



Issue No. 236 February 2017



PRESIDENT'S REPORT

G'day to all Woodies,

Boy, has it been Hot! 35.5 degrees in the shade on our front patio as I write this today at 4.00 pm, and visiting relatives in Esk tomorrow. I can only wonder what will it be like there! As the song goes, "this is Australiaaaaa". Summer is not my cup of tea! The compensation is however that the rest of the year on the Blackall Range is paradise.

To business:

Graham Bradford has written a very useful article on bandsaws in this edition of Flitch & Chips. It is timely as we have just replaced a blade on the Laguna (with stress fractures in several places). In addition to Graham's article, I can only add my experience with all woodworking equipment, a simple principle which I have learnt over many years. LET THE SAW DO THE WORK; DON'T FORCE IT! Bear in mind that the way a saw works (and for that matter most woodworking equipment) is for the gullet to remove the waste, so it is cleared for the next cut (revolution). If excessive force is required, something is wrong. The waste is not being cleared, and the saw is not cutting as designed. If it is blunt, it will overheat and will not perform as designed. If you need extra 'umph' to do the job, maybe there is something wrong. As always, see the Shed Captain.

Australia Day was a great success for the Guild. The exposure resulted in two important issues; one was our application to Rotary for a grant, and the Girl Guides offered a Queensland Maple (Flindersia brayleyana), more about that later. Congratulations to all those members who made this event possible, and a special thanks to Lionel who was our coordinator and organised us all.

The Mary Cairncross Discovery Centre door project (what a mouthful; perhaps MCDCD's will do in future) is progressing well ahead of our schedule but not good enough for the Council. Please understand it was the Council's dithering that delayed us starting and hence the opening will probably take place towards the end of this month with the doors missing.

Councillor Jenny Mackay visited the shed recently and whilst disappointed the doors will not be installed for the official opening, she is excited that there will be a second opening when the doors are finally installed; two parties instead of one. Members can see the carvings taking shape in the marquee on the third tennis court.

Several members have put their names on the notice board for the Barung Chainsaw to Fine Furniture Expo project however we still need more. I was going to act as coordinator for this project but with all goings-on at the Club at the moment, I am looking for a replacement coordinator to run this event as well as someone to run our normal sales stand. If interested in either role, please see me at some time at the shed.

The new shed has hit a road-block in getting approval on the DA from the Main Roads. We are still awaiting their response. The MVA is applying to the Council for a grant for road infrastructure on site, mainly to accommodate the proposed Arts Connect building and parking.

I have been kept busy of late with log collection and our supplies are very good. Silky Oak logs are plentiful and we have a Queensland Maple from the Girl Guides hut in Maleny. The Liquid Amber logs collected some months ago and stored off-site are now ready to be milled and should yield some pretty timber for member's use. The Blackwood from next door has been milled and when dried will be a valuable resource for members.

To all Woodies not feeling the best, look after yourself, get well and keep creating in wood.

Cheers
John Muller
President.



The first MCDCD etc etc door substrate in assembly. By the way John, what is that thing withthe orange handle in your hand?

Nice work Tony!

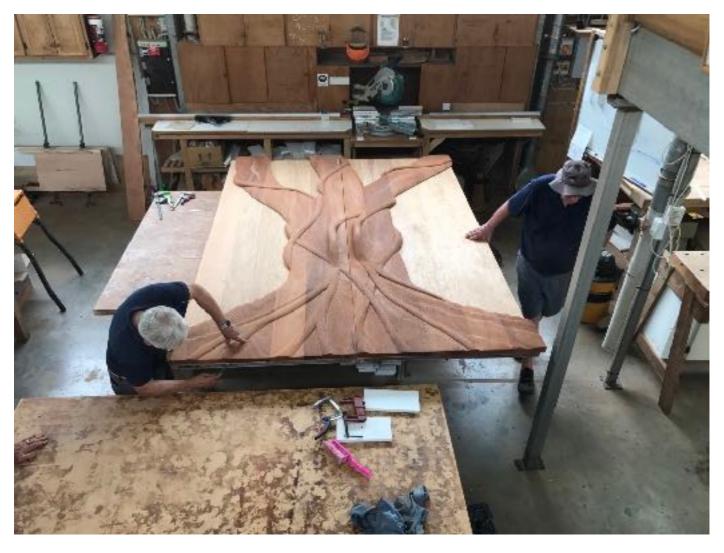




The masters at work, deep in contemplation

Who is that masked man?





