

Tutor's Tidings

No 6 - Friday 20th Feb. 2015

Kia ora koutou



Welcome back **RON** for the new turning year.

RON launched straightaway into a piece of rather choice black walnut. Then he made a beginning on a large block of Indian bead wood. Busy eh!



Somehow **DAVID** got missed in the group photo last week but this week he is shown putting the final touches to his tall pot. A beautiful job all round



Below is a photo of DAVID's

rather special, highly-figured rimu bowl featuring a resin inlay set into the inside base and adorned with small decorative hardware.



ALICE is tickled pink about her flash new goblet. The next step is to make another taller, slim-stemmed example. Quite an achievement Alice. Well done to you.



GARTH checks out the alignment, size and shape of his pepper mill grinder top.

The TUESDAY TEAM

Tuesday 17th February demonstrations/tips included:

- 1. Using a safety sled to band saw round-section "logs". (All turners)
- 2. Using an extension tool for boring long holes (Raewyn)
- 3. Power sanding techniques (Grant)
- 4. Using a Jacob's chuck and disk pad to sand wood (Alice)
- 5. Using the club's sanding machine to remove end grain wood (Jan)
- 6. Fitting a new Velcro loop disk holder to a sanding pad (Grant)
- 7. How to use the large band saw safely (Mauritz)
- 8. How to make/assemble a rubber padded disk holder (all turners)



MAURITZ plans another turning task this time using box elder wood. His most excellent two olive wood serviette holders would grace the tables of Downton Abbey.



Club Raffle - \$3.00 per ticket....or....Two tickets for \$5.00



This 6" bench grinder has been donated by **MAURITZ** and will become a club fundraising raffle prize.

This handy machine will be raffled at **\$3.00** per ticket. The target is to sell at least 50 tickets. Please bring your \$\$\$ to turning sessions until the 50 tickets have been sold.

Many thanks to you Mauritz.

THE THURSDAY CREW

A great session. Two absences but **12 keen members** took part in a busy, productive evening.



Look who's back! Welcome home **STEPHEN.** It's been a while but the team is really pleased you have returned. It looks as if you have been busy in your workshop too judging by that resin bowl you're holding - pohutukawa, paua and pizzaz. Good one !





Perseverance, patience and **PAUL** produced a plywood platter



MURRAY and his emerging flask project.

There's more concentration here than you'd find in reconstituted fruit juice

ANNUAL CLUB MEETING (at the club's workshop)

Ten representatives have been elected to the club's committee.

Elected members for 2015		The first meeting of the new committee is will be held
Spencer Heald	Clive Wilson	Next WEDNESDAY
Robert Wiseley	Dave Moodie	MARCH
Murray Price	Grant Taylor	4th
Andre` Duijnmayer	Muhannad Juma	Starting at
Malcolm Porteous	Bob Hoyle	7:00pm

Our active workshop



MUHANNAD, wearing his safety gear, checks the sanding quality on his flask. The project continues.



COLIN scored a beautifullyfigured block of **Chinese dawn redwood** during a trip to Kawerau. Here he is working on the pinkish-coloured bowl base. A most unusual and very exciting wood. (note the safety glasses)



Another of **COLIN's** masterpieces



JUAN's look of concentration says it all. Keen and quick to learn, Juan got his project to this stage mostly by reading and following one of the club's project booklets.



CHRISTINE is another new member who is also keen and quick to learn. A brass ferrule has been fitted and now the shaping of the knockout bar handle begins.



ROBERT is the club's expert in the use of **Easy Wood tools.** Chips fly off with ease.



ANDRE` follows the club recommendations for lathe speeds when drilling hard woods such as his pohutukawa flask



MIKE re-visits an old classic "The Taming of the SKEW" with his talisman project. (note the safety gear)

Things can go a bit skew-whiff when using a skew so hang in there MIKE. Skew can do it!

Burls or Burrs

What are Burls? Why are these products expensive? Why can't I order a matching product or bowl? etc. This article may answer these questions.



2

Burls are also known as 'burrs' in NZ, the US and in the UK - the dashboards of Jaguars are traditionally made from Burr Walnut with the lovely swirly patterns typical of burls or burrs. Burls form on tree roots, trunks and branches as a result of the abnormal development of bud growth cells. They appear as wart-like lumpy growths, roundish in shape and covered in coarse bark. Burls contain twisted, **compact wood that is tougher** than the wood from the rest of the tree.



HEALTH and SAFETY PRACTICE

It's great to see turners taking appropriate safety precautions.

