



[www.facebook.com/TawaMenzShed](https://www.facebook.com/TawaMenzShed)  
[www.tawamenzshed.org.nz](http://www.tawamenzshed.org.nz)

August 2022



# AGM Tawa Menzshed

Saturday 17th September 2022  
at the Shed.

The Meeting will start at 10:00 am with the rearrangement of the deck chairs.

The Tawa Menzshed will be holding our **AGM 17<sup>th</sup> September 2022**. We will meet around 10:00am for a cuppa and at 10:30am start the actual meeting.

If any members have other members in mind to be elected, please notify John Gibson – nominations close at 12noon 10 September 2022.

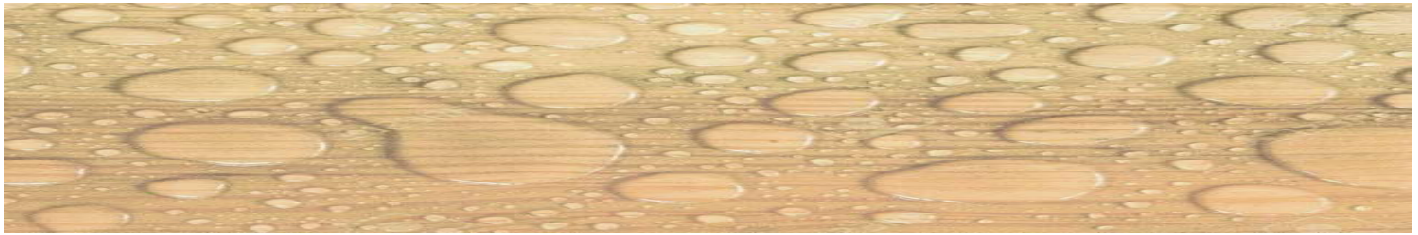
The 2022 AGM Agenda, 2021 AGM Minutes, the Financial Report for YE 30 June 2022 and the Shed Budget for YE 30 June 2023 will be available to view at the meeting

There we will proceed with election and nomination of our officers and committee members.

The meeting will be over in record time, so we can rearrange the furniture again and enjoy a sausage sizzle and a cuppa.

**Seniors week: 24 Sept to 1 Oct.** Open days at the shed during normal open times. Please welcome all visitors and show them around.

Continuing on with 2nd of three parts of an article supplied by Jack Fry to enable us to understand how wood behaves - stress, temperature, moisture etc. Jack gave this presentation at the then National Association of Woodturners in Putaruru many years ago and its all still relevant today. Thank you to Jack for allowing us to reproduce it in our newsletter.



## **Shrinkage**

**Jack Fry**

As previously mentioned wood commences to shrink when the moisture content is reduced to the intersection point. The shrinkage continues until the equilibrium moisture content is reached. Research has shown that the water in the cell walls swells the walls and the loss of this absorbed water can cause a loss in external diameter of the straw or cell, a gain in internal diameter of the cell or a combination of the two. Research has also shown that the form and amount of shrinkage is dependant on the type of cell, whether heartwood or sapwood, whether springwood or summerwood. Very complicated and unpredictable based on the structure but very predictable with regard to the specie and the direction of shrinkage.

Wood shrinks far greater tangentially in the direction of the growth rings than it does radially in the direction of the rays. Generally this difference in shrinkage is of a ratio of 2:1 but this can vary according to specie. The amount of shrinkages from the intersection point to an E.M.C of 12% and the tangential radial ratio is shown in Table 3.

Percentage shrinkage from intersection point to 12% and short term stability of heart wood of some native species.

**TABLE 3**

Percentage shrinkage from intersection point to 12% and short term stability of heartwood of some native woods

Species	Intersection point	Tangential shrinkage	Radial shrinkage	T/R ratio	Short term stability
Beech, hard	28	6.8	3.2	2.1	48
Beech, mountain	32	6.2	4.0	1.6	
Beech, red	24	7.1	3.3	2.2	33
Beech, silver	30	5.7	3.1	1.9	67
Hinau		7.0	2.6	2,7	
Kahikatea	31	4.1	2.3	1.8	71
Kaikawaka		4.5	1.8		
Kamahi		8.4	3.4	2.5	
Kauri	26	4.1	2.3	1.8	62
Kohekohe	29	6.2	3.7	1.7	100
Maire, black	22	5.4	2.6	2.1	67
Mangeao	31	5.9	2.3	2.6	100
Matai	24	3.5	1.9	1.8	52
Miro	28	5.9	2.5	2.4	76
Pukatea	29	6.5	2.2	3.0	133
Rata, Southern	32	6.9	3.8	1.8	67
Rewarewa	34	9.5	3.8	2.5	162
Rimu	30	4.2	3.0	1.4	76
Silver Pine		3.3	2.0		
Tanekaha	23	3.6	1.4	2.6	81
Taraire		5.4	3.0		
Tawa	30	3.9	2.1	1.9	105
Totara	28	4.0	2.0	2.0	57

