

# DIMENSIONS

Newsletter of the Pacific Woodworkers Guild

## At a Glance:

- Next meeting is Tuesday September 18th.
- BC Woodworking Show is October 19-21.

## When Last We Met

By Murray Mackinnon

### Pre-Meeting Demonstration

**Denis Reid** showed use how easy it is to cut wooden threads with a router and Beall's jigs available from Lee Valley (\$210 for 1/2", 3/4", 1" complete with taps or separately). It seemed just as simple as clamping the router to the jig base, setting the bit to the thread depth and winding the stock through the guide.

### Guest Speaker

**Bob Bedier**, our ex-President humorously recounted the trials and tribulations of restoring the woodwork on a 1948 Plymouth station wagon.

Bob, despite his apologies, had great slides that gave us an excellent idea of the Arkansas plants the vehicles were made in, and the before and after of his actual restoration. Originally designed in the 1920s for their speed to weight ratio, these 'hacks' were used to transport clientele from the railway stations to the hotels, hence the term *station wagon*. The framework, which extends from the floor pan up was built almost exclusively from white ash. Mahogany ply was used for the paneling.

As Bob remarked, the subject looked okay on the surface apart from some evidence of rot, a little wear and tear and non-alignment. However, after parts of the rear corner were removed, it was apparent that more than the epoxy of a previous restorer was required. Bob showed us how he patiently sculpted and finger jointed replacement sections. The doors were another challenge, with the lesson seeming to be that internal hidden stresses in the chassis and framework were likely to greet and frustrate you at frequent turns. In fact, Bob stated it took a good day to align just one of the 65 pound doors.

Bob concluded with some slides of the freshly spar-varnished station wagon on the road. It was indeed a truly wonderfully crafted restoration, the impressive result of about five months

work. Great going Bob, and many thanks for sharing this with us.

### General Business

**Bill Ophoff** got a 7:25 pm start to this last meeting until September with a warm welcome to guests, **Dean Pearce** and **Catherine**. Many thanks to **Don Fralick** for generously providing end of year raffle prizes – nearly everybody seemed to win something.

There were two entries in the President's challenge, a coin bank. This ended as a tie between the creative efforts of **Fred Otte's** intarsia river/money bank (complete with a one way coin valve) and **Mike McCarten's** grain silo.

**Ted Fromson** informed us that \$221 was made in raffle sales at the Richmond Carvers show. He figured that next year we should have a dynamic exhibit to rival other exhibitors.

**Bill Ophoff** noted that the workbenches to be raffled were in test assembly mode and another saw dust huddle in early September would see one finished in time for the Cloverdale show. He had also had a call from **John Cryderman** telling us that we have a booth in a better neighbourhood at the show – adjacent to the Delta workshop. Bill is also trying to organize a hands-on dovetail workshop by the Lee Nielson representative, around show time.

**Bill Fox** also made a call for raffle prizes and/or exhibits for the show. Incidentally thanks Bill for the use of your workshop for the meetings and sawdust huddles – a hall just does not have the ambience.

Finally, **Denis Reid** reminded us of the pre-Xmas Toy workshop huddle after the September meeting, organized so we can exceed last year's production total.

Show and Tell was brief, with another real puzzler from **Harry Taylor** – a cross puzzle which would have been a lot easier to solve if MDF had some grain.



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Please direct newsletter submissions to the newsletter editor, Murray Mackinnon, via email: [murraym@istar.ca](mailto:murraym@istar.ca) or call 986-5471.

The Pacific Woodworkers Guild is a non-profit association of British Columbia Craftspeople dedicated to excellence in woodworking. Guild members meet on the third Tuesday of each month (except July and August) in Richmond, B.C.

The newsletter is published monthly, ten times per year, and distributed free to members and associate members. Membership is available to anyone interested in any form of fine woodworking. Membership fees are \$25 for twelve months; Associate membership fees (newsletter only) are \$15 for ten issues.