Here's **JAN** wearing a breathing protector while she sands yet another shopping bag handle.

1



Opinions vary as to the causes of burls but most experts agree on several factors, the first being disease. Although burl formation has not yet been fully analysed it seems able to be attributed to several diseases caused by bacteria, fungi or viruses with mould infestations being held as the most common cause. Infections just below the tree bark seem to trigger these abnormal growths with the tree's cells continuing to grow at the same rate as the rest of the tree but in a drastically changed direction. Environmental stress and physical trauma also contribute to burl formation. The former can include a response to injuries from fire or flood or to irritation from constant wind or water erosion. Physical trauma can include insect damage, wounds from animals or injuries from logging. In many cases it will be a combination of factors that will cause burl growth and basically anything that can injure a tree has the potential to cause it.

A **burl** (American English) or **bur** or **burr** (used in all non-US English speaking countries) is a tree growth in which the grain has **grown in a deformed manner.** It is commonly found in the **form of a rounded outgrowth** on a tree trunk or branch that is filled with small knots from dormant buds.

A burl results from a tree undergoing some form of stress. It may be caused by an injury, virus or fungus. **Most burls grow beneath the ground, attached to the roots as a type of malignancy** that is generally not discovered until the tree dies or falls over. Such burls sometimes appear as groups of bulbous protrusions connected by a system of rope-like roots. **Almost all burl wood is covered by bark, even if it is underground**. Insect infestation and certain types of mold infestation are the most common causes of this condition.

Α



There are some trees however, with Eucalypts being one of them that are genetically predisposed to form burls. These burls are more like big clumps of unformed bud clusters which could re-sprout into a branch or even a whole tree if the primary stem were injured. These burls display wild grain patterns that are prized by woodworkers and furniture makers who use them for decorative accents. Burls, deviating from the close straight grain of the trunks, display grain that is typically wavy, curly, swirled or bird's eye and for this reason is much prized by woodworkers. *(....incl Avalon woodturners eh!)*



RAEWYN uses a long drill bit to bore into her tear-drop vase.

(an old totara fence post)

GREAT NEWS for GARTH

Garth you LUCKY fella!

You have won the free raffle for a macro burr!



The flip side of a burl's beautiful grain is that it is extremely difficult to work with because of the structural weakness that the abnormal growth generated. As mentioned previously, burls contain twisted compact wood whose cells do not grow in the nice straight lines of the wood in the main part of the trunk so when a burl is put on a lathe to be turned into a bowl and a large amount of mass is removed from its centre it can behave in very unpredictable ways.

All the competing stresses and tensions in its dense twisted grain are suddenly released with the result that it will skew off centre, warp and twist into a very un-bowl like shape. The turner then has to rest the burl/bowl for some time to let it settle and then do another turning to re-shape the bowl and make it round again.

This process may have to be repeated several times over many months to achieve a bowl or vase that is stable and sound and will not warp or twist out of shape. So a burl has to be harvested, dried, turned and rested several times, sanded and finally polished - a process that can take a year from start to finish. Woodworkers have lots of burls in different stages on the go at any one time but it is still a time consuming process.



The final point to make about woodworkers and burls is that they are hard to come by.

Your local turning timber supplier will not always have them available. Anyway only a few very specialised providers deal in them, so most woodworkers go out into the bush or pther woodland and harvest their own which again takes time and plenty of sweat. No two burls are similar to each other. They may be from the same type of tree and will perhaps, but not always, display some likeness of colour, but trying to match up products in burl timber is extremely difficult. *(I reckon it's impossible!)*

The unique quality of each burl should be treasured for its particular pattern and colour. Turning wood does not need to be *matchy-matchy, look-the-same stuff*.

Its different hues and grains complement each other.

Varieties

B

Clíve

Redwood burls

Burls are common among <u>redwood trees</u>, but harvesting them can be difficult due to their sometimes great size, and can also harm the tree.

Amboyna burls

Amboyna burl is a particularly expensive type of burl, costing \$300.00 b/f to \$72.00 per pound, much more than bigleaf maple burl, for example. It comes from padauk trees (Pterocarpus spp.) of Southeast Asia. Padauk trees are quite common but the burl is extremely rare. The amboyna is usually a deep red, although the more rare moudui burl is the same species but the color is from golden yellow to yellow-orange. The sapwood is creamy white with brown streaks. The common use for **amboyna** is interiors for luxury vehicles, turnery, cabinets, veneer, and furniture

Cheers,