

# Chris Pye Signature Slipstones

Chris Pye © 2007

## Introducing an innovative range of slipstones for woodcarvers.

Here are some notes about the slipstones which I have designed, and which are produced by Norton Pike.



There are 4 widths in the range, paired into boxes: coarse (major metal removing) and translucent Arkansas (for finishing). Also slipstones for V tools

Each stone has 4 edges and thus 4 profiles. Thus the carver will find a much closer matching of the slipstone profile to the inside sweep of the carving gouge.

The principle advantage these new stones have over existing slipstones is the speed at which they remove metal;

I use them in my DVD [Techniques of Sharpening](#), details of which you can see on the website by clicking the link above.

## The full range, out of their boxes:



To the left, the fine Arkansas stones; these take on a translucent quality with honing oil. To the right, the matching coarser stones: the thicker slipstones are a coarse grit; the thinner slipstones are a medium grit, there being less metal to remove.

## What are slipstones? What are they used for?

Together with benchstones, slipstones are used to correctly sharpen woodcarving gouges.

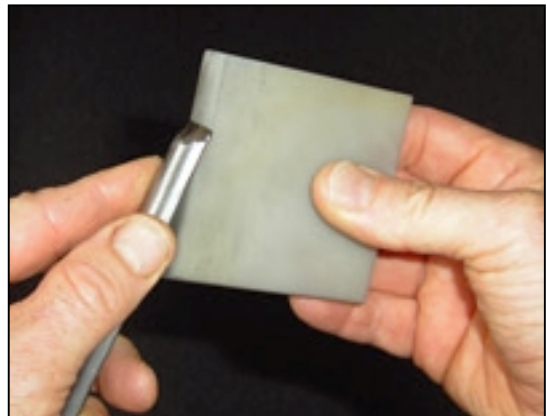


Woodcarvers use the benchstone to work on the *outside* bevel of the carving gouge, which must be sharpened to the correct angle (15-20°).

Shown here is a translucent Arkansas benchstone, also to be found in the range that I am putting my name to. (Meaning I am on their case about giving woodcarvers the best and most appropriate quality.)

Slipstones either create the *inside* bevel of their carving gouges (5-10°) or remove any 'burr' on the inside for a final keen edge of a gouge.

Both slipstones and benchstones are available in coarse or fine (translucent Arkansas) grits: The coarse stones remove metal quickly and thus form the overall profile of the bevels and cutting edge. The fine stones conclude the process, leaving a keen edge.



## Why an inside bevel?

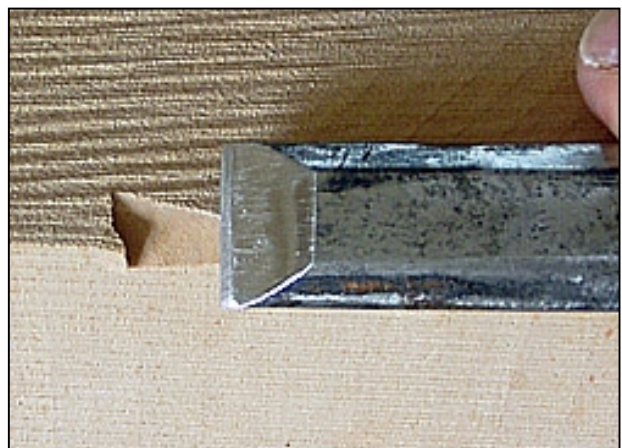
**Note:** Carvers have differing styles of working and thus tool requirements. I always recommend that carvers compare gouges with and without the inside bevel and *make their own minds up*, convincing themselves of the advantages of having an inside bevel.

