



Standing sticks at Pataka



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## Contents

Guild Events .....	1
Our Presidents Corner .....	2
New Editorial .....	3
Collaboration at Taupo .....	4
Oak Timber in NZ .....	7
A Work in Progress .....	9
Wood-turning classes .....	11

## Guild Events

18 Feb, Sat	Green workshop session at Whareama School
28 Feb - 12 Mar	Hutt Art - 'It's all about Us' exhibition
Sat 4 Mar	"Have a go" - activity day at Hutt Art
7 Mar	Guild Meeting – Fine wood group, scroll saw
4 Apr	Guild Meeting, Turners Group & Guild competition
2 May	AGM - plus woodwork topic
8 - 14 May	Thistle Hall exhibition
6 Jun	Guild Meeting – Turners Group ?

## Our Presidents Corner

Happy New year and welcome back ... at the end of 2022, we had Pataka, and coming up we are at Hutt Art, with a repeat of the activity day; and we have Thistle Hall again in May. We plan to run a trial collaboration to host Wairarapa Guild; and to encourage some more new members, we have Wood-turning & Woodwork classes running again soon.

Pataka was well received, especially the activity day. Thank you to all those whose great efforts & enthusiasm, brought the exhibition to fruition. We had a few drawbacks in the scheduling, and setting up ... hence we have a couple of pages of items of feedback to discuss, that we hope will help Pataka in the future.

We had some excellent work at our Xmas competition, although we had a paucity of items on show. Voted the best Overall item was an Oyster veneered table by David Firth; which also won the Master Class. John

Piper won best Turned item, Denis Newton Trophy with a raised platter stand. Warwick with his chess board, won Fine Wood award, and Hartmut won the Carving award

As Mark mentions below; we are looking for someone who is keen to help with Cambium. To spread the load, we intend are to have 2 co-editors, so you will not be on your own. A big thanks needs to go to those who have contributed articles over the years, by sharing their project ideas (& hiccups), to give us inspiration & useful tips.

What are your memories of our Guild; it's activities & people ?



Rolling pin by John S

Somewhere I have photo of Doug Bailey at his pole lathe, and remember Bob Yellowlees for a quick competition on ideas of "irony", making a wooden coffee cup & saucer (try putting hot liquid in it ?!). At the end of this year, we are keen to celebrate 40 years of the Guild. We hope to put together some such images and anecdotes from our history; especially from our long standing & founder members, so we will send a note around to help recover some of your memories.

*Kind regards, Nick C*

## New Editorial

Welcome to the first edition of Cambium for 2023 I hope you all had a covid free Christmas and are all ready to tackle 2023 which has to be an improvement on 2022. I will be sharing the editorial and production of this Cambium issue with Nick .... we do need some one to help with this. Hugh Mill has been Cambium Editor a few of times and has finally decided to call it a day. I would like to thank him on behalf of the Guild for his efforts and contribution to the magazine, I hope I can live up to his standard. We will be looking for volunteers to take on the role of editor at the AGM this year so if any of you have a literary bent and would like to be involved please let the GWW committee know. I believe 2023 could decide if the Guild will start to grow or fade away. We will be losing some long term committee members and Nick will reach the end of his term as president. I have heard some voice dissatisfaction with what the Guild has to offer. In the words of JFK "ask not what your country can do for you—ask what you can do for your country." I have never been at an AGM where any committee position has been contested resulting in running the Guild falls to those willing to step up. If you don't like what they do then you need to contribute too. We are trying to grow the membership with some success. I believe the only way to recruit new membership is to offer them the opportunity to learn and grow their interest in wood with regular workshop sessions. In 2022 we provided beginners classes for

wood turners and basic woodworking. We have also started to expand Saturday sessions to give new members the opportunity to build on their skills. This is especially important for those who do not have their own tools or workshop. I hope 2023 will see this approach grow to include all the interest groups. This approach caters for new members however what can we do for those who already have some skills and their own tools? We need ideas that will make current members want to continue with their membership and take part in the Guild. We need many involved if we want to hold regular exhibitions of quality work. Recent exhibitions have been smaller than in the past and we are losing the work of some of our more productive members with no-one in the pipeline to fill their shoes. Our new recruits need a few years of practice and further training to get to the level of the likes of Graham and Hugh.

