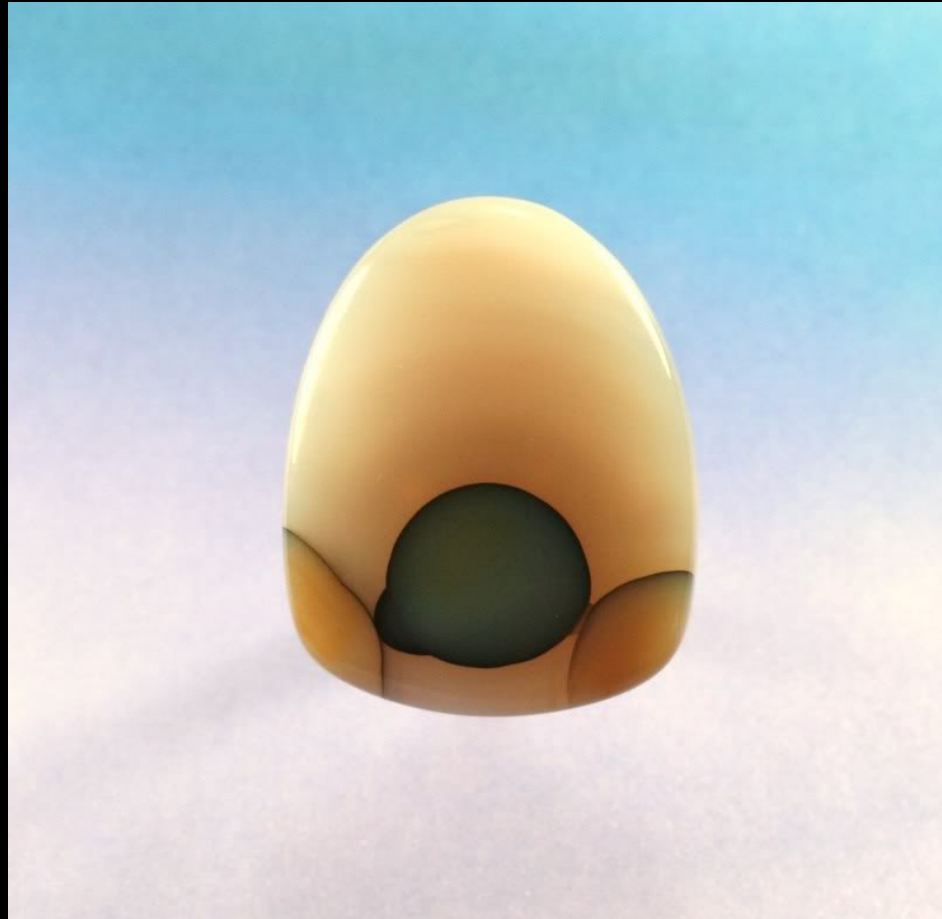


# BRAZILIANS AND OTHER OVERSIZED CREATIONS



Bob Rush - bobby1  
A Portfolio  
Artists of Agate: Volume 2

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# BASIC CABS



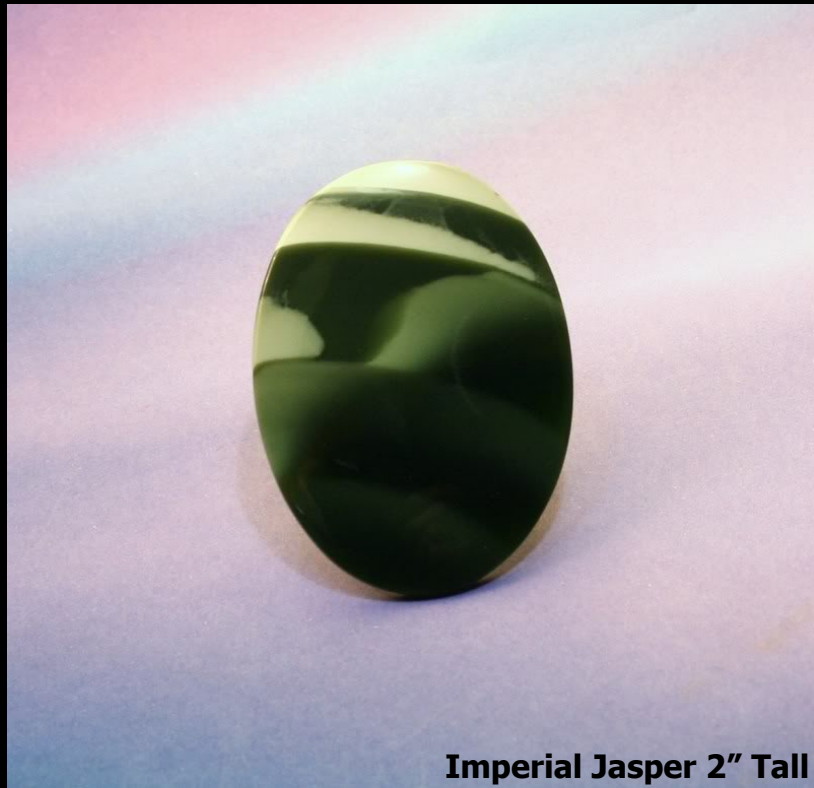
**Brazilian 2 1/2" Wide**



**Owyhee 1 3/4" Wide**



**Montana 2" Wide**



**Imperial Jasper 2" Tall**



**Amethyst Sage 3 1/4" Tall**



**Biggs Jasper 2 1/4" Tall**

**Wile E. Coyote Hiding Behind Bush**



**Paiute Agate 3" Wide**



**Morgan Hill 3" Wide**



**Snyder Ranch 2 1/2" Wide**



**Indian Blackskin Agate 3" Tall**



**Graveyard Plume 2 1/4" Tall**



**Graveyard Plume 2 1/2" Wide**





**Botswana 1 3/4" Tall**



**Myrickite 1 1/2" Tall**



**Pietersite**



**Dryhead 2" Wide**



**Copco Agate 2" Wide**

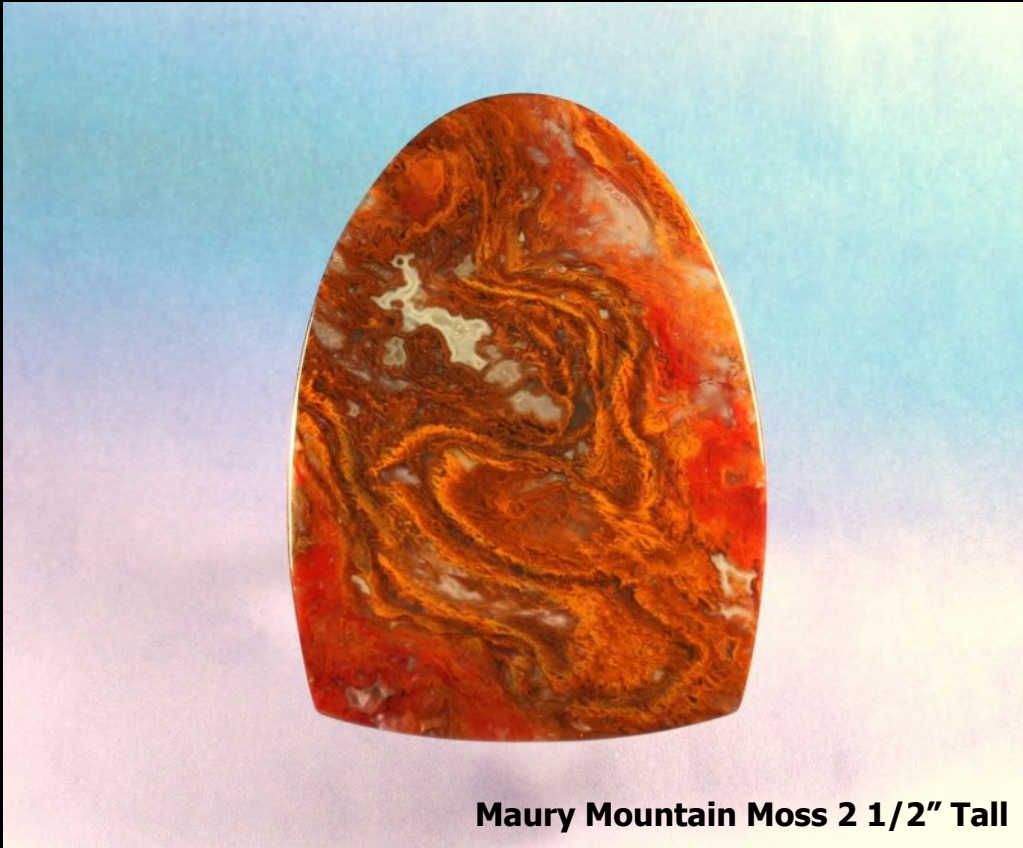
**Native Dancer**



**Agate**



**Piranha 3" Tall**



**Maury Mountain Moss 2 1/2" Tall**



**Polka Dot Agate 3" Tall**

# A LOVE AFFAIR WITH OBSIDIAN



**Mahogany Midnight Lace 3 1/4" Tall**

# FACES OF DAVIS CREEK







**Green Sheen Obsidian**







**Midnight Lace 3 1/2" Wide**



**Obsidian 3 1/2" Tall**



**Gray Swirl Obsidian 2 2/3" Tall**



**Obsidian 4 1/2" Wide**

**Alien Attack!**



**Snowflake Obsidian 3" tall**



# LESSON 1

## BOWL CARVING



I started with a chunk of Davis Creek Obsidian (my favorite material to work) that was large enough to do the piece. I trimmed it with my 12" saw to a rectangular block. I then used my 8" trim saw to get it into roughly the shape that I wanted. I then ground it round and ground as much of the ring groove at the foot as I could with my 8" diamond grinding wheel on my capping unit. All the further steps were done with wheels mounted on small mandrels mounted in my Foredom handpiece. I use the duplex spring handpiece because I get much better flexibility with the movement of the handpiece and it has a smaller, more comfortable size.

