



# IWG News

The Newsletter of the Island Woodturners Guild

June 2024



## About the IWG:

The [Island Woodturners Guild](#) meets from 1:00 - 4:00 PM on the 4th Saturday of each month (except for July/Aug) at the Central Saanich Senior Citizens' Centre, [1229 Clarke Road](#), Brentwood Bay, BC.

**Visitors are welcome.**

## Executive Committee

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**Vice President:**

**Don Robinson**

**Treasurer:**

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## THE PRESIDENT'S TURN

It seems like ages ago that Elizabeth Weber demonstrated her carving and embellishing techniques. Many of you will be aware that Elizabeth was featured in the latest edition of AAW's *American Woodturner* magazine. I was recently in Ottawa for work and brought along my copy of that edition. I re-read the article on Elizabeth and was reminded that we embrace turning in many different ways and for many different reasons. Mine is simply a creative outlook and an artistic relief that I just don't get from my work. I enjoy all aspects of the turning process from gathering wood, to the preparation and planning before mounting a piece on the lathe and, of course, the process of actually turning whether I am able to create something interesting, functional, beautiful or even, in some cases, a really nice-looking piece of firewood! Of course, one of the challenges that we all face is what to do with our turnings. I mean how many bowls, platters or pens do our friends and family need (or want)?

As I was reading through the magazine, I focused in on an article on two-axes turning of a 3-D heart. It caught my eye for a number of reasons. First, multi-axis turning intrigues me, and I have not done it before. Secondly, a heart is different from a pen or bowl, so it is something new to give to friends and family. However, most importantly, I had just heard that a dear friend of my wife and I was diagnosed with a serious heart condition and had just returned home after having surgery. I think the turned heart is a fitting recovering gift and provides a daily reminder that we are thinking warmly of her.

While Gord Kifiak will be giving a demonstration on two-axes turning at our next meeting, I am going to try my hand at this in advance. (This may mean I can ask better questions!)

I will share my experiences of "turning my heart out" at a future meeting and will bring it in for *Show and Tell*.

I do hope that you are all able to get out to your workshops and find your joy in turning.

Don Costello

## NEXT MEETING: SATURDAY JUNE 22

Our last meeting before the summer break will take place on Saturday June 22<sup>nd</sup>. It will feature a live, remote demonstration by Gord Kifiak in his shop on double-axis turning.

Gord will cover a variety of topics including preparing a blank, holding methods, techniques for turning air as well as different grains, and finishes.



*(If you are interested in learning how Gord creates his amazing life-like flowers, check out the note in the September 2018 Newsletter.)*

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## SEPTEMBER CHALLENGE

If you are in need of inspiration over the summer months, the challenge for next September is to turn one or more finials – ideally to fit a box or other form.

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## WOW COVER OF THE DAY: VIRGINIA LEE

Congratulation to Virginia for the selection of her Kelp Frond/Red Cedar piece as the *Photo of the Day* on WOW! Commentators expressed admiration for her willingness to experiment with different materials and as Betty Scarpino noted, producing a piece that has the look and feel of a “*recovered relic*”.



## “MAY” RECAP

The May meeting featured demonstrations by Graeme Evans and Tim Soutar.

### A. TURNING A FINIAL

Graeme Evans provided a great introduction to finial turning. The following are the highlights. *(Some of the photos are taken from other sources.)*



#### 1. TOOLS

He began by discussing the tools that he uses.

- |                                     |   |
|-------------------------------------|---|
| a. Spindle Roughing Gouge           | Used for quick stock removal.                         |
| b. Spindle Gouge (Swept Back Grind) | Used for all detailing (beads, coves, ogees, onions). |
| c. Bedan                            | Heavy duty parting                                    |
| d. Parting Tool (Thin)              | Conventional parting.                                 |
| e. Skew                             | V-grooves at transition points                        |
| f. Golf gloves                      | Hand protection.                                      |

He noted that many of these are not essential tools. For example, you could use a bowl gouge in place of a spindle roughing gouge, a parting tool in place of a bedan and, with care, a spindle gouge in place of a skew.

Indeed, while it will require more sanding, virtually the entire finial in the photo (right) was turned using carbide-cutter tools.