Short term stabilities are based on Rimu Sapwood = 100

Many reasons for this difference in radial and tangential shrinkage have been promulgated but the two must

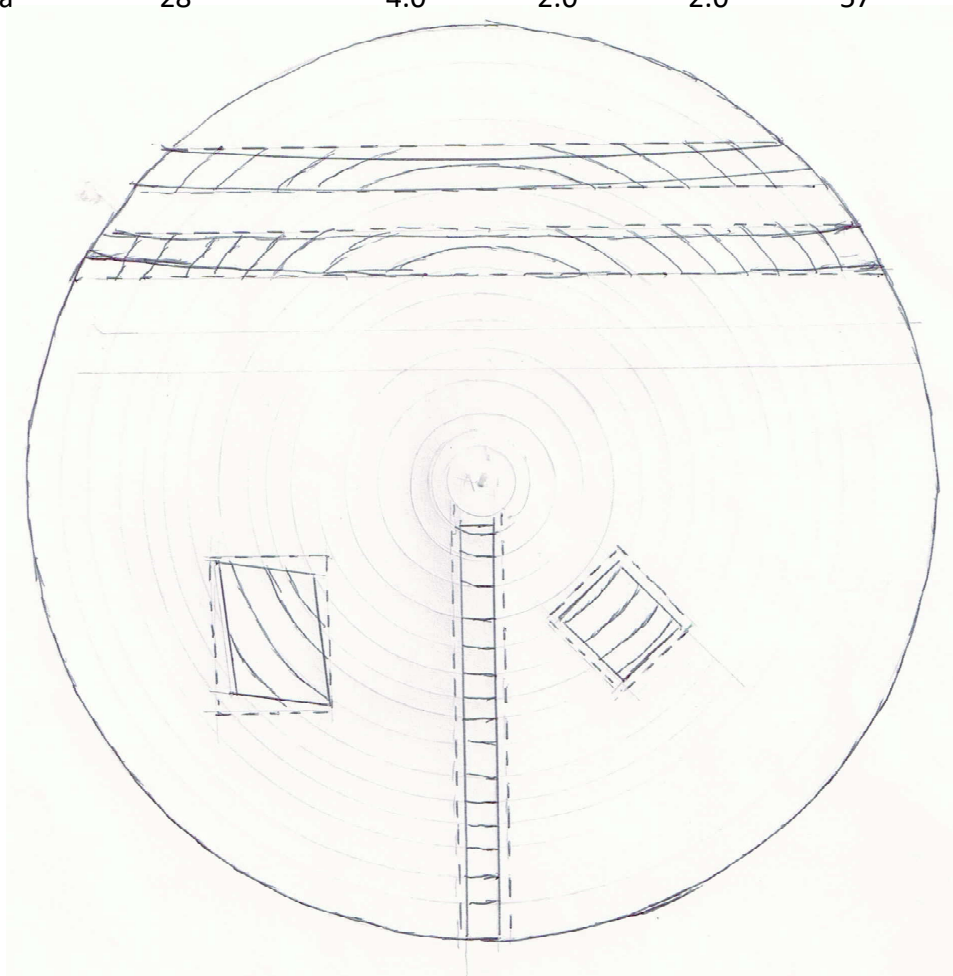
likely causes are the difference in behaviour of spring and summer wood and the restraining effect of the ray cells. SHRINKAGE ON DRYING DOTTED LINES SHOW ORIGINAL CUT SHAPE We may never know the exact cause but what we do know is that boards cup and twist, blocks go out of square and round pieces develop cracks. Quarter sawing generally overcomes many of the distortion problems.

Longitudinal shrinkage is minimal at about 0.1% for normal wood and it is rarely a problem except in abnormal wood which will be discussed later.

**Table 3a**

Percentage shrinkage from intersection point to 12% and short term stability of heartwood of some native species.

Specie	Intersection Point	Tangential Shrinkage	Radial Shrinkage	T/R Ratio	Short Term Stability
Silver Beech	30	5.7	3.1	1.9	67
Kahikatea	31	4.1	2.3	1.8	71
Kauri	26	4.1	2.3	1.8	62
Black Maire	22	5.4	2.6	2.1	67
Matai	24	3.5	1.9	1.8	52
Rewarewa	34	9.5	3.8	2.5	162
Rimu	30	4.2	3.0	1.4	76
Tawa	30	3.9	2.1	1.9	105
Totara	28	4.0	2.0	2.0	57



SHRINKAGE ON DRYING DOTTED LINES SHOW ORIGINAL CUT SHAPE

We may never know the exact cause but what we do know is that boards cup and twist, blocks go out of square and round pieces develop cracks. Quarter sawing generally overcomes many of the distortion problems.

Longitudinal shrinkage is minimal at about 0.1% for normal wood and it is rarely a problem except in abnormal wood which will be discussed later.



## Firewood For Sale.



We're now coming into Spring and it can be very cool at night and "fresh" in the morning, so its time to check your firewood stocks. The Tawa Menzshed are again promoting their fundraising project to sell banana boxes of firewood to assist with the shed development and as a service to the community.