*Cheers Mark*

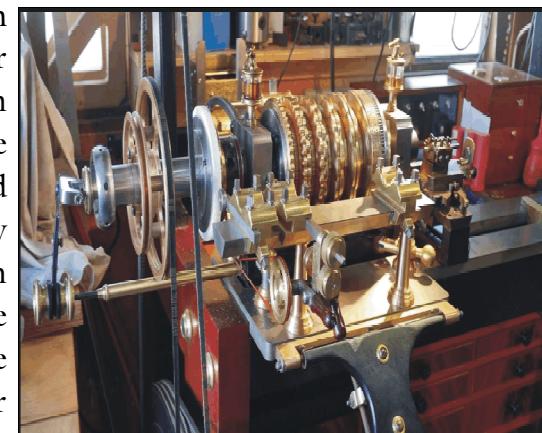
## Collaboration at Taupo

Collaboration 2023 was held at Napier Boys school from 5-10 January. This was my 4th year in attending and most of the same old faces were present. The format is the same every year where we take over the workshop and have fun making stuff. The normal process is for everyone to be allocated to teams of 3 where your team members differ for each team. Each item is allocated a task or theme to create something (This is where the collaboration comes in). This year the themes were Create a highly decorated bowl suitable for a corporate gift Create something from some very old Totara fence posts (Supplied) and Create a troll in the likeness of a colleague (fake hair supplied). In addition we are allowed to undertake any other projects provided we collaborate with someone else.



I will cover the projects in more detail in a future issue of Cambium when the photographs are made available. Dick Veitch publishes a memento of every event with detailed photographs of all items we make. On the final day everything is put up for auction and if you want to keep something you made you have to buy it back. The day is rounded off with a dinner and Dick Veitch acting as Santa distributes our Secret Santa gifts. This year a couple of participants brought their pet projects along to show and experiment with. These were home made Rose engines. Wikipedia summarizes a rose engine: .....

"A rose engine lathe is a specialized kind of geometric lathe. The head stock rocks back and forth with a rocking motion and/or slides along the spindle axis in a pumping motion. A rosette or cam-like pattern mounted on the spindle is controlled by moving against a cam follower(s) while the lathe spindle rotates. Rose engine work can make flower patterns, as well as convoluted, symmetrical, multi-lobed



Rose engine

geometric patterns. The patterns it produces are similar to that of a Spirograph, in metal. No other ornamental lathe can produce these "rose" patterns. The decoration produced by a rose engine lathe is called guilloche. It sometimes confused with "jewel finishes" or engine turning, a much cheaper process of making swirly marks in metal by a rotating abrasive peg or pad, which is repeatedly applied to the surface to make a pattern of overlapping circles. Jewel finishes used to be common on stereo faceplates and automobile interiors."

Most rose engines now reside in museums or in the hands of collectors however with the advent of 3D Printing, CNC machining and inexpensive motors and controllers, home-built engines are now within reach of anyone who cares to spend the time making one. There were 2 such Macgyver/Heath Robinson constructions at collaboration. I photographed this one made by Rex Haslip while he was working on a project with Peter Johnson and Roger Mabey. Peter purchased this at the final auction and asked me to present this to the GWW for use as a trophy. I am not sure what it will be for but all suggestions will be considered. It is solid Kauri so would serve well as a paperweight

I did not witness the other rose engine in use, It was a lot more compact and appeared to have advanced a little further in its construction. I managed one useable photo of patterns cut with this engine on a bowl.