Starting at the bottom center are the grinding wheels that I use. They are the Mizzy Heatless silicon carbide wheels. They come in two grits, coarse and fine. They are 1" in diameter and either 1/8" or 3/16" wide. They come in knife edge shapes and possibly others but I just shape them to what I want with the diamond pointed wheel dresser shown in the right center of the photo. I use them dry (they are designed to be run dry) and do most all the finish shaping with them including the ring groove at the foot, the round hollowed out center of the bowl, the vertical grooves on the outer surface of the bowl and the hollowed out bottom of the foot. These wheels grind surprisingly fast. I shape them to fit into the groove at the foot.



At the right lower corner of the photo are the basic sanding wheels that I use. They are a rubberized silicon carbide wheels (Cratex is this particular brand) in various grits and they also come in various shapes, but again I just shape them to what I want with the diamond wheel dresser.

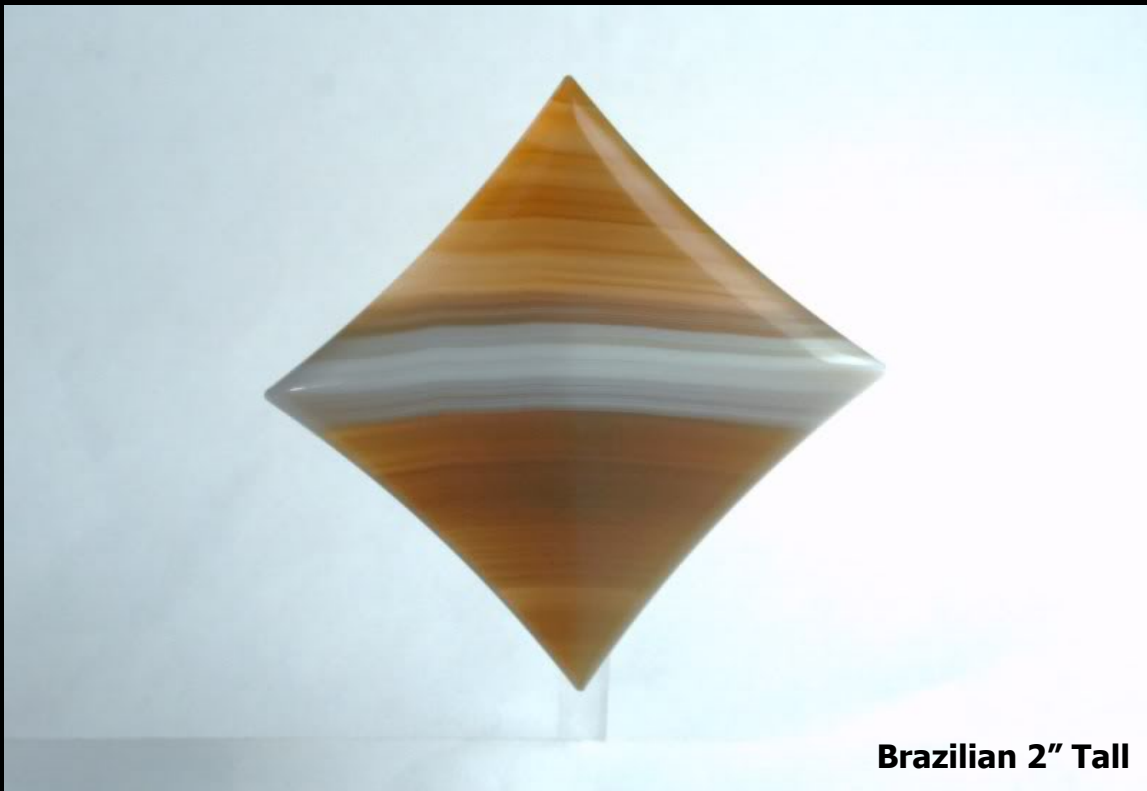
For the finish sanding I use my capping unit with the Expando wheel and Silicon Carbide belts for the smooth outer surfaces that I can reach. Then I hand sand the grooves between the segments on the bowl and the groove above the foot with small pieces of 400 grit and 600 grit Silicon Carbide wet or dry paper shown at the bottom of the photo. Using soft wood wheels that I cut out with a hole saw and shape with a coarse file (shown in the upper right of the photo) I coat the wetted wheels with 600 grit Tumbling grit and sand inside the bowl and the groove at the foot and the concave under the foot.