The first fitting. Looking great Dave.

Guess who was caught on camera at the Australia Day expo



Maintenance Report by Graham Bradford



- 1. Jet Air Filter primary panels cleaned on two occasions.
- 2. Blades for Jet bandsaw repaired.
- 3. Spare sanding belts for Jet drum sander prepared. NB. These are 100 grit so be sure to use no more than 1/8 turn depth of cut.
- 4. Abrasive belts and discs replaced as required. Members are still not cleaning these items during and after use. Premature replacement is an unnecessary cost to the club.
- 5. The Laguna bandsaw blade was replaced due to wear on teeth. The replacement blade failed shortly after due to a fracture in the metal. Shed Captains note that this may have been caused by over tensioning. In the interests of all members, cutting hardwoods in the Laguna saw should be avoided.

We continue to have damage to Velcro backing pads on orbital sanders due to misuse. A Velcro pad is not an abrasive disc. The pads cost \$9.00, and the annual replacement cost is considerable. Shed Captains must supervise the use of these sanders.

On a general note, too often, the shed is left in an untidy condition. Shed Captains must ensure that floor areas are swept, bench tops left clean, all scrap timber disposed of and machines cleaned down, especially around drills, band saws and the wood whiz.

G. Bradford Shed Manager



Understanding Bandsaws

by Shed Captain Graham Bradford

In order to cut straight with a bandsaw, it is important to have an understanding of how the bandsaw works. This information is of particular value to Shed Captains.

The bandsaw consists of a ridged frame that holds two wheels. The lower wheel is on a fixed shaft driven by a motor. It pulls the blade down and through the wood. The upper wheel is vertically adjustable, usually by a screw. It incorporates a spring that keeps a constant pressure on the blade and also absorbs any shock that the blade experiences. The support assembly of the upper wheel is also adjustable for tilt to correct tracking.

The ideal situation for a blade is to have the same tension in the area above the job and below the job. This is difficult, as the action of cutting adds a variable.

The bandsaw blade must be flexible to bend around the bandsaw wheels but also stiff enough to resist bending and flexing between the wheels. The bandsaw achieves this by tensioning the blade and thus stretching it. The blade heats up while cutting the wood and expands its length. This allows the blade to become slacker and lose some tension. To overcome this, the upper wheel has a spring loaded mount that allows for the expansion and keeps a constant tension on the blade.

Before addressing blade tensioning, there are other causes related to blade wander. The blade may be correctly tensioned, but will still wander and a lot of time could be spent adjusting the tension when this is not the cause of the poor cutting.

Blades. If there is more pressure on one side of the blade than the other side, the blade will follow the path of least resistance and move over toward the side with less pressure. Typical reasons for the pressure being uneven are:

- 1. Dull blade. This will cause the pressure to build up on the front of the blade and cause it to move back. This will have a tendency to slightly buckle the blade. This buckling reduces the pressure on the front of the blade and makes it relatively slack, causing the blade to wander. The need for extra feed pressure is an obvious sign of a dull blade.
- 2. Poor wheel alignment. This will cause the blade to be fed through the job with a slight twist and cause the pressures to be uneven. This is not common, as most bandsaws come accurately set from the factory, and unless they have been mistreated, it should not be a cause for concern. Up-market bandsaws have adjustment for wheel alignment, but this should not be adjusted unless the bandsaw has been accurately checked.

3. Incorrect guides or thrust bearings adjustments. The guides are there to provide support to the blade, and if they are set so that they are pushing the blade off its natural path, the blade may wander off track. With the thrust bearing set either too far forward or too far back, the blade will bend either back or forward and change the pressure on the cutting teeth of the blade.

If the guides are set too tight, heat is built up in the blade, and this will cause the tension to change. It is also not good for the motor or the blade. Tight Ceramic guides tend to spark.