Collaboration is great fun and I always learn something new. It can be exhausting if you don't pace yourself. The daily routine is -... 7 am Workshop, 8am Breakfast then back to



McGyver version



PJ's Abstract

workshop, Lunch at 12 followed by more workshop, Beer o'clock around 5pm with Dinner at 6 pm followed by more workshop until just before 9 pm when the alarm goes on then more beer and finally bed around 10. Repeat for 5 Days and you will see what I mean. It is well worth the effort and if anyone is interested in going then I can let Roger Mabey know (by invitation only). You need to be a competent wood-turner and know how to safely use machinery in the workshop. Collaboration is contracted to run for 2 more years and then may move to another location as yet unknown.

## Oak Timber in NZ

In the northern hemisphere, uses of oak are well known and the timber is sought after. The book, Oak, the frame of civilisation by William Bryant Logan outlines the history of oak uses, and makes a correlation between distribution of oak species and the spread of humans, at least since the last ice ages. There is good reason to believe that acorns were a substantial part of the diet for pre-agropastoral humans and that because (pedunculate or English) oak was easy to rive and considered quite durable, was a very important construction timber. Oak was also used for charcoal making and was an important resource in early iron production. These days, oak timber is still revered and widely used internationally, but is not widely grown as a plantation species in NZ. It was considered that trees had to be grown for over 100 years before harvest and that this was far too long to be economic. With improvements to genetics, Eric Cairns now says that millable sized oak could be grown within about 40 years.

There are estimated to be between 430 to over 600 species of oak worldwide, but only about 140 of these species are in NZ. Botanists describe two sub-genus and 8 sections, but as far as timber uses are concerned, these boil down to two main types, red oak and white oak. Red oaks have needles on the tips of the lobes and acorns take 2 years to ripen. White oaks have rounded leaf lobes, and acorns ripen in one



year. (There are some exceptions, and the turkey oak (cerris group) including the holly leaf oaks are a bit different, but not commonly used for timber). Deciduous oaks (less than ½ of the species) have ring porous timber, which means that the vessels formed in early spring wood are much larger in diameter than those formed in the late summer wood. Some evergreen or live oaks can tend to be pore-diffuse, where the vessels are more even sized and evenly distributed throughout the wood. Deciduous red oak (such as pin oak or northern red oak), is so porous that you can blow air through it. In white oak species such as robur, petarea, alba, or prinus, the vessels are sealed off by tyloses, that block the holes. The white oak species can be used for cooperage and tend to be a bit more durable for outside use than red oak.

A feature of ring porous timber is that slow grown timber has more air space and tends to be lower density and weaker than fast grown timber. This is the opposite of what happens for conifers, where slowly grown wood is harder and stronger.

All oak timber has medullary rays as a distinguishing feature. These are best viewed where the board surface is parallel to the radius of the trunk. The rays can be described as radial parenchyma cells (uniseriate and multiseriate rays).

*The attached illustration from Madera y Bosques vol. 25, núm. 2, e12521695.*

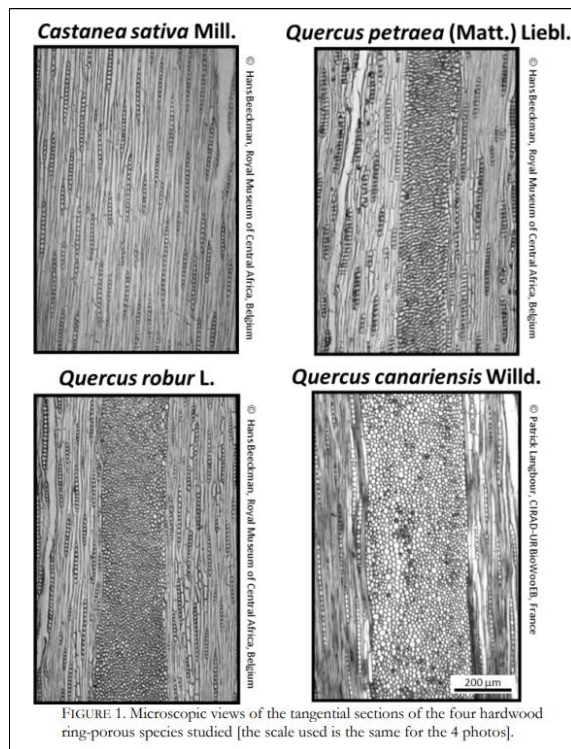


FIGURE 1. Microscopic views of the tangential sections of the four hardwood ring-porous species studied [the scale used is the same for the 4 photos].