The inside bevel has 3 principle functions:

- *The inside bevel allows the gouge to be used 'upside down'*

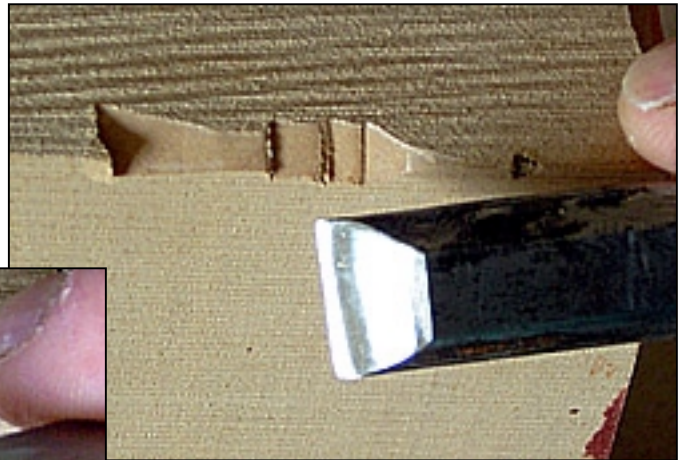
Carving tools work in a very different way to carpentry chisels.

When a carpentry chisel cuts into the wood it 'self-jigs': the blade rests on the facet it has just made to form a flat face for the blade to run along precisely.



The chisel cannot exit the cut back to the surface without 'chattering' because there is nothing for the cutting edge to pivot on.

To exit the cut, the carpentry chisel must be turned bevel-down so that the cutting edge can now pivot on the 'heel' (where bevel meets blade proper).



In contrast to carpentry chisels, gouges are principally used with the main, outer bevel to

the wood—in other words, like the carpentry chisel turned over, bevel-down.

The action of the gouge is more one of scooping; truly flat faces are rarely needed. Without any inside bevel whatsoever—the state of all new carving tools—a gouge used upside down will jig itself into the wood just like a carpentry chisel; the carver will have the same problems of 'chatter' exiting when they try to scoop out of the wood.



With an inside bevel, a gouge can be comfortably used upside down, losing that tendency to jig and dig in that a flat face to the tool gives. The versatility of the tool is thus greatly increased with a carver matching the profile of the gouge to the roundness of the wood surface when shaping convex surfaces.

- *The inside bevel strengthens the cutting edge.*

Carvers need a low angle of presentation to the wood (a low 'cutting angle')—an outside bevel angle of somewhere around (15-20°)—for maximum control and efficient use of effort. This angle is relatively weak when considered as a wedge of metal being pushed into the wood.

By adding a short inside bevel of 5-10°, the overall angle of the 'wedge of metal' is increased to (20-30°), much tougher. The cutting edge is thrown towards the middle of the metal, buttressed on both sides.

- *The inside bevel lifts the shaving out of the gouge*

Shavings and chips tend to bind against the walls of deep and U-shaped gouges as they run up the 'cannel' (the inner trough). An inner bevel eases the shaving out of the gouge by breaking and lifting the chip.

### **Do all carving tools have inside bevels?**

The general principle is that the more the gouge is used upside down, the more inside bevel is needed. (There are a few exceptions to this, such as pea or bead mouldings where the 'self-jigging' action of the edge is a benefit to cutting the extremely tight curve required).

The flatter the gouge, the more inside bevel it will have and the more the inside bevel is an advantage. Deep gouges have a short inside bevel. Bent gouges and V tools have none.

Carvers experiment and find the right amount of inside bevel that suits them, their tools and their style of carving.

### **Why don't gouges come with inside bevels already present?**

Today, many carvers are self taught and assume the manufacturers give them correctly sharpened tools. However, 'ready sharpened' gouges are a modern phenomenon. In the past gouges were bought 'set but not sharpened', with the outer bevel roughly ground to shape.

Carvers sharpened their own tools in the way that suited *them*. Carvers vary in their approach to carving and thus the way they like their carving tools configured (and this configuration does alter somewhat with hardness of wood etc).

*New carving gouges may be 'sharp' but not cut well:* the outer bevel all too commonly has too high a cutting angle, and the gouge cannot be used upside down so well for lack of the inside bevel. These features need to be corrected and carving tools 'commissioned' before arriving on the bench.