#### 2. WOOD

Graeme indicated that for crisp features you should use hardwoods. His preferred species include oak, cherry, dogwood, and cocobolo. Arbutus and holly are two other options. If possible, you should select a blank that is straight grained as this will provide much greater strength – a major requirement in a long, slender finial.

## Pen Blanks

For smaller finials, you may want to use pen blanks. While Graeme does not enjoy turning acrylic acetate blanks due to the “sticky shavings”, there are many pen blanks that are available in a variety of exotic woods.



Lee Valley offers a number of these including amboyna burl, African ebony, and bird’s eye maple, some starting as low as \$3.

If you are turning icicles for a tree ornament, he recommends against using a dark wood as it will be very difficult to see against a dark green background. (Fake silver trees should be ok!)

### 3. TECHNIQUE

Graeme typically starts with a blank that is 1 – 1.5” square and 6” long mounted in a chuck. Before bringing up the tailstock, he removes the pin from the live centre to avoid creating a dimple at the tip of the finial.

**Note:** *If you leave the pin in the centre, it will damage the wood fibres well past the length of the pin which will need to be turned away before forming the tip.*

He will usually turn around 2500 rpm but emphasized that you should select a speed that you are comfortable with.

He turns a taper on the blank using a spindle roughing gouge and then uses a spindle gouge to turn roughly 1” of the top portion. This is then sanded (220X – 400X) in both forward and reverse.

Further turning will obviously thin the blank which can produce considerable “whipsawing”. He adopts two techniques to control this.

The first is a homemade support which mounts on the live centre in the tailstock. It consists of a small block of wood that is threaded on one end for mounting on the live centre. A narrow hole is drilled in the other end to support the tip of the finial. A piece of craft foam is inserted in the hole to protect the tip.

While this will minimize vibration, it will not remove it completely. Accordingly, he also adopts the common technique of using an underhanded grip with his left hand (he is right-handed) to support the finial. The tool rest is placed to the right of the area to be turned which enables him to support the back of the finial. The thumb, which is slightly above the tool rest, is used to guide the tool. He wears golf gloves to protect his fingers.



As he proceeds with the turning, he emphasized that to the extent possible, you should apply pressure towards the headstock. Applying side pressure – perpendicular to the blank may lead to a break.

For many of the small details, Graeme started with the flute closed and gently pushed the tip into the wood. (As he was working towards the headstock, this means that the flute was facing 3:00 o'clock.) This helps to prevent the tool from skating. From this starting point, he then opened the flute to turn the desired detail.

**Note:** For some good information on turning common features of finials (v-grooves, beads and coves), check out this note: <https://www.docgreenwoodturner.com/gouges7.html>

He turns in segments of 1" – 1.25" before stopping and sanding – being careful to support the turning.

Before parting off, he undercuts the collar of the finial so that it will fit the curvature at the top of the box or form.



## A. DESIGN CONSIDERATIONS

While there are innumerable finial forms, the following are some common recommendations you may want to consider.



### 1. Proportionality

The size (length and diameter) of the finial should be proportional to the size of the vessel. Patrick Sikes offers the effort at right as a fairly obvious illustration of what to avoid. (Graeme noted that this may be challenging in cases where the functional nature of the finial requires a more robust size.)



### 2. The Golden Mean (Rule of Thirds)

Cindy Drozda notes that just as the Golden Mean is widely used in designing bowls and boxes, it should also be applied to finials. Accordingly, she recommends that the bulk of the finial should be in the first 1/3 from the base with the remaining 2/3 thinner and lighter as it tapers to zero.

### 3. Base

The largest diameter should be at the base of the finial.

### 4. Flow

As a rule, avoid finials that are chunky or very heavy. To the eye, the finial should flow upward in a pleasing manner. If the finial has a collar, its shape should blend with the curve at the top of the vessel (right).



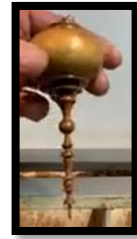
### 5. Complement the Vessel

The finial should complement the form of the vessel. While this is easier said than done, a review of finials – particularly those by Cindy Drozda – will provide some direction. The finial at right by Tim Soutar contains a natural wood “onion” whose form and specie matches that of the hollow form providing a very attractive symmetry.



