







is a special edition eBook which contains bowl gouge sharpening issues and solutions excerpts spelled out in greater detail in the incredibly valuable eBook...



To learn more about the *Bowl Gouge Sharpening Problems and Solutions eBook* visit the Shop section of the TurnAWoodBowl.com website.

# Thank you for joining!

If you've sharpened a bowl gouge, you have been in this situation.

Everything seems to be set up correctly, "why is my bowl gouge cutting edge not right?"

Ideally, we want to be able to sharpen our bowl gouge and have it repeatedly shaped the same each time we go to the sharpening station.

Unfortunately, bowl gouge sharpening can be a delicate process to master, and mistakes or issues are not uncommon.

In this guide, we cover 5 common bowl gouge sharpening issues and how to correct them.

To use this ebook, read the different headlined "issues" and see which best apply to your gouge. Read the "Problem" description and also read the "Cause" and "Solution." Understanding the cause of the issue usually opens the door to a quick solution.

Hopefully you will be back on the road to turning with a perfectly shaped and sharpened bowl gouge very soon.

If you are still having issues be sure to go to the Shop and order the full eBook titled 12 Bowl Gouge Sharpening Problems and Solutions.

In that eBook we cover many more issues that can arise and as a last resort we have the "Can of Worms" solution where we will ressurect a bowl gouge cutting edge that has wandered too far from home, so to speak. ;)

# The Sharpening Jig

If you're new to bowl turning, I highly recommend purchasing a sharpening jig system. There are a few on the market. However, the Oneway Vari-Grind Sharpening System is by far the most readily available, easy to use, and relatively affordable.

Yes, you can sharpen a bowl gouge by hand. However, consistently hand-sharpening a gouge is a skill that requires a good deal of time and guidance to perform correctly.

A sharpening jig system, on the other hand, can produce accurate, consistent, repeatable results time after time.

Similar solutions, explained in this ebook will apply to other brands of sharpening systems as well.

Visit www.TurnAWoodBowl.com and search for the articles I wrote about setting up a Oneway Wolverine sharpening system, and how to use that sharpening system.

The information and techniques described here will apply to most any sharpening system. You do not have to have this particular system to benefit from the information to follow, but there will be specific references to the Oneway Wolverine sharpening system throughout this ebook.





## **Ideal Sharpening**

In an ideal world, we could purchase a sharpening system for our bowl gouges and never think of the topic again.

Unfortunately, even with a sharpening system, poor technique or bad habits can make your gouge cutting edge less than desirable.

A sharpening system jig and guide are just that, a guide and not a guarantee of perfection with every visit to the grinder.

I wrote this eBook to share with you many of the typical bowl gouge sharpening issues that can occur and how to correct them.

Not to worry, with the knowledge contained in this ebook and with practice, over time, you will quickly master the art of bowl gouge sharpening and be able to make a perfect cutting edge on all your tools!

## **Bowl Gouge Sharpening Best Practices**

There are a few habits that will improve your bowl gouge sharpening results that also need to be foundational techniques used at all times.

— It is tempting to want to make long, full sweeping passes from one wing, across the nose, and over to the other wing. This can be achieved but after some time and practice.

Instead of trying to sharpening the whole gouge all at once, concentrate on making one wing sharp first, then matching the other wing.

We want to make graceful sweeping passes on the sharpening wheel, much like we make similar passes while turning a bowl.

Once the two wings are sharp, lightly blend the two wings across the front of the gouge as the nose comes into form and completes the sharpening.

— Use a light touch and let the sharpening wheel do the work. Rarely, should you need to press the tool with much force into the sharpening wheel, apply light pressure.

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— Hold the bowl gouge, mounted to the Vari-Grind Jig with both hands close to the jig. Do not hold the bowl gouge by the handle. Instead, keep close to the pivot point of the Vari-Grind Jig with both hands to obtain much more control than any other gripping location.



— Maneuver the tool in the center of the sharpening wheel at all times and move your body to maintain that central location. Do not let the tool drift off the edge of the sharpening wheel.



— The point of contact between the bowl gouge surface and the sharpening wheel must be above the centerline of the sharpening wheel. If the tooltip contacts the sharpening wheel at or below the centerline, the gouge runs a risk of catching.



— Aluminum Oxide sharpening wheels need to be dressed with a dressing stone. Dressing the wheel makes the surface true and flush. However, this process also reduces the diameter of the wheel.

The V-arm must be adjusted to accommodate this diameter change as needed. CBN wheels do not lose noticeable surface material and will maintain a constant diameter.

— Always, always, always wear safety glasses (and a face shield is a good idea as well) and, most important, wear an air respirator. The metal dust coming off the grinder is many times more dangerous than wood dust. Protect yourself!

# **Tip Too Narrow**

## PROBLEM

A narrow tip on the bowl gouge will not allow smooth transitions as the tool is rotated during turning operation.

When the pointed tip engages the bowl surface, there's a good chance the tip will catch and dig into the wood instead of continuing a smooth cut.

#### CAUSE

The reason the gouge tip becomes narrow is too much time was spent grinding, sharpening, and shaping the wings, and not enough time was spent developing the nose or tip of the gouge.



## CORRECTION

Work one wing at a time first until each is sharp. Then take your time and make light passes arcing around the gouge tip to blend the two wings.