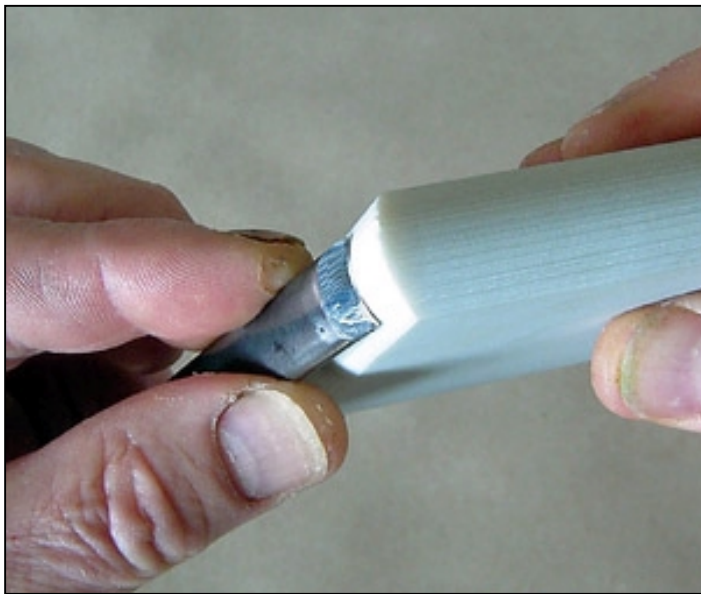
Carving tool manufacturers sell carving tools. Adding an inside bevel is an extra step and thus manufacturing cost when they can rightfully expect carvers to sharpen their tools in the way that we would expect a violinist to tune their violin.

## What is special about these slipstones?

There has always been very limited choice in commercially available slipstones, invariably wedge-shaped and with a single cutting surface that matches the sweep (cross-section profile) of precious few gouges. These slipstones were originally made with gunsmiths and similar trades in mind, not carvers.



Traditionally, woodcarvers acquired their sharpening stones over years from other carvers from whom they learnt, or inheriting from fellow carvers, or sharing within architectural workshops. The collection of slipstones, fashioned over many years of use would vary in size and contour, and would more closely match the sweep of gouges.

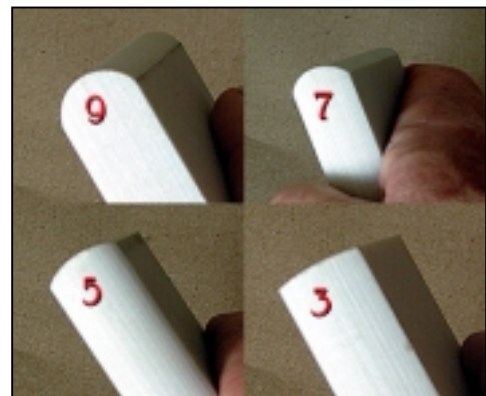


The closer the profile of the slipstone matches the sweep of the gouge, the more abrading surface is in contact and the quicker and truer is the inner bevel formed or the edge sharpened.

*The signature slipstones are the first designed by a carver specifically for woodcarvers.*

The main advantage is that each stone gives a choice of 4 cutting edges, and there is a wide choice of stones: coarse and fine, and from small detail gouges to large sculptural one. Thus carvers can match the sweep of their gouges to that of the slipstones, if not perfectly then closely.

This means that *the time to create or sharpen on the inside bevel is enormously decreased* compared with what has been possible with currently available slipstones.

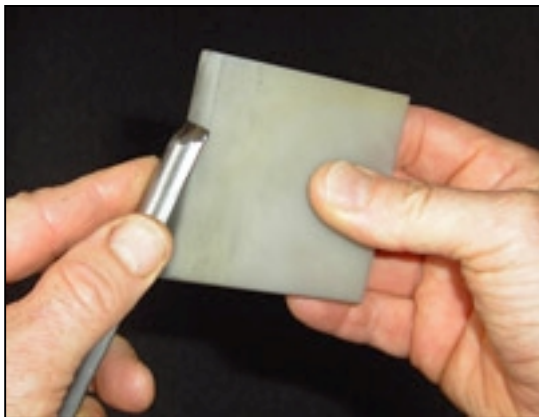


**Note:** Because there is a huge number of sweeps (the radii of the arc of the gouge edge) and widths, it is impossible for these slipstones to fit all of them perfectly. However, where they don't they should fit a lot closer than with previously available slipstones. Also, for the cost of the slipstone, the carver gets 4 profiles, rather than one.