- 4. Tooth pitch too fine. If the pitch is too fine, the gullets of the teeth fill with sawdust and stop the blade from cutting efficiently. This will cause excessive heat build up and dull the blade quickly. The blocked gullets also affect the cutting action, and this, in turn, changes the cutting pressures and results in blade wander.
- 5. Wrong blade selection. This is one of the more common causes of blade wander. As an example, if a 1/4" blade with 14 TPI is used to cut a 8" block of hard maple, the pressure on the blade will be great, and the feed rate will have to be very slow to have any chance of cutting. The blade will have insufficient beam strength and bend back as the wood is pushed against the blade. The bending of the blade will cause the pressures to be uneven, and, therefore, the blade will wander.
- 6. Teeth set insufficient. The set of the teeth is there to create a slot for the back of the blade to pass through. Ideally the body of the blade should not touch the side of the job, but this is not practical, and the best that we can hope for is that little pressure is caused on the blade. If the set is insufficient, the blade will heat up as it rubs on the wood, and the cut will be slow, similar to cutting with a dull blade.
- 7. Uneven sharpening of the teeth. If the teeth are not ground evenly, the pressure during cutting will be different on the sides of the blade, and the blade will follow the path of least resistance and wander.
- 8. Uneven set. If the set of the teeth is not the same, the pressures will be different on the sides of the blade, and the blade will follow the path of least resistance and wander.
- 9. Blade speed insufficient. If the blade speed is too slow for the job at hand, the gullets will block with sawdust and cause uneven pressures on the blade. This will cause the blade to wander. To correct this, slow the feed rate.
- 10. Blade drift. Each blade has a natural cutting angle (drift). This is the angle at which it will cut relative to the desired path. If all the above parameters are generally in order, the blade will follow this path e.g. when using a fence to cut parallel.

Before tensioning, check the blade tracking. This is altered by the adjustment at the rear of the upper wheel which tilts the wheel support assembly. The wheel will be fitted with a rubber tyre having an oval surface. The blade should sit centrally on this surface but with the teeth slightly clear so as not to cut into the rubber. Ensure all blade guides are clear and make the adjustment.

Tensioning. Tension gauges are expensive, and are fitted to measure the amount the blade stretches when tensioned. They are impractical in the Woodies environment. In reality, there is nothing quite as quick or as accurate as experience.

Use one of the following tensioning procedures to tension blades:

Method 1. Looking at the top wheel, place your finger at the 9 o'clock position. Move your finger down 6", and using moderate pressure with your thumb, press on the flat of the blade. You should get 3/16" to 1/4" of deflection.

Refit all the guards and close the doors. Replace the table insert and check that the blade moves freely through the table insert. Check that all wrenches and loose parts are removed from the machine.

Plug the machine into the power. Turn the machine on for a second and switch off. Watch how the blade runs. If the blade tracks well, then run the machine at full power. If the blade tracking needs adjustment, repeat adjustment.

Method 2. Tension the blade as described in method 1. Close all the doors and ensure that all the guards are fitted. Start the bandsaw and look at the blade from the front of the machine. Start to de-tension the blade very slowly until the blade starts to flutter (wobble from side to side). Then start to tension the blade until the blade stops fluttering and is running true. Increase the tension on the blade by one complete turn on the tension handle. You may find that each size and type of blade will need more or less additional tension. For example, a 1/16" blade will need less additional tension than a 1 1/2" blade. Again, experience is the key, and with a little practice, it will become second nature.

The key to all tensioning is to get the blade to cut straight and true with the minimum amount of tension. The less tension you put on the blade, the longer the blade and the machine will last.

Some will advocate that if the bandsaw is not being used for extended periods of time, remove the tension on the blade to increase the life of your blade and the machine. If tension is left on the machine, flats or grooves can be formed in the rubber of the wheels, which will detract from the performance of the machine and in extreme cases cause vibration. Removing the tension will enhance the life of the machine, bearings and tires.

Label the machine de-tensioned. On the label mark the number of turns that you detensioned; this way you will know how many turns you have to put back on to have your blade correctly tensioned.

N.B. In the Woodies environment, some of the above will be a compromise. If you are involved with changing a blade, tracking and guide resetting will usually be required as well as tensioning. Discuss any adjustments with the Shed Captain. <u>Do not over tension a blade.</u>

It is advisable to always check that the table is square with the blade. A previous user may not have reset the table correctly.

Also, in the interests of all users, the Laguna bandsaw must not be used to cut dense timbers such as red eucalypts, mulga, or gidgee. Use the Wadkin machine or the Woodman table saw.