The nose requires less time and pressure to shape than the wings, so be gentle and patent.

Once a balanced nose is shaped and blended across the tool, the sharpening is complete.

If the nose still looks too narrow, continue sharpening until the tip naturally flows and links the two side wings.

# **Multi-Faceted Bevel**

## PROBLEM

A multi-faceted bevel has numerous flat spots and angles that do not continuously flow together. Multiple facets merging with the top cutting edge do not create a fluid cutting edge.

If you attempt to turn with a multi-faceted bowl gouge, the quality of the cut will be interrupted because of the unsharp areas on the gouge cutting edge.



#### CAUSE

Multi-faceted bevel edges on bowl gouges are caused by interruptions in movement while sharpening the gouge.

A multi-faceted bowl gouge bevel is common with hand-sharpened gouges.



Interruptions while sharpening may be caused by awkward body movements and positioning, even when using a sharpening jig.

Holding and controlling the bowl gouge by its handle creates poor control while sharpening the bevel. Grip and pivot the gouge while sharpening, at the pivot point of the sharpening jig.

Other reasons could include a sharpening wheel or grinder that is vibrating and not operating smoothly.

## CORRECTION

Be sure your sharpening station is operating correctly. There should be little to no vibration or movement from the machine when it is working at full speed.

Body movements, when sharpening a bowl gouge, need to be fluid and even.

If necessary, before turning on the sharpening grinder, position yourself with your feet spread slightly apart and facing the grinding wheel at about a 45° angle.

Position your hands both near the rotation point of the sharpening jig. Do not hold the gouge by the end of wooden gouge handle. You need to control the gouge near the sharpening wheel more precisely.

Make fluid rotating motions with your two hands and also by shifting your body weight from side to side. Unlock your knees and pivot your hips as you turn.

You should not have to move your feet nor lean to the point of losing your balance.

If the multi-faceted bevel issue is from handsharpening, for best results use the sharpening jig to obtain a consistent, smooth cutting edge.





# **Discolored Metal**

## PROBLEM

Discoloration of the steel on a bowl gouge is an indication that the metal has been compromised and weakened.

Tool steel is hardened through a process called tempering, which involves heating and cooling the steel to precise temperatures and phases.



When the tool steel is heated to the point of changing colors on the sharpening wheel, it can make the metal brittle and capable of breaking.

#### CAUSE

The cause of tool steel discoloration is overheating the metal while sharpening.

Too much time spent sharpening the tool can cause overheating and discoloration.

Also, too much pressure applied while sharpening can have the same effect.

#### CORRECTION

Slow down and don't sharpen your tools too aggressively. Also, don't apply extra pressure, let the sharpening wheel do the work.

Keep a container with water near your sharpening station and frequently stop to dip the tooltip in the water to prevent heat build-up.



# Flat Spots on Bevel

## PROBLEM

Similar to the multi-faceted issue, a flat spot on the cutting edge of a gouge interrupts the smooth cutting pass on your bowl.

## CAUSE

Pausing, even for a moment, while sharpening can cause the sharpening wheel to remove too much material in one spot creating a flat area.



Also, if you are not making smooth fluid motions as you sharpen, flat spots can be created.

#### CORRECTION

Present the gouge surface to the sharpening wheel when sharpening, then retract the gouge to prevent an accidental bump of the wheel, which can cause a flat spot.

It is possible to make full, smooth sharpening passes from the left-wing, across the nose, and over to the right-wing.

If you are starting out, do not attempt to sharpen the whole gouge at once. Instead, focus on making one wing at a time sharp, then blend the two sides across the nose.

The nose of the gouge should require less sharpening time than the wings, so go gentle and let the sharpening wheel do the work.

If needed, with the grinder off, make practice moves to orient your hand and body coordination to produce smooth fluid motions.

## **Concave Wings**

#### PROBLEM

Concave wing profiles on a bowl gouge do not provide a fluid cutting experience around the whole gouge tip.

If you get to a location on the bowl when the side wings are engaged, the concave area can easily catch and cause trouble.

#### CAUSE

The reason the bowl gouge side wings become concave is due to too much grinding in the center



of the wing area. Also, applying too much pressure on the wings can make them concave.

Another possible cause for concave gouge wings is if the Vari-Grind Jig leg adjustment has been changed or moved from the desired sharpening position.

#### CORRECTION

Check to make sure the Vari-Grind Jig leg is adjusted to the desired setting first.

Slowly sharpen away the top edge of the wing and remove material until the gouge is appropriately shaped.

## **Sharpening Issues Fixed Conclusion**

Well we've covered a few of the many possible sharpening issues in this guide.

Don't be discouraged. The solution is really just paying more attention at the sharpening station.

If you feel you have other issues while sharpening, please check out the eBook 12 Bowl Gouge Sharpening Problems and Solutions in the Shop at www.TurnAWoodBowl.com.

In that 26-page eBook you will find 7 more problems with detailed solutions, including the fix-all "Can of Worms" solution.

I hope you've found this eBook informative and helpful.

My goal is to help you learn all the techniques needed to create the bowls you imagine!

# As Always, Happy Turning, Kent

The Bowl You Imagine-You Can Make!