You can change the profile of these slipstones using a coarse benchstone or flattening stone – also available from Norton Pike.

### How do you use them?

The carver matches the profile of one slipstone edge to the sweep of the gouge as closely as possible then (with oil) rubs the stone back and forth in canal at a tight angle (5-10°), inspecting the metal surface continually to monitor the abrasion.



Sharpening woodcarving tools and using slipstones is fully described in my books, in particular ['Woodcarving Tools, Materials and Equipment' vol. 1](#) and in my DVD [Techniques of Sharpening](#).

### Where do I get them?

- UK:

[Classic Hand Tools](#)

(web: [www.classichandtools.com](http://www.classichandtools.com))

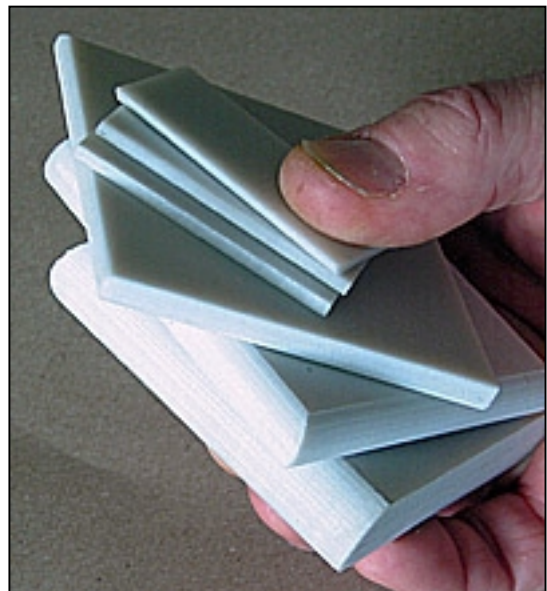
- North America:

[Rob Cosman](#)

(web: [www.robcosman.com](http://www.robcosman.com))

[Tools for Working Wood](#)

(web: [www.toolsforworkingwood.com](http://www.toolsforworkingwood.com))



### Can I see them in action?

Yes, indeed. I use them in my DVD [Techniques of Sharpening](#), details of which you can see on the website by clicking the link above.

## Power v Hand Sharpening

*There is no moral high ground in sharpening by hand, and power sharpening devices are essential to the busy carver to save time.*

I see these slipstones are simply a part of the carver's general sharpening 'kit' and will find uses no matter what approach a carver takes.

- Getting the correct and exact qualities in a carving tool to make it carve as efficiently as possible is a skill. Honing machines are very fast and used incorrectly quickly give poor profiles (lost corners, rounded bevels and high cutting angles) or overheating metal.
- Sharpening by hand is a safer more considered way of working and *I always suggest that beginners learn this skill slowly first—by hand*—and only when they know exactly what to look for in a correctly sharpened gouge and how to achieve it, introduce power assistance to speed the process up.
- There are some gouges that it is very difficult if not impossible to sharpen on a machine, either because of their smallness or shape.
- Slipstones are also useful for exact touching up of edges.
- Very large gouges can have their inner bevels ground in; the appropriate slipstone is used to clean and unify the abraded surface.
- You can take slipstones with you where sharpening machines would be inappropriate or unavailable.
- There are many carvers who actually don't like honing machines and grinders. They find hand sharpening more pleasant, more in keeping with the speed at which they work and even 'meditative'.
- You also have to ask: where does all that abrasive material flung out by these high speed honing machines end up? In the air, for the carver to breathe.