For those interested in trivia, it can be calculated that the blade speed of the Laguna bandsaw is 15.5 m/sec. and that any particular tooth is engaged in cutting four times per second. So if you lose a finger, it will be difficult to tell which tooth was responsible.

More importantly, on deep cuts, considerable heat is generated by a high speed blade, and the feed must not be forced when cutting harder timbers.



Tips and Tricks by Warne Wilson



An area I get most questions about is staining, filling, and the many finishes and polishes available on today's market.

The first of these is staining: reaching back in time, the earliest stains were made from natural materials including nuts and plants, and one which is still used sometimes, and vinegar and iron which will ebonise some woods and highlight grain in others.

Today however, we can buy stains in hardware stores in a wide range of wood tones. Walnut is the darkest of these and has to be used sparingly because of its intense dark colour, and if used neat it can severely darken some woods. Always try a little on a scrap piece of the same wood you have in your project, and it can be thinned with turps. Cabots range of stains is my favourite – they mix with both cellulose lacquer and turps based polyurethane finishes. A coat or two of shellac as a sealer can create the warm glow on cedar we see in antiques.



Wood fillers: As with stains a wide range of water based wood colours is available in the hardware store; from almost white for pine to walnut and ebony. The <u>reason</u> for coloured wood fillers is sometimes overlooked – the ideal is to make a surface mark as invisible as possible by matching the colour of the wood. Think of and old floor which has been sanded, we have all seen it, the white putty filled nail holes of 100 years ago really stand out when clear varnish is applied.

A common mistake is to fill marks on raw wood; this will often leave a halo around the repair which stands out in 3D under a clear finish. I always apply a seal coat before filling to prevent this (and on a sealed surface clean up is easy.)

When wood filler dries it becomes lighter, and when clear finish is applied it darkens. Please keep this in mind and experiment with a piece of scrap wood; a little finish on a fingertip applied to the dry filler will give you the clue. Fillers can be blended for shades of colour, and I keep a kid's watercolour set ready to be used if necessary to augment filler colour.

Finishing. A very big subject. French polishing using shellac began in the 18th century and antiques still feature this envied finish; it is the prince of finishes and very labour intensive but its high gloss surface, deep colour, and chatoyancy, (look that up!), cannot be duplicated.

Lathe work is often finished with sanding sealer and wax burnished on the spinning wood. Cellulose lacquer is popular and the preferred finish at BRWG. Sprayed on, it dries in a few minutes and can be sanded about an hour later. Quick and practical, it comes in gloss grades of matt, satin and high gloss, is robust in use, and will stand up to hard wear. Because it dries so quickly it cannot be brushed.

Polyurethane varnishes such as Estopol and Cabothane can be brushed or sprayed and are very dependable for many uses. Stain can be mixed with them and a range of them can be purchased with stain colours already added.

Paint of course has been used since the time of the pyramids, and probably for millenniums before. I once painted a room using water based milk paint – the paint used in the pyramids, the casein in milk fixes the paint when dry. Today's paints are non toxic and lead free, they are very forgiving in coverage, and in the elimination of brush marks. Oil is popular for cutting boards, especially olive oil and the other food oils. Actually the exceedingly small amounts of other finishes which might end up in food with years of use would be inert and harmless, but when selling it is best to be able to quote 'Food safe'. Also, too fine a finish would lead a buyer to think the board is too nice to be used for cutting!



Safety Notes by Warne Wilson and Dave Banister



We have a big organisation compared to many woodies clubs and to ensure its smooth working, it is important that we are all aware of club rules. From time to time over the years, accidents and incidents have occurred which have led the committee to lay down decisions about shed routines and safety practices. This month I have listed a few of the rules to refresh your memory of them:

