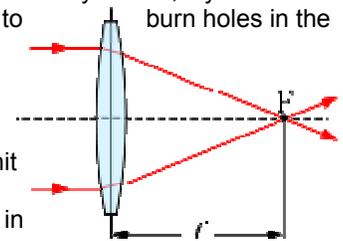
I have presbyopia, which is a fancy name for not being able focus your eyes close up anymore. As we age, the lenses in our eyes stiffen up, so that the muscles in the eye are unable to change shape enough for us to focus close up. So for those of us with normal vision, we need reading glasses. Talking to people about this, most only have a vague idea of how to select which glasses to use. Here is an explanation of how the eye works, so you can understand enough to select the right reading glasses for the task in hand.

If you don't mind a bit of theory, read on, otherwise skip to the end.

Flat glass doesn't bend light, so light rays that pass through it are not concentrated or spread, whereas a lens concentrates or spreads the light in a controlled way. A lens is made with a carefully controlled curvature that either concentrates or spreads the light by an exact amount. The more curved a lens, the more it bends the light. A convex lens concentrates light. When you hold a magnifying glass (a convex lens) in the sun and focus the light onto a point (F), the distance from the lens to the point is the focal length (f). As any small boy knows, if you want maximum effect, then you need to focus the sun onto the smallest area, all the better to burn holes in the carpet or make ants explode.

The power of lenses used in eye glasses is measured in diopters which is a [measurement](#) of the [optical power](#) of [lenses](#). A diopter is defined as being equal to the [reciprocal](#) of the [focal length](#) measured in [metres](#) (that is,  $1/\text{metres}$ ). It is thus a unit of [reciprocal length](#). For example, a 3-diopter lens brings parallel [rays](#) of light to focus at  $\frac{1}{3}$  metre. The usage was proposed by French [ophthalmologist](#) Ferdinand Monoyer in 1872.

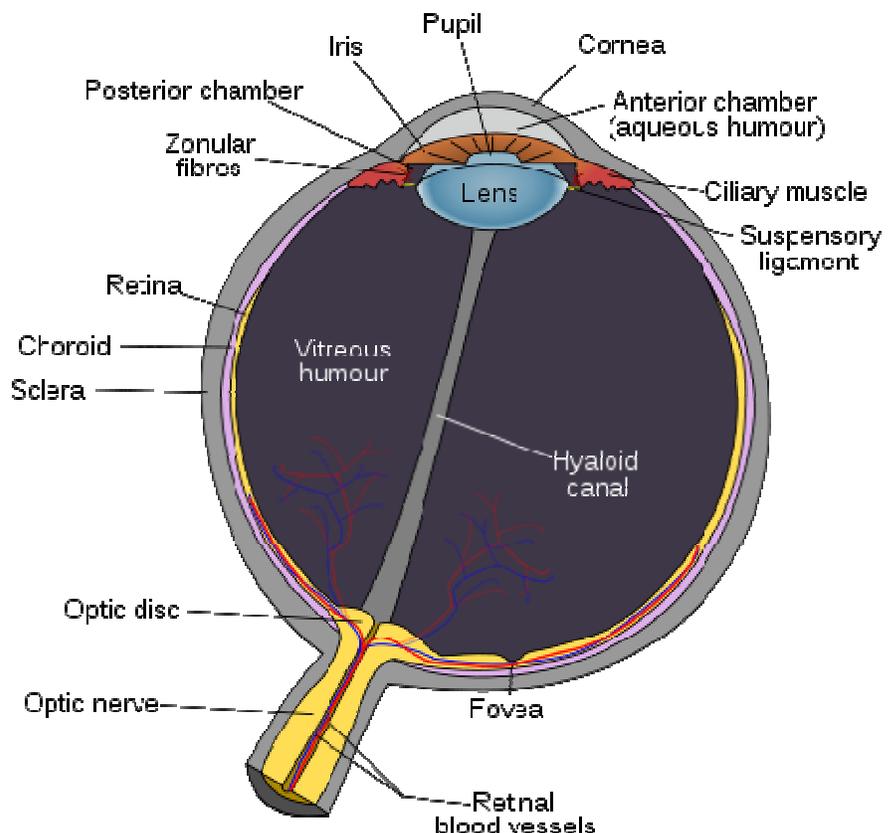
One benefit of quantifying a lens in terms of its optical power rather than its focal length is that when [relatively thin lenses](#) are placed close together their powers approximately add. Thus a thin 2-dioptre lens placed close to a thin 0.5-dioptre lens yields almost the same focal length as a 2.5-dioptre lens would have.



This diagram from Wikipedia shows the lens in the eye. The eye contains a concentrating lens that focuses the image of what you are looking at onto the light sensitive part of the eye at the back, called the retina. To accommodate objects at different distances, the eye focuses the lens to suit – this is called accommodation and is done by the ciliary muscle. The eye has a built in mechanism that does edge detection to adjust the lens so that the edge is in focus – this happens automatically over a wide range from infinity to close up, so you are not aware of it happening.

Until you approach fifty, when it stops working as well as it did – welcome to the world of glasses!

In the human eye, the total optical power of the relaxed eye is approximately 60 diopters. The [cornea](#) and anterior chamber provides for approximately two-thirds of this refractive power and the [crystalline lens](#) (in conjunction with the [aqueous](#) and [vitreous humors](#)) contributes the remaining third. In the very



young, the range of accommodation of the lens is approximately 15 to 20 diopters. It reduces to about 10 diopters at age 25, right down to around 1 diopter at 50 and over. The balance has to be made up with reading glasses.



What strength reading glasses do I need?

Well it depends on what you are looking at. Reading glasses are offered over the counter in a range from +1.0 to +3.5. Each person's eyes are slightly different, and each eye may also differ.

In my case +1.0 will let me focus comfortably at arm's length. +1.5 is suitable for general office work – reading and writing and computer work. For finer work in the workshop, I find +2.0 is about right. +1.5 leaves me squinting to see the divisions on a millimeter ruler, whereas +2.0 is comfortable for that. I have some +3.5 glasses for really fine work, but they can only be used really close up. There is a big gap between the really close up work and even arm's length objects, so they are frustrating to use.

To determine what you need, go to the reading glasses display and test the different strengths on what you typically work on at the right distance. Make a note of the strength, and then you can select the style you like. Reading glasses are relatively cheap (R60- upwards) which is just as well, as I have several pairs and they do get damaged or are lost.



You may have noticed that you can read close up better in bright light – why is that? Photographers will know the answer. In bright light, your iris closes down to admit less light into your eye, effectively reducing the aperture which increases the depth of the field, so you can focus closer.

**One note of caution** – reading glasses are not safety glasses – they don't cover enough of your eye and they are not impact rated. For work on machinery, I use plain safety glasses with a reading insert. These are not readily available, so I order them from the local supplier of Elvex. They are available with inserts from +1.0 to +3.0.

Obviously, if you don't have normal vision, you may want to consult an optometrist, because the standard readers may not help. There may be differences between your eyes, which will require different strengths. Also if you notice rapid changes to your eyes, there may be an underlying cause which must be investigated!

Sources:

[en.wikipedia.org](http://en.wikipedia.org)

[www.elvex.com/safety-readers.htm](http://www.elvex.com/safety-readers.htm)