The rays have an ability to alter shrinkage factors, so tend to stabilise the wood in the radial direction, but not in the tangential or longitudinal directions. The ratio of these two (tangential/radial shrinkage, is called Transverse Anisotropy Ratio for Shrinkage (TARS). Heart wood can exhibit higher TARS than sapwood and can therefore be more difficult to season. Absolute radial shrinkage may be up to about 20%, and typical TARS ratios for the species tested here were between 2 and 4, and so you can imagine that a freshly milled board containing both sap and heart wood (or knots) can move a lot during drying.

The above scientific paper by K  vin Candelier et al sheds some light on why slow grown oak has a reputation for being easier to mill and season. The denser woods tend to have higher TARS ratios. NZ grown oak tends to be much faster growing than the same species in its homeland, and therefore a denser timber. This is an over simplification, as other factors such as ring width (tension gradient), sawing pattern (quarter versus flat sawn), pore diameter, microfibril angle, genetics, environmental and seasoning variables are also thought to play a part in seasoning and the final sawn lumber properties.

by Eric Cairns

..... To be continued

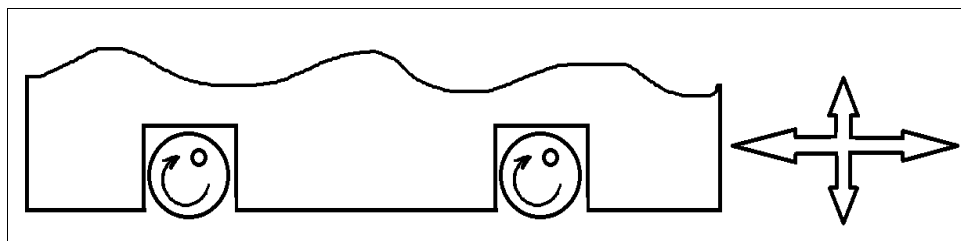
## A Work in Progress

A new year, a new project, and it is a work in progress. The disadvantage to this report is that if I fail to complete it everybody will know!

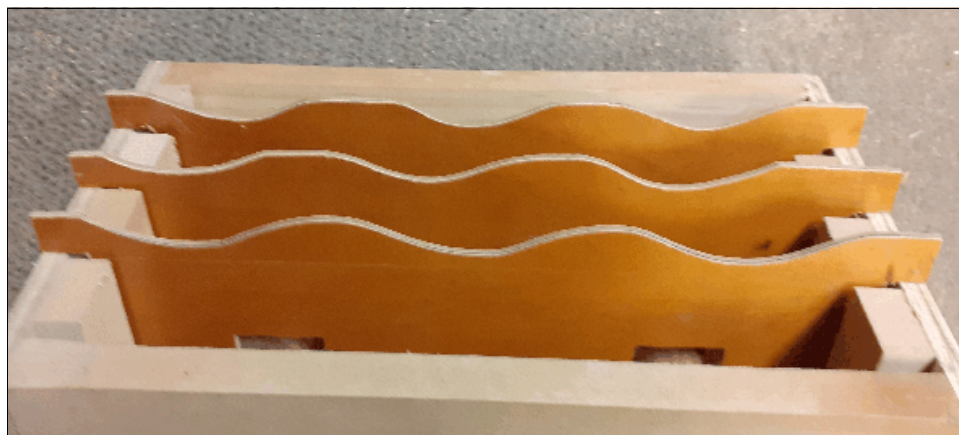
The project was suggested some time ago, but the suggestion was rekindled when we visited the Expressions Gallery in Upper Hutt to see the display of automata: "Curious Contraptions" (Cabaret Mechanical Theatre, London). Some were driven by an electric motor, and some were manual.