## 6. Excessive Features

Resist the temptation to add too many elements to a finial. In a self-critique, Jerry Ritter concluded that he overdid the elements on this icicle finial.



As Cindy Drozda's work illustrates, "relative" simplicity can be a virtue.

## 7. Drawing

While Graeme noted that he designs "as he goes", it is important to note that he has turned many hundreds of finials as illustrated by his first "demo finial" (right).



For those new to finial turning, most sources recommend drawing a proportioned sketch on graph paper in advance. This allows one to easily play with different forms and dimensions before putting tool to wood. As Cindy Drozda notes, it also means that one is not faced with the often-impossible task of making changes to a completed portion of the finial.

## SOURCES AND FURTHER INFORMATION

Patrick Sikes, *The Art of Finial Design & Turning Techniques*

[https://www.woodturnersofpolkcounty.com/Finial\\_Design\\_Worksheet.pdf](https://www.woodturnersofpolkcounty.com/Finial_Design_Worksheet.pdf)

Cindy Drozda

<https://www.cindydrozda.com/index.html>

Jerry Ritter

<https://www.facebook.com/zvwoodturners/videos/finial-design-and-turning/705850086841048/>

Jim Terry, *Designing and Turning Finials*

<https://ptwoodturners.org/Tips%20and%20Handouts/Designing%20Finials%20-%20Terry.pdf>

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## **B. INTRODUCTION TO SHARPENING A BOWL GOUGE**

Tim Soutar volunteered (sort of) to offer some recommendations to new turners on sharpening a bowl gouge. The following are the highlights.



### **1. EQUIPMENT**

#### **a. Grinder**

As is the case with most turners, Tim uses an 8" slow speed grinder (1750 rpm) rather than a conventional one (3400 rpm). It removes less steel and produces less heat.

#### **2. Wheels**

While they are expensive (\$225), if you can afford them Tim recommends CBN wheels. They will not overheat tools, never need to be dressed, and will last a lifetime for a hobby turner. And as they will always retain their original diameter, it means there is no need to adjust grinder jigs. If you are only purchasing one wheel, he recommends 180X.

*(For more information on these wheels, see the note in the November 2023 Newsletter.)*

#### **3. Sharpening Jigs**

##### **a. Wolverine + Vari-Grind**



Despite being proficient at freehand sharpening, Tim uses the Wolverine and Vari-Grind Jigs. (LV: \$160). He does so for reasons of speed, consistency of grind and to minimize loss of steel.



##### **b. Mike Neal's Attachments**

He strongly recommends two attachments to the Wolverine system which are available from Mike Neal. They are both used in place of the Wolverine long V-arm.



The first of these allows one to easily and safely produce a traditional or fingernail grind on a bowl gouge. (\$35) This is a nearly straight across grind similar to that found on a spindle roughing gouge.

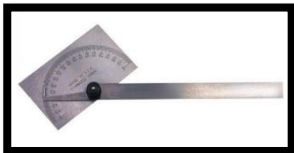


The second attachment is used in conjunction with the Oneway Vari-Grind jig. (\$45) The jig has two “sockets” for the leg of the VG jig (green arrow): one for the primary bevel and one for what is termed a “secondary bevel”. It also has a locking screw (red arrow) which secures the length of the extension arm for repeatable grinds.

The use of these is discussed below.

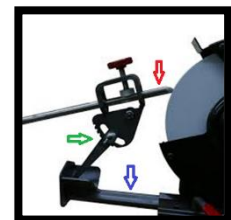
#### 4. Miscellaneous

You may also want to have a protractor (KMS: \$19) and a wide tip felt pen.



## 2. VARI-GRIND (VG): INITIAL SETUP

There are 3 variables when using the VG: tip projection, leg angle and the distance of the foot of the leg from wheel.



One of the challenges is that changing any one of these will affect the other two resulting in a change in the grind. Accordingly, Tim suggests that you start with the following settings and once you are more experienced you can play with these if you want.