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*Treasurer*  
*Secretary*  
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 Dan Lemire  
 Lou Hafer  
 Paulin Laberge  
 Paul Townsend  
 Bill Fox  
 Art Liestman  
 Bob Bedier

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 Murray Mackinnon  
 Murray Mackinnon  
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 Denis Reid  
 Fred Baldwin  
 Murray MacKinnon  
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##### Entertainment/Workshops Assistants

##### 2x4 Challenge Assistants

##### Richmond Carvers' Show

##### BC Woodworking Show -

*Delta Workshop Assistant*  
*PWG Booth Assistant*

##### Christmas Toy Workshop

##### Fundraising/Charity Raffle Assistant

##### Library

Tony Carter  
 Jack Wagner/Don Fralick  
 Paulin Laberge  
 Phil Laliberte/Mike Leahy  
 Ted Fromson  
 Denis Reid  
 Art Eberwein  
 Bill Fox  
 Harry Taylor  
 Denis Reid  
 Jan Dicks  
 Klaas Focker  
 Bob Bedier

## Next Meeting

The next meeting of the Pacific Woodworkers Guild will be held on Tuesday September 18th, starting at 7:30 pm (pre-meeting demo at 6:30 pm). The guest speaker will be **Ross MacMillan** of Industrial Artifacts. Ross recycles wooden dies (moulds) into functional objects d'art.

## For Sale

12" Diameter, 32" throat, home built drum sander: Depth adjustment from 0 - 1.5 inches; Casters; needs 1 to 3 HP motor, steel framed slide table, very heavy duty construction. Perfect for veneer, wide stock or burly maple. At \$125 firm its a steal (the parts are worth way more than that!) Call Mike at 329-5777.

## Christmas Toy Workshops

By Denis Reid

There will be two Toy Workshops for making toys for our annual donation to the Christmas Bureau. They will be held on Saturday, September 22 and Saturday, November 24 from 10:00 a.m. to 2 p.m. at **Bill Fox's** Shop.

Please bring Eye and Ear Protection, an apron or smock, portable tools such as drills, sanders, scroll saws, toy patterns, started or finished toys, and ideas.

For further details, contact **Denis Reid** at 604-533-2547.

## 2" x 4" x 8' Plus 1

By Marco Berera

*“Comments from tourists from all over the world complimenting the skills of the PWG’s artists were recorded in the guest book...”*

After much eager anticipation and preparation, 13 members of the Pacific Woodworker’s Guild had their artistic, prize-winning entries showcased by curator **Carol Badley**, August 1 to September 2, 2001 at the Seymour Art Gallery in Deep Cove, North Vancouver. The Plus 1 was pastel artist **Janis Blyth** who uniquely used some of the PWG members’ entries as the main subject in her colourful paintings.

The Opening Reception on Tuesday, August 7 was very well attended by the contributors, their families and friends as well as members of the Greater Vancouver Woodturners Guild.

Thanks to Carol Badley and her staff for the wonderful professional presentation of the 2 x 4 x 8 entries of our Guild. Comments from tour-

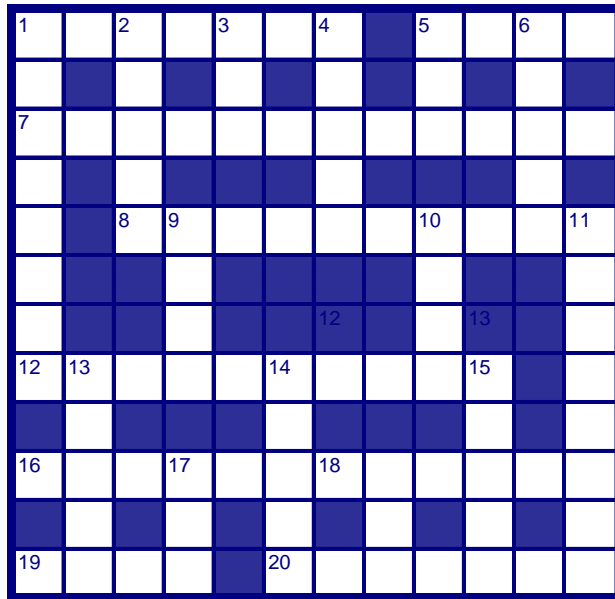
ists from all over the world complimenting the skills of the PWG’s artists were recorded in the guest book and the show was also featured in the North Shore News. This 30-day show has provided unique exposure for our Guild and was advertised widely in a great number of newspapers and publications as well as posters all over West and North Vancouver.

