

## Agate

### Local favorite connects us through time and space

We love our agates here in Minnesota! For most of us it starts with a day at the lake. We're wandering along the beach when something catches our eye – a bright stone that seems to glow in the sun. Before long we've got a pocket full of stones to bring back and show to anyone who will look. As we learn more about agates we learn to recognize them even when they don't stand out. And we learn that they can be found almost anywhere there is gravel – not just at the lake! Lake Superior agates are known for their intense red color and strong banding. While most gray agates can be heated to turn them into carnelian red, Minnesota's agates require no treatment making them more desirable. And while the source rock for Lake Superior agates is the basalt of the North Shore, glaciers have carried them from that original source to a wide area covering most of Minnesota.

Because agates are durable and plentiful, they were used in historic times for both tools and decorative objects. The earliest artifacts dating back 9000 years or more are beads and scraping tools. In more recent centuries, agates were used to make seals, snuff bottles, and parts for equipment that could be made accurately and stand up to repeated use.

In the late 1800s and early 1900s lapidaries in Idar-Oberstein, Germany built an entire industry centered on the treatment and forming of agates. It was discovered that agate was porous enough to absorb liquids and durable enough to withstand strong chemicals. Experimentation with heat and different chemicals produced black, green and blue as well as many other colors. New colors and patterns are

still being developed today although most of the production has moved from Germany to China. These treatments are all permanent making the resulting stones excellent for use in jewelry.

One would think that the formation of agates would be well understood. One would think. Karen Brzys has a long detailed chapter in her book, *Agates Inside Out* where she explains two prevailing theories. We know that agates form as nodules or seams in a volcanic host rock and we know the pressure and temperature requirements. But we are still unsure as to the exact method. One theory is that the necessary minerals seep into the cavity over time and are deposited. The second theory holds that the cavity is filled with a gel containing all the necessary minerals and they solidify over time.

Agates are given a bewildering assortment of names. Some, like our own Lake Superior agate, are named for specific locations. Others are named for specific colors and patterns. One well known variety is the blue lace agate. Traditionally, most blue lace agate comes from a mine in Namibia, but agates with similar color and pattern are also found in other locations. While agates are found around the world, there are only three countries that export significant quantities of agate – Brazil, Botswana, and Mexico. Nearly all of the treated agates used in jewelry making are created from gray Brazilian agate. That includes black onyx, green onyx and carnelian. Botswana is known for fine lined fortification agates similar to our own Minnesota agates. Mexico produces a whole range of agates, the best known being crazy lace agate, a variety with wild lace like banding caused as the agate formed while accommodating mineral inclusions.

So head on out this summer and collect some agates! If you find a special agate, we'll be happy to make it into a meaningful piece of jewelry for you to wear or give as a gift.



Veberod Gem Gallery  
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# Spring Bead Sale!

Come in **March 7-10**  
and all strands of beads will be

**50% OFF**

the single strand price  
regardless of quantity!



## New Cabs

Great new selection of fire  
opal from Mexico cut and  
polished by Tai just for you!

\$75 - \$300

## Featured Jewelry



### **Pink Tourmaline Earrings**

1.50ctw in 14KT  
gold - \$850

**1.27ct Gray Spinel**  
0.20ctw diamonds in  
14KT rose gold ring  
\$900



### **2.15ct Emerald Ring**

0.25ctw champagne diamonds  
in 14K rose/18K yellow gold  
\$1750