### a. Tip Extension

The tip of the gouge should extend between 1.75" or 2" from the jig. All other things being equal, a 2" projection will provide slightly longer wings. Whatever distance you decide upon, stay with it. You can make a simple depth gauge by either drilling a hole to this depth in a piece of wood or mounting a small registration block on a flat surface.

### b. Leg Angle

If you are starting out, Tim recommends that you place the leg roughly in the middle of the range. (See the green arrow in the photo above).

*Note: A slight variation in this can be found on the website of Thompson Tools. You may want to consider printing off a full-size template which can then be easily used to set the leg. It can be found here: <https://thompsonlathetools.com/sharpening/>*



### c. Distance from Wheel

To determine this, simply slide the V-arm forward until the bevel is flush with the wheel and then lock it down.



## 3. GRINDS, BEVELS AND WINGS

While there are a variety of different grinds, Tim recommends that one should start with 2 basic ones. With experience, you may want to explore different configurations.

### a. Swept Back Grind (aka Irish Grind)

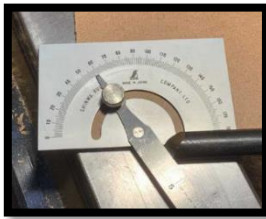


For most of his turning, Tim uses a bowl gouge with a swept-back grind where the wings of the tool are swept back 1 – 2 times the diameter of the tool.

It performs well in making roughing, scraping and pull cuts as well as enabling shear scraping with the wings (right). (For a good discussion on how to shear scrape with a bowl gouge, see the article by Mike Mahoney in *American Woodturner*, June 2017.)



Tim recommends that you begin with a bevel angle somewhere between 45 and 55 degrees.

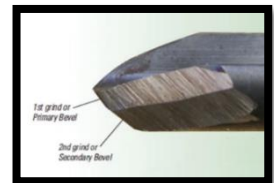


While there are many ways to check the angle, if you have an engineer's protractor, place the bottom of the card in the flute and adjust the arm until it matches the bevel.

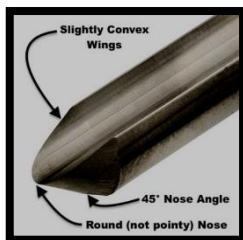
To check the grind, you can mark the bevel with a black felt pen. Turn the wheel by hand and advance the tool. Once you have a clear mark that runs the width of the bevel, your grind is set.



He also recommends that you create a secondary bevel. This is a somewhat confusing term that simply means removing a portion of the heel of the gouge for greater clearance when making concave cuts. (If you have Mike Neal's jig, this can be done quickly by placing the VG leg in the forward hole).



However, Tim emphasized that these jigs do not determine the shape of the grind. This will depend upon how you swing the gouge, where you grind and for how long.



He also noted that it is important that the tops of the wings have a slight convex shape or at least be straight. It should never be concave.

Jerry Hall

For a good video on sharpening an Irish grind on a bowl gouge, see: <https://youtu.be/rNCZP3veFqk> (starting around 8:25)

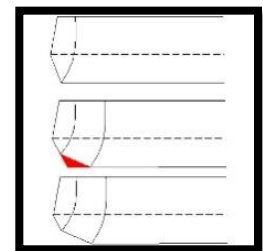


## b. Traditional Grind (aka Fingernail)

A swept-back grind does not work very well when hollowing a relatively deep bowl. Even with a secondary bevel, the tool may rub when cutting the bottom of the bowl. In these situations, Tim uses a bowl gouge with a traditional or finger nail grind which is sharpened straight across the shaft, like a SRG.



He uses Mike's first jig noted above with a bevel angle from  $60^\circ$  to  $70^\circ$ . Once again, he also removes part of the heel for clearance.



This grind also works well on end-grain and fibres and other difficult grains.

Obviously, deep bowls will involve substantial overhang of the gouge. For stability, you may want to consider using a  $5/8$  or  $3/4$ " gouge.

## 4. CONCLUSION

One of the most important points Tim conveyed is to avoid the temptation early in your turning efforts to get "hung up" on the *minutiae* of various grinds and bevel angles which are routinely found on various woodturning sites.