Our thanks go out to Carol.

The artists who contributed were:

- |                     |                       |
|---------------------|-----------------------|
| <b>Fred Baldwin</b> | <b>Ted Fromson</b>    |
| <b>Harry Taylor</b> | <b>Gordon Bednard</b> |
| <b>Steve Hansen</b> | <b>Fred Otte</b>      |
| <b>Marco Berera</b> | <b>Phil Laliberte</b> |
| <b>Henry Schulz</b> | <b>Bob Caffrey</b>    |
| <b>Dan Lemire</b>   | <b>Bill Fox</b>       |
| <b>Art Liestman</b> |                       |

## Puzzler



### Across

1. On trams about a cross-beam. (7)
5. Associated with fungal attack. (4)
7. Stain for softwood or oak. (12)

8. Wooden braces. (10)
12. Will stop joint in veneer from opening. (6,4)
16. Prevents the rot setting in. (12)
19. Measure of land. (4)
20. Backs iron support them. (7)

### Down

1. Coming, as it were, towards a point. (8)
2. Such a guitar is a V shaped. (5)
3. Watering place. (3)
4. Power. (5)
5. Spanish gentleman at Oxford. (3)
6. Source of power. (5)
9. Neat. (4)
10. Cannabis - to ensure water tight joint. (4)
11. Dormant ties (8)
13. Language of the Magyars. (5)
14. Classic architectural style in the cylindrical (5)
15. Leave out when pronouncing. (5)
17. Look! The bishop's territory. (3)
18. Skill. (3)

- |               |           |                   |             |          |                 |                |                  |
|---------------|-----------|-------------------|-------------|----------|-----------------|----------------|------------------|
| 11. Sleepers. | 3. Spa.   | 16. Preservative. | 1. Transom. | 5. Damp. | 7. Permanganate | 8. Stretchers. | 12. Gummed tape. |
| 13. Ugric.    | 4. Might. | 19. Acre.         | 20. Cutters | 5. Damp. | 7. Permanganate | 8. Stretchers. | 12. Gummed tape. |
| 14. Dortic.   | 5. Don    | 19. Acre.         | 20. Cutters | 5. Damp. | 7. Permanganate | 8. Stretchers. | 12. Gummed tape. |
| 15. Elide.    | 6. Motor. | 19. Acre.         | 20. Cutters | 5. Damp. | 7. Permanganate | 8. Stretchers. | 12. Gummed tape. |
| 17. See.      | 9. Trim.  | 19. Acre.         | 20. Cutters | 5. Damp. | 7. Permanganate | 8. Stretchers. | 12. Gummed tape. |
| 18. Art.      | 10. Hemp. | 19. Acre.         | 20. Cutters | 5. Damp. | 7. Permanganate | 8. Stretchers. | 12. Gummed tape. |

## Sharpening Notes

By Ron Hock

*“Though many woodworkers find the sharpening process a pleasant pre-work meditation, most of us would just as soon get it out of the way and get busy woodworking.*

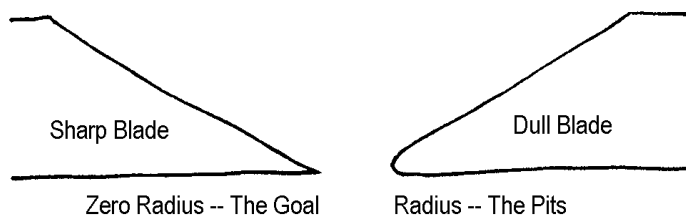
*There is more to sharpening than I can cover here and I refer you to any of the many excellent books on the subject. What I offer here, in extremely condensed form, are some ideas and methods to help make the task less forbidding”*

*[I finally got around to writing my own instructions for sharpening after using a reprint from Woodsmith Magazine on our blade wrappers for over twelve years. I heartily thank them for their generosity but I always wanted to use my own words about techniques that work for me. I also recommend Leonard Lee’s The Complete Guide to Sharpening from Taunton Press, Brian Burns’ Double Bevel Sharpening from Palo Alto Publishing (available from Luthier’s Mercantile International), and The Japan Woodworker’s sharpening info about chisels and hochos. You can’t have too much information. -- Ron]*

Though many woodworkers find the sharpening process a pleasant pre-work meditation, most of us would just as soon get it out of the way and get busy woodworking. There is more to sharpening than I can cover here and I refer you to any of the many excellent books on the subject. What I offer here, in extremely condensed form, are some ideas and methods to help make the task less forbidding.

