Why water stones?

Posted by Scott Sherman - 20 Oct 2012 08:42

I just recently became a devotee of self sharpening a couple of months ago. Before that, I thought only experts could sharpen my knives because there was such a dizzying array of methods and materials by which it could be done and until somewhat recently, it was all done freehand by craftsmen who probably learned at the hand of other experienced craftsmen.

Enter guided systems like WE (and others) which made expert results obtainable by inexperienced, unskilled knife collectors or someone with a collection of dull kitchen knives which is what got me started. So now I have bought into this WE system and decided to get a PP2. The PP2 was put together at a time when the 1200-1600 ceramic stone was not available due to some production problems (which now seem to have been resolved). This left a gap in the progression of abrasives between the 1000 grit diamond stone and the next available micro fine ceramic stone which shipped as part of the PP2.

Because of that gap, I began to consider the available options including the Chosera water stones made for the Wicked Edge guided rod system. The 2000-3000 and 5000 -10000 sets would very capably fill that gap but going from the proprietary (easy to use) WE stones to the Japanese water stones was messy and the stones have different dimensions making it more complicated to set the bevel etc.

However, having said all that, I have noticed among some here in this forum, there is a preference for using the water stones and I could not help but wonder why. So I would love to hear from those who prefer and use the water stones or who are considering buying them or perhaps you bought them to fill the gap and no longer use them because the 1200-1600 ceramic stone is now available. I would appreciate it if you could share your thoughts and experiences. What do you like about them? Do you regret getting them or if you did would you never consider using the diamond and ceramics. Perhaps you only use water stones, would you also get some of the diamond or ceramics now to supplement your water stones?

I know there is a different feedback and user experience with water stones , but to my untrained eye, you seem to be able to obtain about the same results with the dry, easier to use diamond and ceramic stones, or am I missing something? I am guessing that some here only used water stones freehand before the guided rods were introduced and liked being able to use them with the new rod system and just stuck with the water stones. If so, what is your feelings about diamond and ceramic stones vs water stones?

Thanks for your feedback and insight I am hoping others here are also curious and may learn something here.

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Re: Why water stones?

Posted by PhilipPasteur - 05 Nov 2012 22:58

Scott Sherman wrote:

Thanks Phil,

Very informative and helpful. I appreciate your sharing this info, even though it may wind up costing me a bunch more now. I see where the Chosera stones are now listed on the website among the top selling accessories.

By the way, you mention that you go back to the 2/3 K Chosera Stones, (presume before finishing them with the 5K/10K C Stones.

Could you do just as well after going through the diamond progression and then the ceramic progression with the added strokes and then to the 5/10 K C Stones or even just the 10 K C Stone since the micro fine ceramic is pretty close to what the 10 K grit is supposed to be? Or do you really need to go back to the 3 K C Stone and then move forward from there. Also, I guess if you do that why go all the way through the diamonds to ceramics and then to the Choseras. Why not just go from 1000 diamond to 3/4 K Chosera then 5/10 K?

Interesting that you ask. "usually" after going throught the diamond progression I .. "go back" the the 400 Choseras. They are listed as being much more coarse than the 600 diamonds. Maybe they are, but they "seem" to remove a good bit of tyhe diamond scratches.. after the 1000 grit Diamonds... and brighten up the edge considerably.

I then go to the 600, then 800 then 1000 choseras.. The 1000 are still more coarse then the 1000 diamonds.

After the 1K Choseras we are getting a real nice reflective finish. After the 2K/3K (Tom says this is dependant on the particular blade... being OCD I use them both) It is definitely more reflective at that point, than I got going through the last three knives ..in different steels, than the result using the 4 stones progression with the ceramics from WEPS after the diamonds. The Ceramics "cut" the Choseras.. cut AND polish.

I think you could get there with the 5K/10K Choseras after the ceramics.. It would just take lots more strokes...

As Curtis said, you could get there with strops and the WEPS pastes... and maybe we could... But,

again, with **lots** more strokes.

More in a bit.. need to walk the dogs!

Phil

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Re: Why water stones?
Posted by LukasPop - 06 Nov 2012 05:19

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Interesting that you ask. "usually" after going throught the diamond progression I .. "go back" the the 400 Choseras. They are listed as being much more coarse than the 600 diamonds. Maybe they are, but they "seem" to remove a good bit of tyhe diamond scratches.. after the 1000 grit Diamonds... and brighten up the edge considerably.

I then go to the 600, then 800 then 1000 choseras.. The 1000 are still more coarse then the 1000 diamonds.

After the 1K Choseras we are getting a real nice reflective finish.

What is the benefit of using 100-1000 diamond progression first? I heard that 400 Choseras work very fast, so why you don't start with them?

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Re: Why water stones?
Posted by Mikedoh - 06 Nov 2012 05:52

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?? Cutting down on stone wear maybe?