This short video by Jacques Vesery provides a humorous illustration of this point: <https://www.youtube.com/watch?v=OYODmS6Jt2Q>

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## DRYING “TWICE-TURNED” BOWLS

*This note is prompted by questions from new members as to the best method for drying wood blanks.*

While there may be occasions where one decides to turn a bowl to completion from green wood, the more common practice is to adopt a “twice-turned” approach. The blank is turned to a rough shape, dried, and then re-turned to the final form. This note considers the most common methods used by experienced turners to dry a bowl as well as offering some tips that may increase your chances of success.



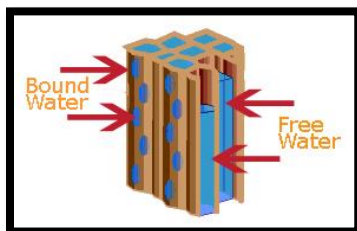
### INTRODUCTION

A blank from a freshly fallen tree will contain a very large amount of moisture. A study by the Oregon State University, concluded that the moisture content (weight of water versus weight of wood) of Pacific Northwest trees can range from 45 to more than 200 percent!

Moisture Content is Defined as:

$$MC = \frac{\text{Weight of Water}}{\text{Weight of Wood}} \times 100\%$$

(Typically, wood that is harvested on Vancouver Island during the dormant months (October – February) will have a lower MC.)



This moisture consists of two types: **free water** which is liquid in the cell cavities and **bound water** which is trapped within cell walls.

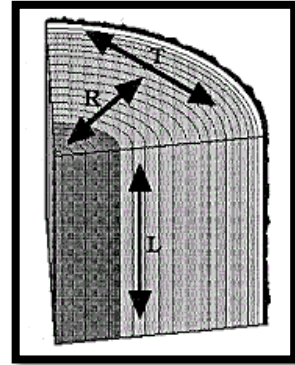
Once a piece of wood is cut and exposed to air, it will begin losing **free water**. The “shower” you experience when turning green wood is principally this form of moisture. However, the wood does not contract or change dimension since the wood fibres are still saturated with bound water. It is only once all free water is gone – called the fibre saturation point which is typically 30% - that the wood will begin to lose **bound water**. And this is when wood will begin to shrink and threaten to crack.

Wood shrinkage takes place in 3 dimensions: longitudinal, radial, and tangential.

The first of these, which refers to shrinkage along the length of a log, is relatively minor – typically only 1/10<sup>th</sup> of 1 percent.

Radial shrinkage refers to shrinkage which is perpendicular to the growth rings. Depending upon the species of wood this can range from 3% for poplar to 7.6% for hickory.

However, the greatest amount of shrinkage is tangential which takes place along the growth rings (circumference). It can range from 6.4% for butternut to a whopping 12.4% for arbutus.



While shrinkage can produce cracks, it is not the primary cause. Rather, most cracks are caused by the **differential moisture levels** between the outer and inner areas of a log or blank.

As the outer areas of a piece of wood begin to lose bound water and shrink, they will conflict with the stable saturated interior. As the circumference (tangential) shrinks much more than the radius (radial), it causes the familiar radial cracks.



Hence, the primary goal in drying wood is to attempt to ensure a relatively equal moisture content and thus drying time throughout a blank. For example, in the case of commercial kiln-dried wood, heat and steam are introduced into the drying chamber at scheduled times to maintain a moisture level on the outside of the wood the same as that on the inside.

## A. DRYING METHODS

*Many senior members report that with some species, they do nothing more than store the rough turning in a cool location with some ventilation. These include species with low shrinkage rates such as poplar, butternut and most significantly, big leaf maple. However, if you are just starting out, you may want to consider using one of the following 3 methods with these species until you acquire more experience.*

## 1. BOILING

Most sources claim that the most effective method of drying is to boil the blank. The science behind boiling is relatively straightforward. "Flexible" wood cells are surrounded by lignin which provides reinforcement and strength. Boiling will fracture cells walls facilitating the release of bound water and will liquify the lignin which allows stresses in the wood to be released.