First, The Goal: A sharp edge only exists where two planes (i.e., the back and the bevel of a plane iron or chisel, or the two bevels of a knife) meet with zero radius. Of course, “zero radius” is a theoretical ideal that eludes us as we move to the next, more powerful microscope. (Figure 1).

There will always be some radius to an edge but The Goal is to minimize it. (Our fine-grained steel helps you here; the hardened particles in our steel are very small, allowing a smaller radius to be sharpened.)



**Figure 1 — The Goal: Zero Radius.**

Next, Getting There: Any of the popular abrasive devices can and will sharpen your blade. The choice is yours. The venerable “Arkansas” oilstones are legendary and keep their shape and flatness with little maintenance. These are a natural, quarried product that will last a life-

time. Man-made waterstones were more recently introduced from Japan, having a long history there as a natural stone. These stones sharpen more quickly because they are softer and thus wear faster, exposing fresh, sharp particles as they wear. However, their softness requires they be flattened often to avoid their tendency to “dish,” which makes accurate blade flattening and honing impossible.

Many woodworkers use a series of sheets of wet-or-dry sandpaper as their abrasive medium. A piece of glass serves as a flat baseplate and the sheets are simply switched as the blade is honed through successively finer grits. The low start-up expense, ease of use, and variety of grits (up to 2000-grit or finer from the auto supply) make this a great way to get started. Then there are diamond stones (great for coarser work), lapping plates (those who know them, swear by them), ceramic stones, leather strops (excellent for final finishing), and an overwhelming selection of powered machines all designed to make this task easier. Whew!

If you have a method that you like, that works for you, stick with it, use it. The following steps are mostly generic and you can follow along regardless of your abrasive proclivity. If you’re new here and “grit-less”, head to the store that sells automotive paints and related supplies and buy a sheet or two each of 180-grit (180X), 320X, 400X, 600X, 1200X, and 2000X. Some folks like to use 3-M #77 spray adhesive to stick down the sandpaper sheets; they sell it where you buy the sandpaper. Next, to the glass shop for a piece of 1/4” glass about a foot square. A marble floor tile, or scrap piece of monument or countertop granite, works well, too. Now go clear a spot on a workbench for the glass or tile. With a new blade, start with the 600X paper. If the back needs a lot of flattening, don’t be afraid to use a coarser grit to save time. When resharpening a blade, if the edge is chipped or horribly dull you may need to start coarser: 320X or 180X may be necessary.

Honing guides are useful things. If you have one, now is a good time to use it. Most block and bench plane blades are ground to 25° but some smart folks argue that there need only be clearance under the heel of the bevel. In other words, since the average bench plane blade is bedded at 45°, any bevel angle less than that will provide the needed clearance.

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And a thicker bevel is stronger so the edge should last longer. Bench plane and block plane blades have traditionally been beveled to 25°. Our blades for the handmade wooden planes were specified by **James Krenov** to have a 30° bevel. Chisels get different bevel angles for different tasks: 25° or lower for paring, 30° or so for chopping. Experiment a bit with different angles to see which one works best for the

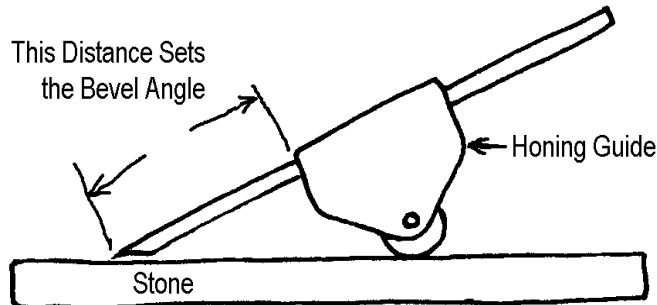


Figure 2 – The Honing Guide.