Finally, I use my large carpet polishing wheel to get as much as I can reach. Then I use the shaped wood wheels in the upper left with polish (I used Rapid Polish because it was handy) to polish in the groove on the bowl and above the foot and the hollowed out center of the bowl and foot. The small dishes to hold water, tumbling grit slurry or polish slurry are some that I kept after using them to hold the hot sauces at a local Mexican restaurant.



Recently, to hold down the mess from slinging grinding dust, tumbling grit slurry, and polish slurry, I made a carving station. Actually, making the Obsidian carving was what motivated me to build the station. It is made from 1/4" Lexan. I left a section on the sides open to allow me to reach in from both sides. The front hinges towards me so I can clean the window often and to allow me to take it outside to hose it down between grits. One thing that you might have noticed missing from my tools are small diamond grinding wheels or bits. I really don't care much for them especially where I'm not doing tiny detailed carving because they are expensive and they wear out too quickly. The Silicon Carbide Mizzy wheels have a reasonable life, are inexpensive (\$0.49 each) and they are just as sharp from the beginning of their life to the end.

# ADVANCED CABS



**Brazilian 2" Tall**



**Marcasite in Agate 2 1/2" Tall**



**Willow Creek 3 1/2" Wide**





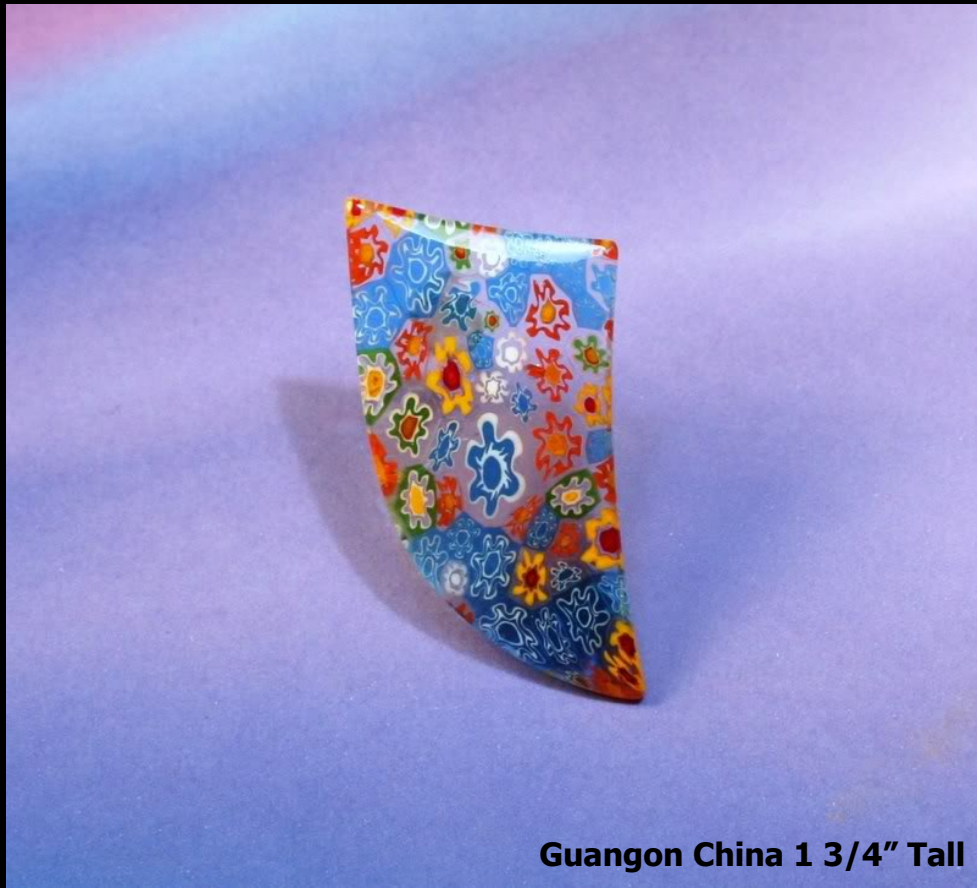
**Brazilian 3 1/2" Wide**



**Paiute Agate 3" Tall**



**Agate 3" Tall**



**Guangon China 1 3/4" Tall**



**Flame Agate 1 3/4" Tall**



**Copco Agate 1 3/4" Wide**



**Crazy Lace 1 1/2" Tall**



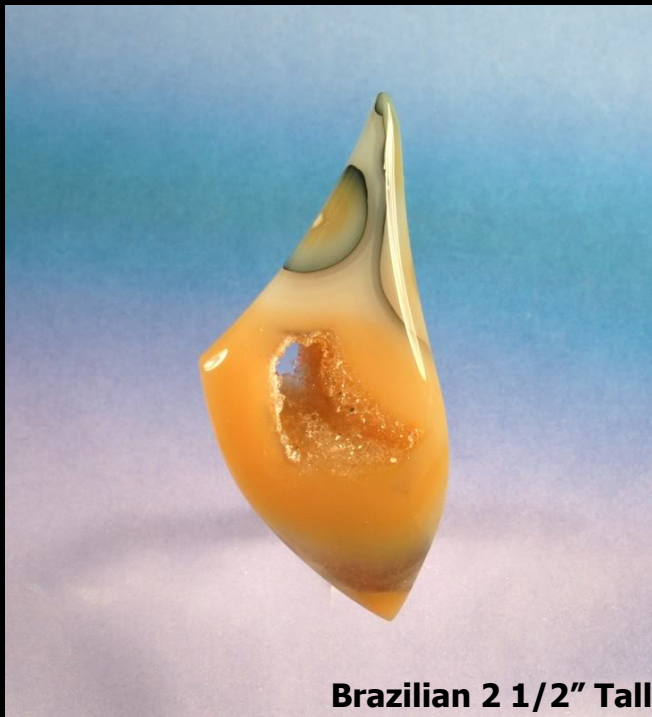
**Laguna 1 1/2" Wide**



**Mexican Crazy Lace**



**Owyhee 3 1/4" Wide 2" Tall**



**Brazilian 2 1/2" Tall**



**Agate 2" Tall**

# A FASCINATION WITH MONTANA



Montana 2 1/2" Tall



**Montana 2" Wide**



**Montana 1 3/4" Tall**



**Montana 1" Tall**





**Montana 3" Wide**



**Montana 4" Wide**

# LESSON 2 CUTTING MONTANA AGATE

About 3 years ago I was in a rock shop browsing through their bargain bin and came across a very small piece of Montana Agate that had the end sliced off. There was no particular pattern showing, just the ends of some color layers. I suspected that there were some nice layers inside, but the surface of the piece wasn't clear enough to see anything inside. I took a chance on it and spent heavily to get the rock (\$1).