- Stout shoes or boots should be worn in the shed. Wood is heavy and a hazard when being handled; footwear that offers little or no protection to sensitive toes is not permitted in and around the shed. We had a case once where a member badly injured a toe when he dropped a heavy slab.
- Many of us like to watch the Holland saw team turning logs into slabs and milled timber. It is
 a fascinating sight, but please stay behind the witches hats defining the working area, they
 are put there for a reason in the event of a catch or a blade break; bystanders, or
 someone walking through the perimeters instead of walking round, could risk serious injury.
- The drum sander: In the past we had lot of maintenance problems with this machine caused by members overloading it and presenting glue lines and resinous timber to ruin the wrap of heavy expensive sandpaper. Since the committee decided to lock the machine with the key under control of the shed captain the problem has been mainly eliminated. The shed captain will check the material you wish to sand. Keep the advance wheel to no more than an eighth of a turn for each pass and use the cleaning rubber before, during and after uses. A five-minute refresher on how to use this machine is easy just ask the shed captain for the day, he will be pleased to help you.
- Pre-used timber is not permitted to be recycled through our machines. Paint and other finishes may gum up blades and sanders. Hidden nails can do expensive damage.
- Let the machine do the work! Time without number we have seen machines being forced, forced, take it easy, and keep your feed rate at a speed which does not overload the machine. This is a safety issue also; kickback can happen in a millisecond.
- No work is permitted in the shed unless at least three members are present. This is a safety issue. In the event of an accident involving injury; one member can assist the injured while the other calls for help.

- Be aware of the position of fire extinguishers and the fire hose. Fires have occurred with an off cut jammed against a saw blade intensified by the forced draft of the cyclone, and a fire caused by an unnoticed similar incident started in a sawdust drum under the cyclone and caused severe damage. (Shed captains lock up procedure now includes removing the drum to check for smoke.)
- Newer members may not understand that the shed and its envied range of machines has been worked for and purchased one at a time with the proceeds of 20 years of shows, sales and raffles. The few members who remain from the original formation of the guild will attest to the fact that we started with absolutely nothing. Please respect dedicated work of members across the many years by using our precious machines with care and respect.

What should members provide ?

- On joining, members are given a suggested first project, of a tool box. The purpose is to
 enable the member to convey to and from the shed the items they need each and every
 time they attend. The design offered for the box is rudimentary, and recently we have
 seen some very elaborate tool boxes starting to appear. It is a great first project, with the
 added benefit of being highly useful.
- So, what should be in the box. One tip, from experience, DO NOT buy cheap rubbish, only to throw it away in days / months, and then have to buy a better one. Do your research, or ask a fellow member, and buy the BEST quality you can afford, with a view to having equipment that works correctly, every time, and for a long time.
- Following are suggestions for the minimum requirement :
- Pencil (not a flat carpenter's pencil). Do a little reading on the hardness you require, e.g.
 2B, HB, etc. A pencil sharpener is provided to keep it sharp for immediate use.
- Tape measure. No need for an 8m; a 3 m, or 5m, is much easier to use, carry in your pocket etc.
- Combination square, 150 mm or 300 mm (remember, the emphasis is on square, so do not skip on quality).
- Flat steel rulers, 10mm, 300mm and you could even go to 900mm.
- A rubber, to erase pencil marks from your project, saves on sanding.
- Basic chisels, say 6mm, 12mm and 19mm.
- HEARING PROTECTION (and dust protection is also a great idea)

Finally, to avoid your shiny new accoutrements being "borrowed", make sure you mark them permanently.

Innovation Corner

As we live in a rapidly changing world, this month we introduce a new segment focussing on innovation in all forms of wood working. You will have seen the Festool equipment recently introduced to the Guild, which is a good example of how technology has advanced. Think back to your childhood with a blunt chisel, handsaw and hammer, then compare that to the modern marvels on the market, which gives an idea of the changes experienced, which continue apace. Have a look at what a CNC (Computer Numerical Control) router is capable of !

How did the adage go, "Necessity is the mother of invention"? Not all innovations are commercial. They can be a simple jig developed to resolve a problem on a particular project.

So we would like to hear from the membership of innovations they are responsible for, have seen on mediums such as YouTube, or have purchased. If you have anything which fits, please email the Editor at newsletter.brwg@gmail.com.



A little piece of magic to hold the stock for resawing on a bandsaw. Editor's note: Do Not appropriate the laundry trolley to trial it





Along with our good supplies of silky oak we have also recently stacked for initial air drying some black wattle, white cedar, Japanese maple and Dutch elm. The pick of these varying timbers was the black wattle. We have more silky oak, white cedar, liquid amber and Queensland maple now waiting to be milled. The kiln is not ready for unloading yet. Still some good silky boards from the last load available and deep coloured camphor laurel.

Around the Shed



Warne Wilson was commissioned by the Maleny Netball Club to make a red cedar Honour Board, which attracted a \$100 donation to the Guild. A big thank you to Warne, whose efforts are greatly appreciated.