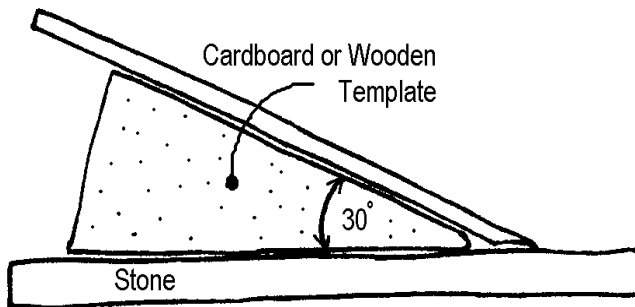


Figure 3 – Use of Template to Obtain Correct Angle.

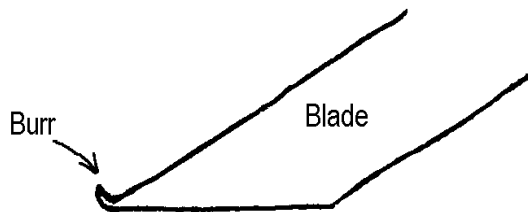


Figure 4 – The Burr.

wood and your style of work. A honing guide helps with all this by establishing an angle and sticking to it (Figure 2). It can also shorten the whole process by letting you raise the blade a degree or two so that you're only honing the very edge. The angle of the bevel is determined by how far the blade sticks out of the honing guide.

At least one brand tells you right on it how far to extend the blade for a 25° or 30° angle. If your honing guide doesn't tell you how far to extend the blade, you'll have to experiment and

measure to get what you want.

No honing guide? That's okay, but you'll have to exercise a bit more diligence and control while honing the bevel. It is important that the bevel be maintained throughout the sharpening process. If you rock the blade, the bevel will end up convex, "roundish," and the actual angle at the sharp edge will be greater than you intended. Not the end of the world, but it makes apples-to-apples comparisons between woods, steels, tools and bevel angles impossible. You can cut an angle template from a piece of cardboard, or whatever, and use that to check the angle as you go (Figure 3).

Start by "grinding" the bevel until a burr forms on the back. It may not be very visible, and will get smaller as you move to finer abrasives, but the burr will catch your fingernail (Figure 4). If the edge radius is large (which is a fancy way of saying "if the edge is really dull"), it may take a while before the burr will appear but it must be there or you haven't done enough work. It's the burr that tells us when the two planes have met (that zero radius thing, again.)

Now flip the blade over to do the back. Flattening the back is as important as honing the bevel. I repeat: *Flattening the back is as important as honing the bevel.* Think about it: in a bevel-down plane, like all bench planes, the back of the blade is the cutting edge. So you have to make the back *flat* to insure that the edge is straight, smooth and sharp - without waves, valleys or "teeth." Many woodworkers believe that the whole back, from the edge to the slot, should be flattened and honed. Others figure that a stripe about an eighth of an inch back from the edge is sufficient since the chip breaker rarely exposes even that much. Your choice.

If you can leave the honing guide on the blade, just hang it over the edge of the stone or plate. If it's in the way, you'll have to measure and reset the blade extension from the guide each time you change grits. Start with the coarse abrasive you've been using and rub the back using even, firm, down-pressure and take even, steady strokes keeping the blade flat on the surface. Do this until *your* scratches are uniformly all over the area you want to hone. It's quite common for a plane blade to have a slight "hollow" in the back and the early honing will reveal an arc of fresh metal along the edge and sides. You can expand this area as far as you want until the whole back is covered with the coarse scratches. When you're down far

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enough, and the planar surface of the back meets the planar surface of the bevel (zero-radius!) you will raise a burr on the bevel side. You're there.

Change to a finer grit and repeat the above process. Once the back has been ground flat with the first grit, it gets much easier and goes much faster. It's a good idea to angle the blade slightly while working on the back (Figure 5) and to change the angle with each successive grit. That way, you can readily see when you've honed off all the scratches left by the previous grit; another clue that it's time to change to a finer grit.