Unfortunately, I didn't get a photo before I sliced it parallel to the flat faces. Here is a photo of the slices stacked as they came off the saw.

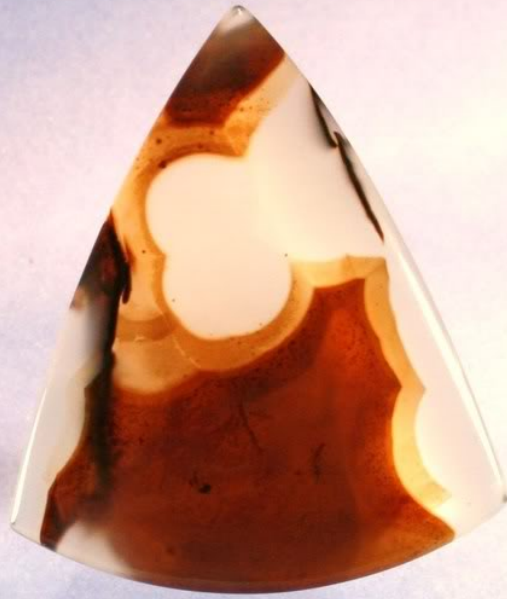




You can see the layers that I saw and that had interested me. I have found that this patterning and layers are not all that uncommon in Montana Agate but most people cut the rock across the bands (because that is the easiest way to grip the rock in the saw) and are disappointed in the results. It pays to look carefully at these rocks and to cut them parallel to the flat sides.



**Dedicated to Deb**



**Montana 2" Tall**



# BIG ONES



**Luna 5 1/2" Wide**

**The Dragon**



**Indian Blackskin Agate 4 1/2" Wide**



**Brazilian 5" Wide**



**Polish Flint 4" Wide**



**Brazilian 4 1/2" Tall**





**Brazilian 5" Wide**



**Agate 5" Wide**

# LESSON 3

## MY CABBING PROCESS



25 Year Old Cabochon Machine



Agate 6" Wide

I only use an 8" expando drum with Silicon Carbide belts to do all of my cabbing, regardless of size. This includes as small as 1/4" across up to 7" across. I work my larger cab domes and backs by sanding them dry. After the grinding steps I go to an 80 grit belt that is moderately worn, then to a similarly worn 100, 220, 400 and finally 600. The coarse belts allow me to remove a lot of material on the outer edges of the cab so that the dome starts just above the girdle and goes across the top of the cab. I focus my coarse sanding on the top and center of the cab. This is where I have to spend most of my time on the cab. I do the edges and girdle wet because smaller areas and surfaces would "burn" from the friction of working them dry. For a 4" to 5" cab it takes me about 2 to 2 1/2 hours to finish including sanding and polishing the back to the same quality as the front. Usually I have to work with the standard thickness slabs so it does take considerable time to get the (low) dome.