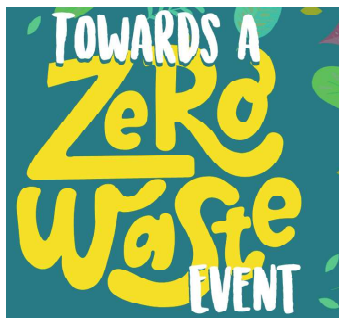
Can Menzshed members please help spread the word to neighbours and circle of friends who may have wood burners.

Banana boxes of firewood sells for \$10.00 each which includes delivery within Tawa. The firewood comprises cut-up pallets, and off-cuts from other Menzshed activities.

To place an order please contact: Richard Herbert on 027 445 5942, or email [herbert.r@xtra.co.nz](mailto:herbert.r@xtra.co.nz)

Payment either on delivery or to the Menzshed bank account:

02-0552-0040123-00. Please reference "your surname" "firewood" "your address" ☐



## Sat 29th October 2022

The shed has booked a stall at this years event, it is reviewing any stock items we have for sale and replenishing any low stocks. We do need members to volunteer on the the day, the more members we can get to step up the less each one will be required to do.

On the day the stall will have to be setup for the start and packed away at the end, in between we require mebers to man the stall - probably only for an hour or so?

If you have an idea or have made any curious/clever items talk to a committee members to discuss.

Its usually a very interesting and entertaining day.



**Safety** in the Workplace - that includes the Menzshed. We all know its sensible, but this is something we are not always! The items shown above are practical things to help keep you safe. We urge everyone to try to purchase them - doesnt matter how careful you are, if you are working in a very noisy area you are likely to damage your hearing particularly if you do it regularly and over a prolonged period. Same with yours eyes, you cant predict where things will fly through the air - particularly wood shavings, sawdust etc. If you are careful you can avoid dropping things on your foot, gloves are good to protect from splinters, knocks etc.

---

## Reminders.....

There are a couple of ongoing subjects of discussion that should be repeated here, the dust extraction sytem we have in the m/c room works most efficiently for the m/c you are using, when only the gate is open for the the m/c in use. Thats pretty obvious, if several m/cs on same line are being used at the same time - then dust extraction efficiency will be reduced because there is less suction at each gate. That fine when we are aware of this. The problem can and does arise when “someone” doesnt close their gate after use, *please* when using the dust extraction system (and we want you to) open your gate when using the m/c and close it again when finished.

I think its also timely to remind members to clean up after using a bench or m/c, I know there are members who are scrupulous about this, but there are others that are not. There are always people that will clean up a dirty m/c for others but they shouldnt have to.

My last little blast regards the Stopsaw. This is a wonderful piece of equipment but there is a proper, correct sequence for firing up this m/c. Its on the wall but will reduce it to basics here. When starting on this m/c - setup as much as you can for the cut you are going to do, height of blade, fence position, guards in place etc. - to check accuracy and safety - before even plugging in at wall, now at this stage big red paddle button should be pushed in, and on/off sw in down position. When satisfied plug m/c in, start dust extraction - if not already going, make sure gate is open. **Switch on/off to on and observe the sequence of lights (red flashing)** - they are going through a self check to make sure the safety (your safety) module is working fine, if you dont get a green light **DONT USE THE M/C**, if you get the green light all is fine and if all else is fine you can start the saw blade.

When finished all your cuts, a reverse sequence should be adopted, push in red paddle button, turn on/off sw to off - **DONT FORGET THIS STEP**, lower blade etc, close gate on dust extraction, turn off dust extraction, unplug m/c and secure.

The procedure for the dust extraction on the Stopsaw of course applies to all the m/cs connected to the system.

# From this.....

.....with the aid of a grant the shed has been able to purchase a couple of new items. As pictured we have a new Band-Saw, a very nice band-saw. Please get instruction before using, apart from the usual safety measures required when using, please remember to Tension and Untension the blade before and after use respectively.

The other item is a compound saw - unfortunately this has had a recall and we are awaiting the return of this unit.



.....to this!



Whats happening at the shed, nearly all community related.



Faith assisting George with his project



Joey applying his designs on the Weta Houses



Remember the trolley everyone was keen to give me advice on - some of it worked out nicely. Its now ended up in TawaPlay Centre



Well Marble Man Ian has broken the back of his "Marble Machine", it is starting to make a lot of sense now, we are waiting now for the next creation!!





John G finally got the sign up at the end of our street - hope you have all seen it?



This is a large sign from over at the RSA that we are "refurbishing"- it will gleam when finished. The metal bits are being taken by Jack Fry to his lair to use his "preservation" skills.



This is Tal, one of Garys students from one of woodworking classes he holds. She tells me its a wine cabinet she is making and shes very proud of it as you can see.

I came, I saw, I forgot what I was doing, retraced my steps, got distracted on my way back, have no idea what's going on and now I have to pee.



This is for Toy Library, I was asked if I could do anything with it, I started it from scratch - its a great learning curve for me to learn to use some of our more complex m/cs