While boiling (and steaming) have been used for centuries to bend wood, the current popularity of this technique for woodturners dates from the publication by Steven D. Russell of his experience with this method. Over a period of many years, he boiled more than 4,200 roughed-turned bowls and platters - made from 46 different species of wood. His success rate in terms of avoiding cracking was more than 95% - a rate which far exceeds any other technique. Of equal significance, he found that it cut the subsequent drying time by 50% compared with air-drying.

This method is particularly recommended for species which are prone to cracking such as arbutus, oak, and most fruit trees.

### a. Equipment

You will need a large pot and a heat source. For maximum use, purchase the largest canning pot you can afford. A less expensive option is to use a cut-off from the bottom of a 55-gallon steel barrel. (Warning: If you use a kitchen pot, it will no longer be a kitchen pot!)



As for heat, a propane stove (or barbecue side-burner) set up outside provides a safe and effective source. More expensive options include turkey boilers or crab pot cookers. (Or, when no one is watching, you can simply use a kitchen stove top.)

## **b. Boiling Time**

While the time required will vary by specie, the common recommendation is to boil for one hour for every inch of wall thickness. This should be a “medium” boil – active bubbling - not a simmer. Boiling for longer than this will not harm the vessel.

If you initially place your form in cold water – which is recommended for safety – the clock starts when the water begins to boil. If you need to add water before the time is up, wait until it comes back to boil before “continuing the countdown”.

## **c. Immersion**

The piece must be completely submerged in the boiling water. In most cases, this will require a metal grate which is just slightly smaller than the diameter of the boiling tub with a weight on top. Many turners use heavy duty wire mesh with a cement brick on top.

**Safety:** If you are boiling a large bowl (or platter), be careful that it does not jam in the pot. If so, it can act like a steam pot lid and explode. (Yes, there several cases where this has happened resulting in serious burns!)

## **d. Let Cool in Pot**

While some members remove the blank once the time has expired, most sources recommend leaving the blank in the pot until it cools – typically overnight. A slow cooling period will help to minimize cracks particularly in troublesome woods such as arbutus.

## **e. Subsequent Drying**

For some species, many members simply store the boiled turning in a cool, dark area and let it air dry. Most sources suggest that you wait 2 or 3 weeks before exposing it to ventilation. Others prefer to place the turning in a Kraft paper bag, regardless of species. (*This method is discussed in more detail below.*)



Whichever method you choose, you should inspect the condition of the turning every day – particularly for the first few weeks.

If the blank starts to crack it means the wood is drying too fast. Apply thin CA glue to the crack and consider placing it in a paper or plastic bag for a few days to slow the drying process. (Too long in a plastic bag will likely produce mould.)

Conversely, if you discover mildew or mould, it means that the environment surrounding the blank is too humid. Apply bleach to the mould and take appropriate steps such as moving it to a dryer environment and/or increasing the ventilation.

### **f. Determining when Dry**

The goal is to achieve EMC (equilibrium moisture content) which simply means that the piece matches the shop environment and is no longer gaining or losing moisture.

Most turners use a kitchen scale to determine this. The boiled piece is weighed at regular intervals with the results recorded on a scrap of paper. When there is no longer any drop in weight, you know that the piece is stabilised.



## **2. MICROWAVING**

For smaller pieces, you can use a microwave. It must be a “shop” microwave as opposed to the kitchen unit given the odours which will permeate the machine.



The effect is similar to boiling in that the heat serves to “liquify” the lignin and ruptures internal cell walls. The precise settings and time will vary depending upon several factors (species, size, initial moisture level, microwave power, turntable), so there will always be an element of experimentation.

If you are starting out, it is recommended that you use settings of 20 - 30 seconds at full power. As a guide, when the blank is removed from the machine, it should be warm – not hot – and have a slight amount of moisture on the outside.

**Note:** Microwaving will release a great deal of moisture which means you should wipe down the inside of the machine between cycles.

After each session, you must allow the piece to return to room temperature before the next cycle. Accordingly, this provides lots of time to clean up your shop!

(For woods prone to cracking, you may want to leave the piece in the microwave for at least 5 minutes to cool down in a high humidity environment.)

**Caution:** There are numerous instances (including one of our members) of aggressive microwaving which overheated the wood and caused it to catch fire. Worse yet, in some of these cases, the inside of the overheated wood ignited some time after the microwaving had finished. Do not rush it and do not leave a piece unattended before it has cooled off!