# AN OBSESSION WITH BRAZILIANS



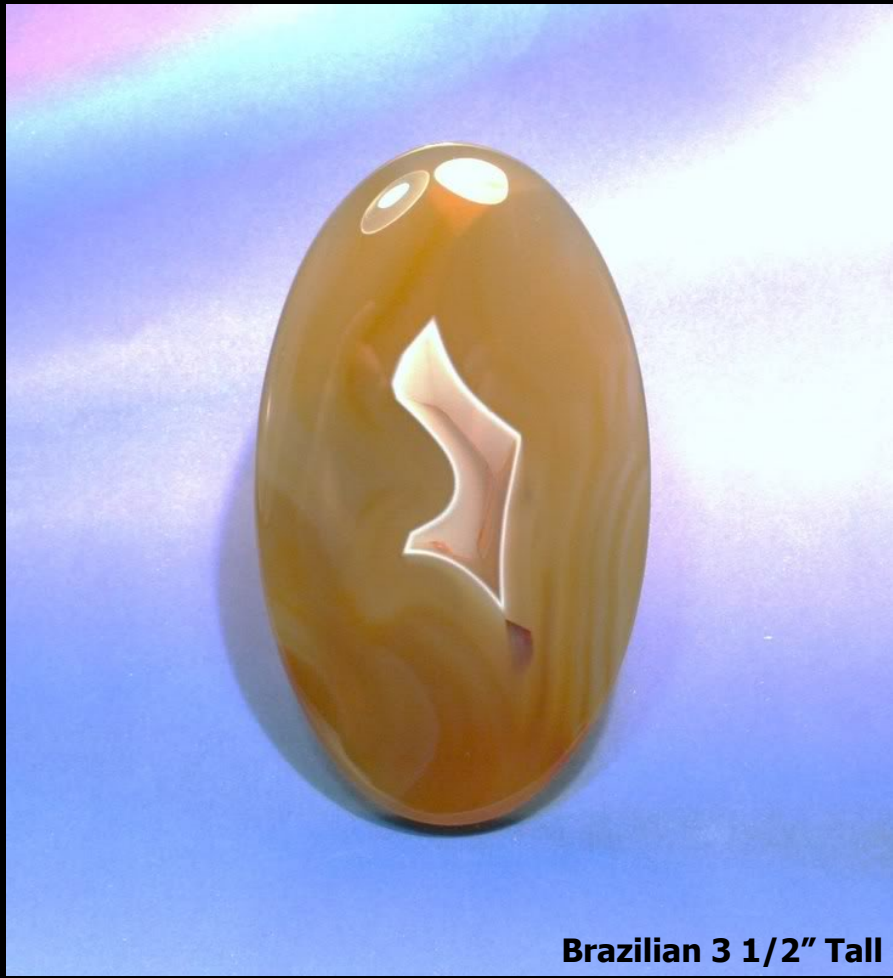
Piranha 3" Tall



**Brazilian 2 3/4" Wide**



**Brazilian 1" Tall**



**Brazilian 3 1/2" Tall**



**Brazilian 3 1/2" Tall**



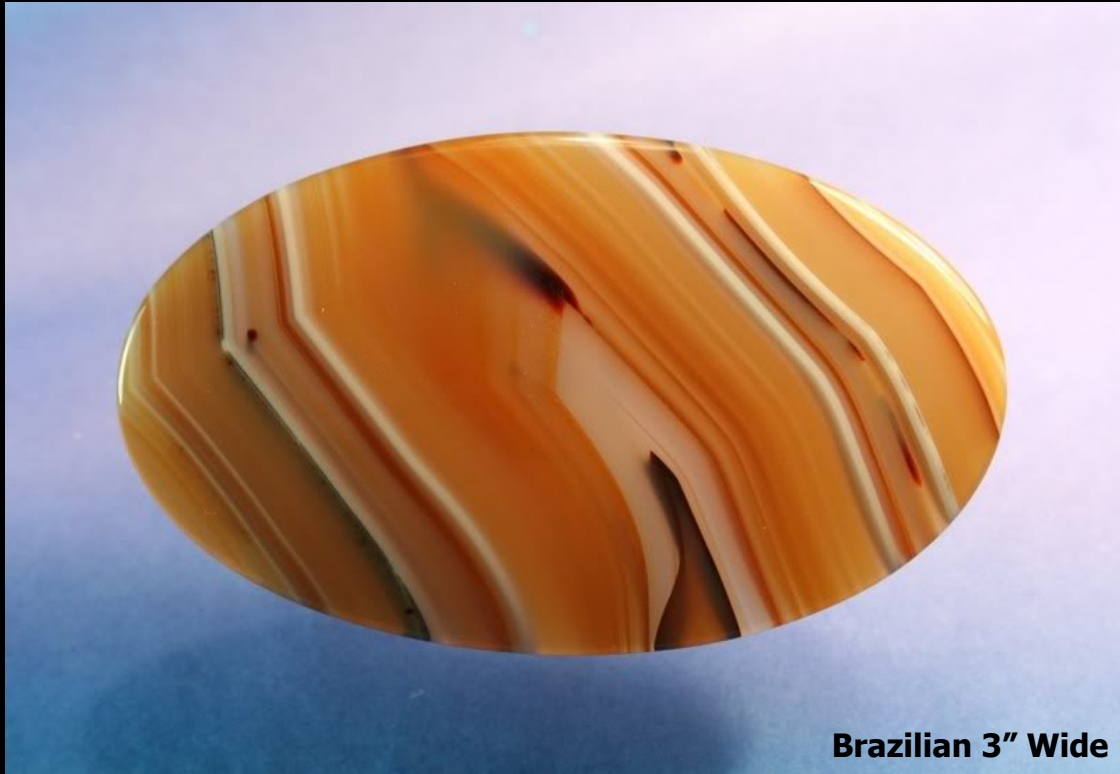
**Brazilian 2 1/2" Tall**



**Brazilian 2 1/4" Wide**



**Brazilian 3 " Tall**



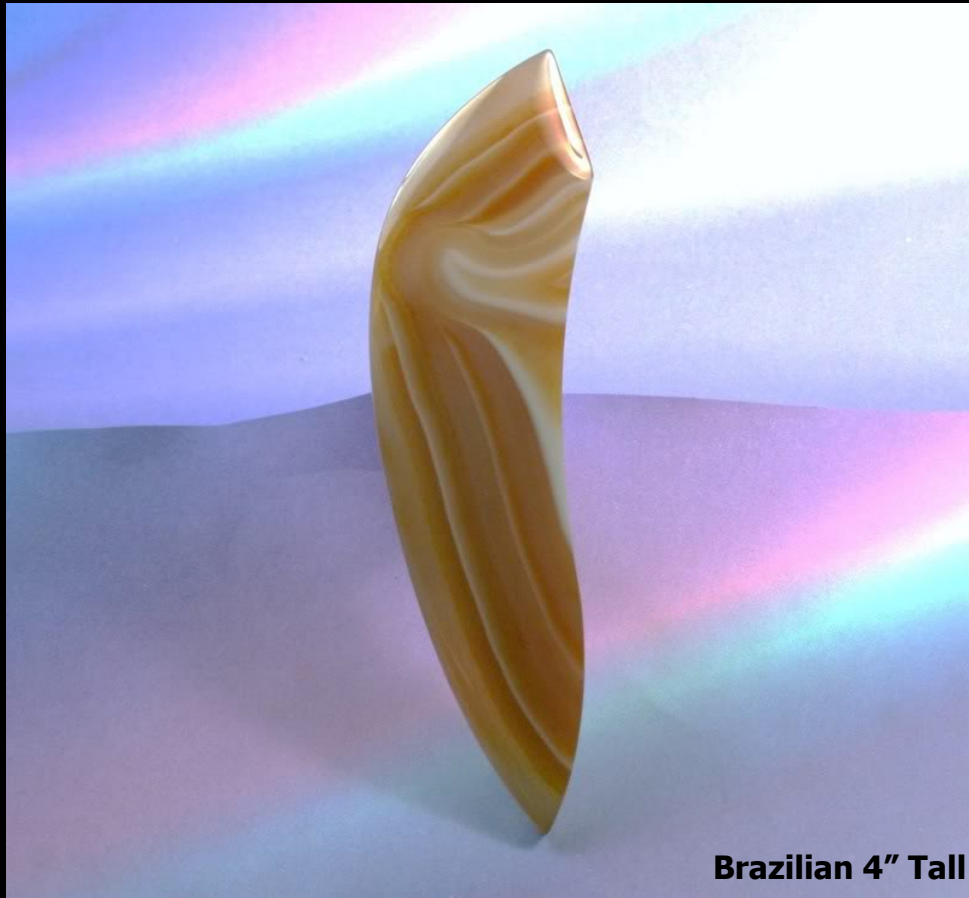
**Brazilian 3" Wide**



**Brazilian 3 1/2" Tall**



**Brazilian 2 1/2" Wide**



**Brazilian 4" Tall**



**Brazilian 3" Wide**

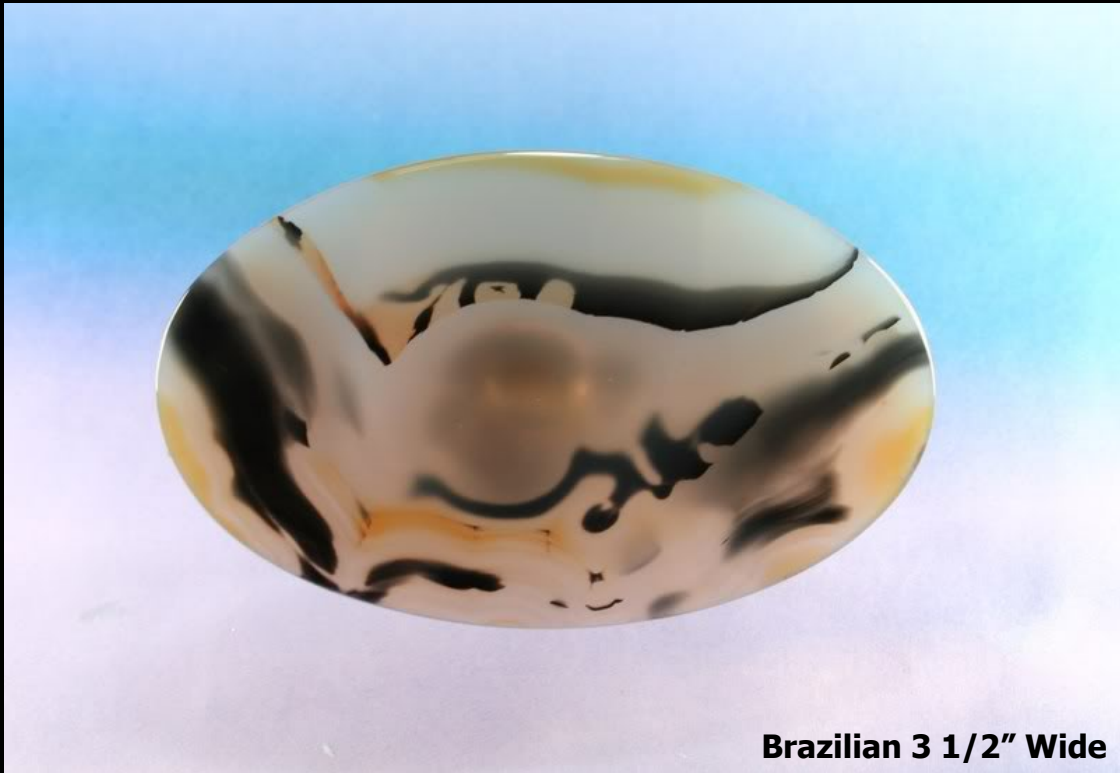




**Brazilian**



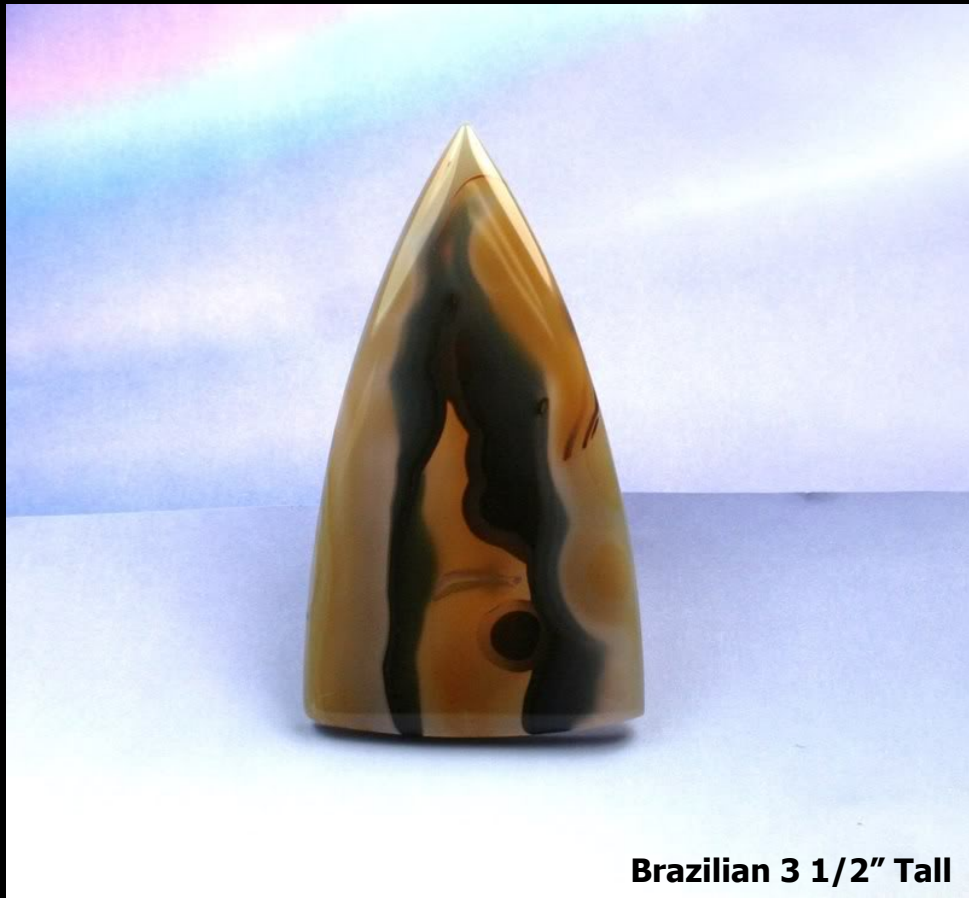
**Brazilian 3" Wide**



**Brazilian 3 1/2" Wide**



**Piranha 2 1/2" Tall**



**Brazilian 3 1/2" Tall**



**Brazilian**



**Brazilian**



**Brazilian 3 1/2" Wide**



**Brazilian 2 1/4" Wide**



**Brazilian 4 1/2" Wide**

**The Sisters**



**Brazilian 1 1/4" Tall**



**Brazilian 2" Tall**

# MACRO PHOTOGRAPHS

In 2009, I was at a show (I think it was the Santa Clara Valley show in San Jose) when I met one of the dealers. He was selling mounted photos of macro views of various lapidary materials. I got to discussing some of my cabs and the images therein. Consequently we struck up a deal to work on a couple of my cabs. What he does is to select portions of the images in the cabs (and sometimes slabs) and do a real close up shot. He then mounts these images on a canvas panel.