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Re: Why water stones?
Posted by PhilipPasteur - 06 Nov 2012 08:31

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LukasPop wrote:

What is the benefit of using 100-1000 diamond progression first? I heard that 400 Choseras work very

fast, so why you don't start with them?

Speed. The diamonds cut much faster. By their nature, they tend to cut deeper as well. These (relatively) big honkin troughs are what I want to get out with the Choseras. While the 400 Choseras are pretty fast, they can't touch the 100/200 diamonds for speed.

I think I have seen some Naniwa SuperStones in 120 and 220. These are something I would like to try some day. They could replace the diamonds for all but major repairs I think.

Phil

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Re: Why water stones?

Posted by PhilipPasteur - 06 Nov 2012 09:15

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So.... after fnishing up the Damascus mule I deciced to go back to the other Mule with the BCTS-B75P steel and see what some additional stropping would do for it. First, this steel is very close in chemical make up to BG 42 which was used for awhile in custom knives. The biggest use for BG42 was in aerospace for making ball bearings. It can be left very hard, I believe up to Rc 66 or better and polishes very well. The BCTS-B75P is Carpenter Steel's powder metalurgy version of the BG42. In the Mule it is supposedly hardened to around Rc 63. It should polish even better than the BG42 as the powder technology is designed to produce a finer grain with more uniform distribution of its carbides and the Vanadium which differentiates it.

If you remember from a previous post I had reprofiled this blade with the 100/200 diamonds and worked on it through the 1000 grit diamonds followed by the four grades of WEPS Ceramics. I then did a few strokes per side with 6 micron DMT paste on leather. The finish, while somewhat reflective, still had a lot of visible very fine scratches. Keep in mind that I went to about 200 strokes with each set of the ceramics and alternated every 50 with edge leading and edge trailing strokes. I really wanted to get results that would allow me to use this as my standard progression. It is fairly fast and there is little fiddling with angles. I think for a utility blade or a customer who did not want to pay for the ultimate polish, it could fit that bill nicely.

This time I wanted to follow-up on something that Curtis said. In essence I think I heard that he thought that the Choseras could be replaced by the WEPS pastes to get to the same place. I wanted to see how that would work for me. So I went back to the 14/10 WEPS paste on leather. I hoped to start at this level to get rid of some of the Ceramic scrathces relatively quickly, and I did. I used about 200 strokes at each grit. BTW, I changed my angle from 18 degrees on the main bevel to 17.25 degrees. I then went to 6/3 micron, then 1/0.5 on leather, then 0.125 CBN and 0.1 Diamond on Kangaroo then 0.050 and 0.025 micron dimond on NanoCloth for, again, about 200 strokes per side, per grit.

Bottom line, I had a very sharp, litterally hair whittling edge and a quite shiny bevel. I still had far more fine scratches visible than on the blade done with the Chosera progression to 10K, the 12K superstone, and then from 1 micron down to 0.025 micron strops as above... and the edge is just not quite as bright. Of course this is an entielr different steel than the VG10. I have a second mule in the BCTS-B75P, one day I will have to go back and do it the way I did the VG10 so I can directly compare.

I will see If I can get some pics that will capture what I am talking about... it was 11:30 by the time I finished up last night...and I get up before 5 AM. The pics will have to wait

I hope this does soembody some good!

Phil

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Re: Why water stones?
Posted by KenBuzbee - 06 Nov 2012 10:56

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PhilipPasteur wrote:

I hope this does soembody some good!

It definitely does, Phil. Very good reading. Thanks for posting it!

Ken

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Re: Why water stones?
Posted by Scott Sherman - 06 Nov 2012 12:36

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Thanks very much for taking time to experiment and report your observations. It is very helpful and appreciated. It certainly shortens the learning curve and at least for some may save money so they don't have to buy stones or accessories they won't need or allows some to add stones that they may not have been aware of or get results that otherwise might have been unobtainable.

This goes to all who take the time to experiment and share. Or just share their knowledge or experience.

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Re: Why water stones?
Posted by Geocyclist - 06 Nov 2012 21:39

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Phil,

Again, great write up and lots of good info. I can't wait to get my Chosera's.

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Re: Why water stones?
Posted by Scott Sherman - 06 Nov 2012 21:43

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Andrew,

Which Chosera's did you buy?

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Re: Why water stones?
Posted by Geocyclist - 06 Nov 2012 21:57

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I jumped in all the way and got them all. My initial thought was 800/1000 and 2k/3k were enough. Based on a lot of feedback I decided to get the 400/600 to back that course to get the diamond scratches out. After that I decided might as well get the 5k/10k too. At least those should save some stropping time. Probably still a good decision, may not use 10k on every knife but probably will use 5k all the time.

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