

NEWSLETTER

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I ♥ OPAL

COOKED OPAL - THE MAY PROGRAM

In his unique dynamic and tasteful style, Jack Smothers held his audience captive at the May meeting with "recipes" and cooking directions to achieve that certain "just-right" done-ness. The end result? Matrix opal stones. For those who were unable to attend the presentation, we are delighted to include in this issue a copy of Jack's informative article entitled, "Look What's Cooking in Opal." Amazing!!

APPRAISAL TIME

Since then are such fun and so popular among members, it's practically become a tradition at AOS to host at least one annual appraisal session. That time is here again. Or it will be ---- on Thursday, June 10 at 7:30, in the California Federal Building, upstairs, 8211 E. Firestone Blvd., in Downey. So, come one and all: seasoned experts and novices; new members and long-standing ones; curious and aloof; friends, relatives, spouses. Just bring your stones (and yourselves, of course). The appraisal forms will be supplied. There is a rumor going around that you-know-who will be there.

BOY! DID WE HAVE FUN AT NOWAK by Pat Smallwood

Leaving home at 7:30 a.m., heavy low clouds looked as if rain were on its way. Traffic on the Freeway was rather heavy for a Saturday, and the smog was dense, stinging the eyes. Just before reaching the turnoff leading to Palmdale and Lancaster, the traffic obligingly became lighter. There seemed to be a mist in the area, and the air was a bit chilly. Finally, after getting over the hills we saw a break in the sky and soon the sun was out bright and beautiful, blue sky overhead.

A stop in Mojave for breakfast, a sort of "Last Chance" stop, then on our way, about 30 miles further, to where a little sign read, "Nowak Opal Mine." Down the dirt road, lined on either side with beautiful purple and yellow wild desert flowers. The road seemed greatly improved from the last trip. Finally a sign showing Nowak to the left. We were greeted by John Jones as we drove in. After chatting a while, down to the digging and looking the area over for opal.

The wind was gentle, the sun so warm and bright, the air so clean--a perfect digging day. As each rock was checked over, a few bits of color showed up, with always a hope for the large one. then, lunch was shared with John and Marlene Jones and their daughter, Jennifer; Lucille and Marvin Garvin; and Brian and Mary Franks. ~he highlight was fried pie!! Delicious.

Soon day would end and night appear, time to say goodbye. And so with the wind on our backs, powerful and strong, back to Los Angeles. the smog settled under the stars, and at 10:30 p.m. we pulled into the driveway, recalling the great bag. Let's go back to the Nowak Opal Mine real soon.

UNDER THE WEATHER

-Understand Walt Goodwin is recuperating very nicely following surgery.

-Hear Jim Smallwood had a bout with pneumonia and is in the hospital but should be home soon.

-Grapevine has it that Lupe Diaz hasn't been feeling well lately.

-Rumored that Joe Huddle is up and about and feeling better.

-Found out Retha Eaton's spirits are up for the time being (can't NOTHIN' keep her down).

THE SECRETARY SEZ. . . .

Welcome New Members!!!

-Michael and Suzanne Powell of Cerritos.

-Laura Jaffe of Silver Spring, Maryland.

-Michael Rickards of Montreal.

-Correction in last month's Newsletter, Robert and Nookan Trusky of Ft. Polk, LOUISIANA and not PENNSYLVANIA. Just a typo. I sure wish that typist would be more careful!!!

We heard from Joy Wilson of Royal Peacock opal mines in Denio, Nevada, who is generously offering public bugging for the first time. Details follow on the enclosed map. Thank you, Joy, for the invitation.

LOOK WHAT'S COOKING IN OPAL

By D. M. Smothers

This article is about a unique material which comes from the Andamooka Opal Field of South Australia. It is called Cooking Matrix. What it is, how to prepare it, and what it can be used for make an interesting story. One recipe for cooking it is given; there are others. Like cooks the world over, each thinks his way of doing things is the best.

The Andamooka Cooking Matrix is somewhat like a very fine textured sandstone with Opal filling the voids between the individual particles of sand. This material is generally found just above the impervious clay layer upon which the best Opal is to be found. It is believed to have been formed when the Opal jel or liquor seeped through the layer of very fine sand or silt deposited on the clay. Some of the liquor adhered to the sand particles and bound them together into a rather porous mass. There is a second theory that the matrix is burned Opal partly embedded in Alumina. The proponents of this theory hasten to point out that sometimes Opal is found embedded in matrix.

For years the material was discarded as worthless. In its natural state the color is difficult to see against the neutral colored sandy background. After World War II, an enterprising miner in Andamooka discovered that by providing a black background just under the surface, the color could be readily observed. The cooking process does not change the Opal in any way. It merely provides the black background against which the Opal can be seen. When properly prepared, the final results are beautiful and lasting.

Like all other Opal, no two pieces of Cooked Matrix are alike. The colors vary over a wide range. The basic background color can vary from light brown to jet black. Some dealers have in the past sold Cooked Matrix as Black Opal. This may account for the reluctance of some people to use it. In Europe, they call it treated black Opal. They say that it is Opal and it is treated to give it a black background. Whatever name you may choose to use what I have called Cooked Matrix Opal is beautiful, interesting, and has several possibilities.

The rough material, when wetted, can give an indication of its color structure. The color seems to occur in what must have been vertical columns or tubes. The tubes vary in size. The end effect depends on how you cut these tubes. A cut at right angles to the tubes produces a pin fire effect. When cut parallel with the tubes, the result is long bands of color. A cut half-way between these two extremes produces short bands of color. A small Cut on two intersecting sides of a piece of rough will generally indicate the tube orientation. A word of caution to the Opal novice. Do not use cutting oils when working Opal. Use one of the water soluble rust inhibitors or plain water. Opal is somewhat porous and oil can be absorbed which might ruin the Opal. In the case of matrix, the oil would tend to seal the porous material and exclude the penetration of the treating solutions.