Check the blade to be sure that it is staying square. If it's not, push a little harder on the high corner while honing the bevel to bring it back square. Proceed through the grits until you run out of them. After a few, the honed surfaces will begin to act as mirrors; a sure sign of imminent sharpness.

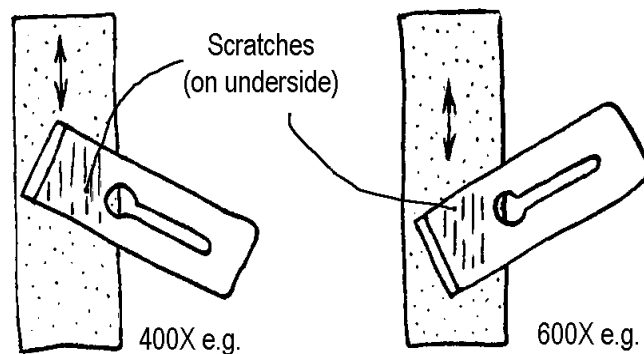


Figure 5 — Angle Blade to Stone.

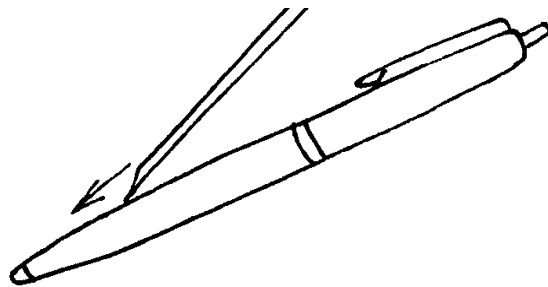


Figure 6 — Testing for Sharpness.

For most efforts, the 2000X paper is as fine as you need to go. But if you're doing the final planing on a surface that you don't want to degrade by sanding, you may want to go beyond the 2000X paper to a 6000X waterstone or a strop charged with chromium oxide compound ("green oxide" or "knifemaker's green"). The 6000X waterstone is a soft "stone" of cerium

oxide that cuts fast but can be tricky to use because the blade wants to stick to the fine surface. Slow strokes, plenty of water and patience are required. The strop can be leather, cardboard, or wood; a flat, fine textured surface that will take the crayon-like super-fine abrasive is what you want. It's best to gently pull the blade across the strop or you risk cutting into it. Be careful to keep the back flat against the stone or strop and the bevel at the correct angle; you don't want to round off the edge.

To test for sharpness, you can always shave the hairs on your arm (or wherever). A sharp edge will cut hairs with very little pressure. But if you're running low on hair (or just hate that patchy look) there are other ways. A sharp edge will catch on the flat of a fingernail or plastic pen barrel while a dull edge will skid a bit (Figure 6). It's really that simple; try it a few times to feel it but it takes only the lightest touch and if it skids, it's dull.

Also, you can see if a blade is sharp. Closely examine the edge with good light and if the edge reflects at all, it's dull. (Remember that zero-radius stuff? It's the blade's edge radius that reflects light and if there is no radius -- The Goal -- there will be no reflection.)

If you've just done a chisel, block-plane blade or other breakerless blade, you're done! But if you're working on a bench-plane iron, you're not done until you've polished the breaker. Make sure the breaker, when tightened in position on the blade, makes complete contact along its edge with no daylight showing; no gaps at all where a shaving could catch. Now polish the breaker ramp-surface. How much work is needed depends greatly on its condition, of course, and how smooth is enough is a matter of experience and performance. Use the same abrasives starting no coarser than you must. Breakers usually aren't hardened so the work should progress quickly. Rock and slide the breaker along the different grits until all coarse scratches are gone and the ramp area looks and feels smooth. *Now you're done.*

Resharpen often and lightly, no coarser than necessary, to insure good cutting performance and save time in the long run. Goodluck, have fun, and... "Ommmm"

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Ron Hock is president of Hocktools ([www.hocktools.com](http://www.hocktools.com)) a small metalworking cottage industry in Mendocino California, specializing in handcrafting quality plane irons.