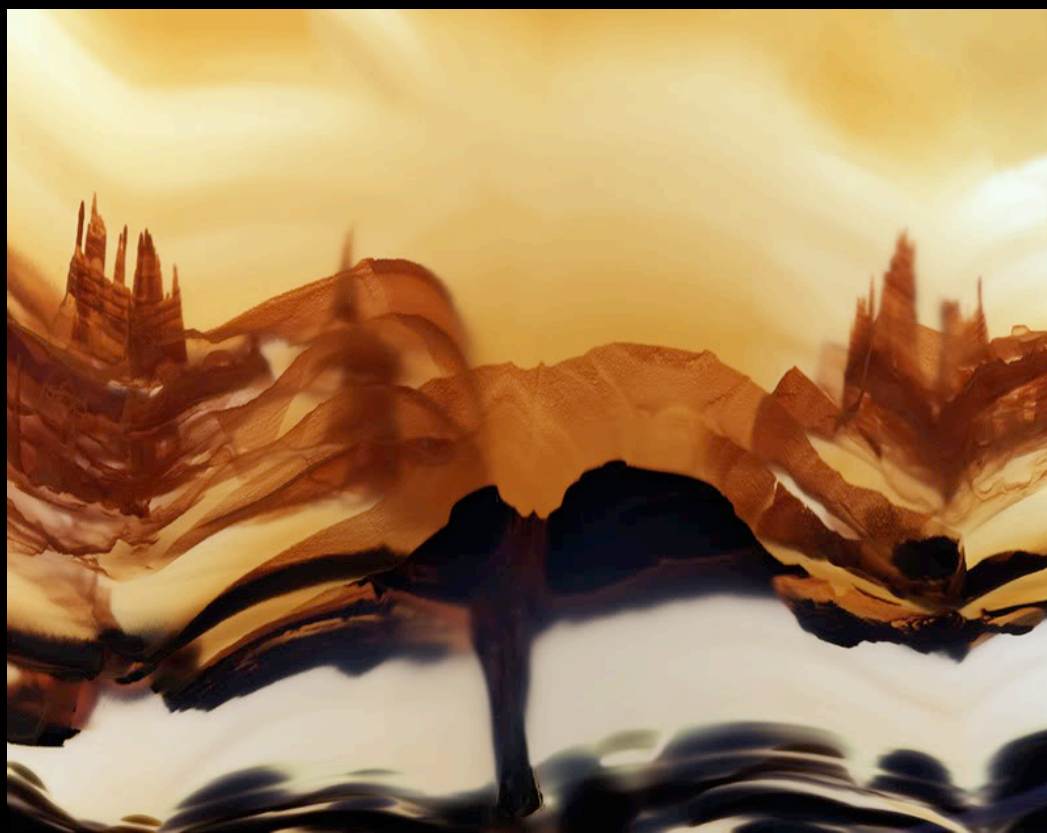


**Biggs**

**The Volcano**



**The Tornado**





# FINAL LESSON HOW TO SAND AND POLISH A FLAT SURFACE

Here is my method of sanding and polishing slabs and geode halves in just a few minutes. It involves sanding with a dry Silicon Carbide 8" by 3" belt on an Expando drum.

Here is a photo of the slab that I will demonstrate on. It is a Brazilian Agate and the saw cut very roughly and left rather significant saw marks. It is a slab that I got last Spring at the local rock pow wow.



Here is a photo of the belt. It is a 100 grit that has moderate wear. When you feel of the grit surface you can feel the grits rather easily but they are not sharp. There is some build up of rock dust on its surface.



Because the sanding is done dry you must use a high quality dust mask. I use N95 rated masks that can be purchased at most hardware or paint stores.



I always sand only in one direction, parallel to the long direction of the slab. I sand a few strokes (four or five) and feel the slab. If it has gotten hot enough that you can't comfortably touch it, stop and wipe it with a damp cloth to cool it down. Don't wet the belt because it will wash the rock dust out of the belt. Your objective is to get a buildup of dust on the belt. Stop and look for progress in removing the saw scratches.



After several minutes of sanding, we are getting real close to being finished with it.



Here we are finally finished sanding. I look for no diagonal saw marks (one of the reasons I always sand in only one direction, preferably across the saw marks) and for very shallow fine sanding marks. Turn it a couple directions to check for the sanding marks.

Here is how the belt looks after the sanding process. More dust than when I started. The elapsed time so far is 12 minutes including picture taking.





Next I go to my 12" diameter carpet covered wheel with Cerium Oxide paste. Here is a photo 15 minutes later before I washed it.





I intentionally left one end of the slab in its original condition as a comparison. If you are working a thicker slab (this one is 3/16" thick) or a geode half, you can do the sanding steps faster because there is more mass to the piece and it won't heat up as fast or require more time to cool the slab when it over heats.





# PHOTOGRAPHY NOTES

I use a canon EOS Rebel XT camera with a 18 - 55mm Zoom lens.

I made one of these gizmos to hold the cab at an angle off the surface. It is made from a 2" x 1/8" round of clear plexiglass, a 1/8" diameter by 2" clear plexiglass rod heated with a small flame to bend the tip about 1/2" from the end, and a 1/2" diameter round piece. I flatten the ends of the rod and glue the three pieces together. All of these pieces are standard stock items at a local plastics store. I place a small piece of clear double sticky Scotch tape on the upper circle to hold the cab.

I cut a notch in a piece of white copy paper and place it over the gizmo base. I also put a piece of the paper under the gizmo to keep the color of the table from transmitting up the plexiglass rod.

I have two photoflood reflectors on short stands. One has a compact fluorescent lamp - 26 watts, 5000k. The other is a standard 100 watt photoflood bulb. I hand hold the camera about 5" to 6" away from the cab and let the camera auto focus and I manually push the button to take the picture.