Sarah and Nigel did a fabulous job on the leaflet holder for the Maleny Community Centre. President John is photographed handing it over to President Phil following the mounting ceremony. Following is a note from a very grateful MCC:

Many thanks for coming out this afternoon to fix our wonderful new leaflet holder. It certainly looks impressive! Please pass on the MCC's thanks to all concerned. As I mentioned, we will sort out a donation to the Woodies' Building Fund at our next meeting in February.





Mobile: 0427 943 733 Phone: 5494 3733 Fax: 5494 3473 6 Lawyer Street, Maleny

Did you know ?????

There are two words in the English language that have all five vowels in order: 'abstemious' and 'facetious.'

A 'jiffy' is an actual unit of time, 1/100th of a second (so, when SOMEONE says they will be a jiffy, it may not be wise to hold them to that).

If the population of China walked past you, 8 abreast, the line would never end because of the rate of reproduction (the lesson being, don't stand on one leg while you watch).

Seventy year old Martha woke her husband, seventy-five year old George, from his nap on the sofa.

"There is a truck backed up to your shop and thieves are loading up your tools." she told him in a frightened voice.

He immediately looked out the window, then phoned the police.

The police informed him that it was Saturday night and they were really busy but would have an officer over to his place as soon as one was available, probably in about half an hour. He was advised to stay inside the house with the doors locked until they got there.

He hung up the phone, waited about a minute, then called back. "I just called about the thieves stealing my tools. No need to hurry, I just shot them."

Three minutes later an ambulance and two police cars arrived and the burglars were caught red-handed.

"What is going on here?" asked one of the officers, "We were informed that you had shot them."

"Yeh, and I was informed that nobody was available", George replied.



President	John Muller	0418 871 946					
Vice President	John Henderson	0481 339 814					
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Asst. Secretary	Dave Edmond	5478 6932					
Treasurer	Brian Harris	5445 7921					
Asst. Treasurer	Lindsay Thomas						
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Website Editor	Dave Edmond	5478 6932					
Publicity Officer	Trevor Jorgensen						
Timber Management	John Holland, Ron Donald, Bob Rothwell. Bruce Chapman						
Safety Officers	Dave Banister, Warne Wilson						
First Aid Officer	John Drewe						
Events Organiser	Rick Vickers	0408 663 842					
Shed Managers	Graham Bradford, Bruce Chapman(0422 927 032)						
Amenity Officer	Hamish Borthwick						
House Officer	Jan Clements						
Purchasing Officer	Rob Otto						
Training Officers	Sarah Odgers, Nigel Cundy						
Librarian	Brian Holdsworth						
Recruitment Officers	Dave Banister, Lionel Tilley, Tom Black, Jeff Harrison, Dave Edmond.						
Activity Officers	Ray Curry, John Drew, John Clarke, Warne Wilson Dave Banister, Keith Muirhead, Brian Harris, Max Barrenger						

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Monday	General Activities			
Tuesday	Turning & Carving			
Wednesday	General Workshop & Toys			
Thursday	Furniture & Joinery			
Friday	General Activities			
Saturday	General Act. & Demo's			

Shed Captain Roster - February 2017											
	Monday Tuesday			Wednesdav Thursdav		Thursday	Friday		Saturday		
				1	AM Dave Banister	2	Spike Bettega	3	Hamish B/wick	4	Keith Muirhead
					John Henderson						
6	6 Brian Harris 7	Bruce Chapman	8	AM Leigh Boynton	9	Ray Bryant	10	Dave Edmond	11	Graham Bradford	
					PM Keith Carter						
13	13 John Muller 14	14	Dave Southern	15	AM Rob Otto	16	John Drewe	17	John Muller	18	Warne Wilson
					PM Warne Wilson						
20	20 Lionel Tilley	21	Greg McCosker	22	AM Dave Banister	23	John Holland	24	George Blowers	25	John Henderson
					PM John						
27	Dave Banister	28	Tom Black								
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Shed Captain Roster - March 2017											
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20	Lionel Tilley	21	Greg McCosker	22	AM Leigh Boynton	23	John Holland	24	George Blowers	25	John Henderson
					PM Keith Carter						

Spike Bettega

30

Hamish B/wick

31

AM Rob Otto

PM Warne Wilson

29

Dave Banister

27

Tom Black

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