Regular weighing and recording as discussed above will help you determine when the piece is at EMC.

For more information and some additional tips, see the video at:

[https://www.google.com/search?client=firefox-b-d&sca\\_esv=83e1b8e3588a8f5f&sca\\_upv=1&q=woodturning+microwaving&tbm=vid&source=Inms&fbs=AEQNm0DPvcmG\\_nCbmwtBO9j6YBzM68ZanC7g01Skprhw5JoufVCiMv-hxC44jt6JduRQysBab-bgQXjPraaWFXMvOy8KCB\\_4I5hL0NIRHmm\\_irUX0qxwzoqqNEhPHKIXhT\\_JsVphYO9ip\\_8ih8C6vAl\\_VNhGgtKdg11Uh3vymdmlOVOhgAM\\_IXb0UpRDABM-HfGcdIVDEp\\_7uMTxG3SQL\\_Y\\_3LD8-XnASYA&sa=X&ved=2ahUKEwj1wZ2Os-GGAXFlzQIHRoWCC0Q0pQJegQIChAB&biw=1408&bih=606&dpr=1.36#fpstate=ive&vld=cid:c56e09ba,vid:0X5xyq2ikzY,st:0](https://www.google.com/search?client=firefox-b-d&sca_esv=83e1b8e3588a8f5f&sca_upv=1&q=woodturning+microwaving&tbm=vid&source=Inms&fbs=AEQNm0DPvcmG_nCbmwtBO9j6YBzM68ZanC7g01Skprhw5JoufVCiMv-hxC44jt6JduRQysBab-bgQXjPraaWFXMvOy8KCB_4I5hL0NIRHmm_irUX0qxwzoqqNEhPHKIXhT_JsVphYO9ip_8ih8C6vAl_VNhGgtKdg11Uh3vymdmlOVOhgAM_IXb0UpRDABM-HfGcdIVDEp_7uMTxG3SQL_Y_3LD8-XnASYA&sa=X&ved=2ahUKEwj1wZ2Os-GGAXFlzQIHRoWCC0Q0pQJegQIChAB&biw=1408&bih=606&dpr=1.36#fpstate=ive&vld=cid:c56e09ba,vid:0X5xyq2ikzY,st:0)

### 3. BAGGING

While substantially slower than boiling or microwaving, bagging can be an option on its own or in conjunction with either of these methods.

On its own, a common procedure is to coat the end grain portions of the turning with a wax emulsion (*Anchorseal*), place it in a brown paper bag and then store it in a cool, dry location.

The bag slows the release of water vapour from the piece as compared with open-air drying. This means a slower rate of shrinkage and more time for stress to be released slowly. As the bag will become saturated with moisture, it must be changed every day or two.



As is the case with boiling, and to a lesser extent, microwaving, this process does require daily monitoring for the first few weeks. Cracks or more likely fungal growth should be dealt with as indicated above.

While some turners will wrap a piece in a towel, as opposed to a paper bag, you should keep in mind that the towel will speed up the drying process since the fabric will “wick” moisture from the wood which may cause cracks. It will also produce a higher moisture environment which may produce more fungal growth.

### 4. MISCELLANEOUS TIPS

#### a. Thickness

One of the most important steps to minimizing cracking is to rough turn the bowl to a consistent thickness. This will allow a more even drying throughout the piece.

#### b. Tenon

The tenon should be oversized so that it can be trued up after drying and warping. For remounting, ensure that you clearly mark the centre of the tenon.

### c. Rim

The rim is the most likely location of cracks. Many sources suggest that a rounded lip as opposed to a flat rim on the rough turning will enhance flexibility and thus minimize cracking. In the case of air-drying, many turners will apply a length of plastic wrap or stretch film to the rim for the first few weeks.

### d. Persevere

Wood does weird things which means there are no guarantees. This is especially the case with arbutus and fruit woods. With experience comes greater success.

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## PARTING OFF

Many thanks to Graeme Evans and Tim Soutar for their great demonstrations, and to the members of the semi-new Executive for stepping up!

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## CONCLUDING THOT