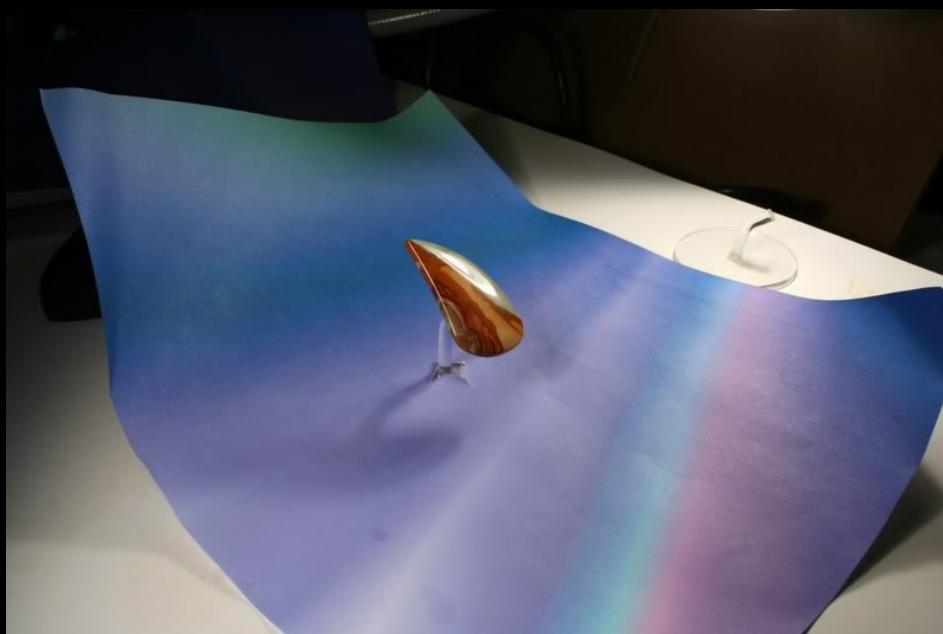
I download the photos to my computer using Windows Photo gallery. In that program I use "fix" - "auto adjust" - "adj exposure" and crop. I go to Photobucket and load the photos. There I resize to the 17" screen size.

I always use white paper background for the cabs because I want to showcase the cabs. I feel that other colors, textures, etc. detract from the beauty of the cabs.

I hope this all makes sense.

*Bob Rush*

Winner of the 2009 CFMS President's Trophy  
Rock & Gem Magazine Artist of the Month: December 2009







### **Artists of Agate: A Note**

The idea for the Artists of Agate series of portfolios originated with the work being done on the American Agate/Jasper Database. There are many wonderful artisans and photographers posting on internet boards, and many of them offered their work to the Database. As I sifted through the hundreds of photos, several people stood out due to the quality of their images and level of their lapidary work. Though I only needed a few samples for each agate/jasper type, there were many more photos these people offered that I could have used. Producing a portfolio of their work for free downloading seemed to be a way of sharing more of their incredible shots without the limitations of the database's goal. It also permitted the publication of images that fall outside the boundaries of the Database. These portfolios are produced with the permission and aid of the featured artist. They hold all rights to the photos contained herein. Please let them know what you think of their work.

Thank you,

Series Editor - Lowell Foster

January 28, 2011

# ARTISTS OF AGATE PORTFOLIOS

Lakers and other Pieces from the North, a Portfolio by Steve Haynes.

The file is about 7 MB and is 50 pages long.

[http://www.4shared.com/document/BreWexmS/Portfolio\\_-\\_NorthShoreRocks\\_\\_W.html](http://www.4shared.com/document/BreWexmS/Portfolio_-_NorthShoreRocks__W.html)

--White Background

or

[http://www.4shared.com/document/Ep3j0Zc4/Portfolio\\_-\\_NorthShoreRocks\\_\\_B.html](http://www.4shared.com/document/Ep3j0Zc4/Portfolio_-_NorthShoreRocks__B.html)

--Black Background

# THE AMERICAN AGATE/JASPER DATABASE

Volume 1: Utah and Colorado {2nd ed} (warning - 16 MB)

[http://www.4shared.com/document/mNXTQALM/Agate\\_Index\\_Vol\\_1\\_\\_2nd\\_ed\\_.html](http://www.4shared.com/document/mNXTQALM/Agate_Index_Vol_1__2nd_ed_.html)

Vol 2: Wyoming and Montana

[http://www.4shared.com/file/224404408/51585e57/Agate\\_Index\\_Vol\\_2.html](http://www.4shared.com/file/224404408/51585e57/Agate_Index_Vol_2.html)

Vol 3: Idaho and Washington

[http://www.4shared.com/file/229956030/cc07189f/Agate\\_Index\\_Vol\\_3.html](http://www.4shared.com/file/229956030/cc07189f/Agate_Index_Vol_3.html)

Vol 4: South Dakota, Nebraska, and Oklahoma

[http://www.4shared.com/file/242786005/91b2476f/Agate\\_Index\\_Vol\\_4.html](http://www.4shared.com/file/242786005/91b2476f/Agate_Index_Vol_4.html)

Vol 5: Texas

[http://www.4shared.com/document/oCLei3tU/Agate\\_Index\\_Vol\\_5.html](http://www.4shared.com/document/oCLei3tU/Agate_Index_Vol_5.html)

Vol 6: The South - Mississippi, Louisiana, Alabama, Florida, Georgia, Arkansas, Missouri

[http://www.4shared.com/document/nXCjumab/Agate\\_Index\\_Vol\\_6.html](http://www.4shared.com/document/nXCjumab/Agate_Index_Vol_6.html)

Vol 7: Arizona (Warning 16 MB)

[http://www.4shared.com/document/XplaNpW1/Agate\\_Index\\_Vol\\_7.html](http://www.4shared.com/document/XplaNpW1/Agate_Index_Vol_7.html)

Volume 8 - New Mexico & Nevada

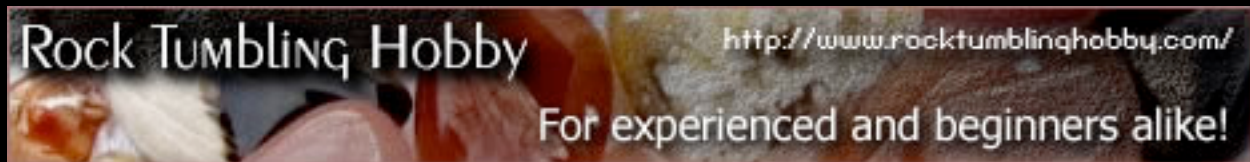
[http://www.4shared.com/document/dHMLvcjE/Agate\\_Index\\_Vol\\_8.html](http://www.4shared.com/document/dHMLvcjE/Agate_Index_Vol_8.html)

Vol 9: Oregon (Warning 20 MB)

[http://www.4shared.com/document/-CARc\\_SR/Agate\\_Index\\_Vol\\_9.html](http://www.4shared.com/document/-CARc_SR/Agate_Index_Vol_9.html)

I owe a huge thank you to the boards which allow me to both post these books and provide a place for me to make new friends and keep in touch with old ones.

-editor



<http://andy321.proboards.com/index.cgi>



<http://gemstone.smfforfree4.com/index.php>