What should my subject be ? After some thought I decided on a maritime theme, waves, a sailing ship and perhaps a dolphin. Following in the footsteps, or should that be footlights, of old-fashioned theatre,

the waves would be represented by wave shaped boards that rise and fall and move slightly left and right; I think this was common in productions of the Pirates of Penzance.



My usual practise is to create a crude model to see how it works so this has been done. Below is a diagram of one of four wave boards, each one will have the peaks of the waves in different positions. When the cams rotate in unison around the axles the boards lift and move from side to side. Each end of the boards will be in a slot that allows this movement. It took a while to work this out. So, this is the basis of the representation of the sea.



Another fundamental design feature is whether it should be motor driven, or manual. I would like both but have not worked out how to do that. I do have a scavenged electric motor. Progress, if any, will be posted next time. *Michael Harrison.*

## Wood-turning classes

Wood-turning classes for beginners will continue in 2023 with 4 planned over the year. Gordon and John who have helped run previous sessions will be attending a master-class with Chris Hooton in February with Dougal and Grant hopefully to follow later in the year. This will mean we have a total of 5 wood turners who can run/supervise classes and Saturday sessions. This will take the pressure off me and I will be stepping back a little from running the beginners classes to be more involved in the regular Saturday sessions for those wishing to improve their skills. I will also be overseas for 3 months this year initially on the wood-turning cruise in Norway (see <https://www.woodturningcruise.com/en/> there are still cabins available) then visiting family. The Saturday sessions for Wood-turners run twice a month at present. If there is the demand and we have more tutors available this will expand to 3 or 4. The format is flexible but the intention is that there will always be a supervisor to help turners with any issues or questions. There will be a demo or theme for those that want to try something new and help if you want to do your own thing. It is open to ALL Guild members and I encourage you to come along and share your skills and perhaps learn some more. *Cheers, Mark*

## Woodwork & Wood-turning Tools for Classes

We are after tools to use, for the classes we run. There are some sets we have gained or bought, that are dedicated to classes; so the tutor does not need to spend hours sharpening them before each session. Turning Gouges, chisels & scrapers are useful; as well as some joinery chisels, mallets and squares, etc. *Contact Nick or Mark.*

If you have spare tools that may be useful; please feel free to donate them to the Guild, or we can buy them at a sensible price.

## Guild Contacts

### **GUILD SUB-GROUPS**

TURNERS - Coordinator: Mark & John      Naenae Mens' Shed,  
1st and 3<sup>rd</sup> Saturday after Guild meeting 10 am –12 noon  
CARVERS - Coordinator: Sam Hillis,      529 7105  
Meeting at Naenae Mens' Shed - (3rd Tuesday 7-9 pm)  
GREEN WOODWORKERS - Coordinator: Eric Cairns      526 7929  
FURNITURE GROUP - Coordinator: Mark & Nick  
1st and 3<sup>rd</sup> Saturday after Guild meeting 10 am –12 noon

*Please come along to these [your] - they are an opportunity for more for you to further develop those skills that you have so far accumulated..*

### **Guild Committee**

President	Nick Crocker	04 479 0404
Vice President	Mark Wilkins	021-428-187
Secretary	Phil King	021 250 6467
Treasurer	David Firth	021 398 241
Membership Sec	Warwick Smith	027 485 3770
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	Bruce Christenson	04 527-7300
	Grant Miles	021 483 868

Cambium Editor      ..... we need your help with this

**Life Members** : Neil Gandy, Ken Cox, John Spittal, Hugh Mill, Archie Kerr, Jack Fry, Eric Cairns, Sam Hillis

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