When you have established the orientation you desire, cut the rough into slabs. If you have difficulty in establishing the orientation, it may be helpful to cook the entire piece of the rough. This may, in the long run, save you both time and trouble. The cooking barely penetrates the surface and will not adversely affect the whole piece. Finish the slabbed material as you would any other cab short of the final polishing stage. Some prefer to do the complete polishing

before cooking. This does save time in dopping twice. The stones should be thoroughly dried out in a low oven before treatment. — Make a mixture of cooking sugar. This is different from the stuff you put in your coffee. Mix up one part of glucose and four parts lactose. These may be purchased in the larger drug stores. Dilute this mixture five to one with water and add two or three drops of concentrated sulphuric acid (98%). Use either a chemical beaker or a small Pyrex dish large enough to hold all your stones face up in a single layer. It is suggested that this dish be placed in another Pyrex cake pan of larger size. Cover the stones with the prepared solution. Place the whole in a cold oven and set the temperature at 250 deg. F. Cook until the water has evaporated and a black crust is left. This will take about 24 hours. Open the oven and let the whole cool to room temperature. The black crust will be found to crumble easily due to the small amount of acid added. Clean the stones and beaker of all carbonaceous material using only water. Do not be discouraged that color does not show at this stage. There is one step to go.

Before proceeding, let me make two observations. First, the use of a home oven is quite acceptable. There are no corrosive fumes generated in either step which might adversely affect the oven. The only possible harm could come from spilling the acid in the next step. This is why the small dish was suggested to be placed in a larger one. Secondly, it is recommended that several stones be treated at one time due to the amount of time and effort involved. Now, on with the cooking.

Place the cleaned stones in the cleaned beaker as before. Cover them with concentrated sulphuric acid (98%). Place in the cool oven and bring the temperature up to 212 deg. F. for about four hours. This carbonizes the sugar which penetrated the stone in the preceding step. Allow the oven to once again cool to room temperature. Pour the acid off carefully. Use rubber gloves or extreme care not to spill or splash acid on the body, clothes, or other organic material. Wash the beaker and stones thoroughly in running water for several minutes. Pour off the water and as a final step, neutralize any remaining traces of acid with a solution of household ammonia or a baking soda solution.

The stones should now show the right color. If the background is too light, the two basic cooking procedures may be repeated as often as desired. After the desired color is obtained, the stones are given their final polish. Remember that the whole treatment is virtually only skin deep and can be easily ground away. Be sure to only polish, not grind, after treatment.

In addition to making cabs from Cooking Matrix, the material is also good for carving. All carving and finishing must be done prior to cooking. Due to the relatively inexpensive cost of the material, several unusual things may be done with it. Here is one, and your own ingenuity will doubtlessly bring forth others. Cut the rough into slabs about 1/8 inch thick. Lap the slab, cook it, and then cover with quartz caps like triplets and finish them in the same manner as a triplet.

SILVERSMITHING EXPLAINED FOR THE BEGINNER
Some Tips about Fabrication Learned the Hard Way

By Retha Eaton

First of all, use only copper tongs to place or remove silver articles from the pickle. If any other metal tool is used the silver piece will turn a funny rusty pink and it takes a lot of filing and scouring to clean it up.

Always use clean silver pieces to solder together. Dirty silver will just lay there and get red hot and then melt into a blob. To clean use a solution of 1/3 water, 1/3 ammonia and 1/3 detergent mixed together. Use an old toothbrush to clean the silver, then rinse and dry.

To put a protective coating on the silver pieces after washing and before soldering to prevent fire scale from forming during soldering and eating into the surface and causing little pits, you can mix denatured alcohol and boric acid (either crystals or powder crystals dissolve faster). Make a saturate solution, in other words dump in a lot of boric acid and stir until no more will dissolve and some sinks to the bottom. Shake this solution hard each time before using it Dip each piece in this solution and place it on the soldering pad or block or grate and touch a flame to it. It will burn with a green flame; let it burn out and then solder.

There are two ways of pickling. You can drop the hot piece you have just soldered into the pickle, but this has a regrettable tendency to cause all the little goodies you may have just added to pop off. To avoid this, let the piece cool, then put it in the pickle and heat it almost to boiling on the stove. Pick out with copper tongs, rinse and dry and dip in the alcohol solution again; flame and then solder the next step. If this method is used, the surface will stay bright and smooth and this is great for beginners who have trouble avoiding fire scale.

When you polish, use tripoli first and wash in the soap, water and detergent solution, dry and go to the next polish; jewelers rouge or zam for the final polish. Always wash before going to the next polish step. Keep polish and pads separate. If tripoli gets on the red rouge pad, you can't use red rouge or zam on it again. Keep it for tripoli after that and use a fresh pad for the final polish. Tripoli is a harsh polish and if accidentally used after red rouge it will scratch the smooth surface badly. Keeping a smooth surface is the secret to having a smooth shiny finish without so much elbow grease.

Using a lot of tiny pieces or snippets of solder is much more effective than using a few large ones.

Start soldering with hard solder first and progress to the medium and lastly the soft solder. Some jewelry is made entirely of soft solder, and if you ever have to repair a piece of this you will have heart failure the first time you heat it and it falls apart.

After fluxing and placing the solder snippets around where you want them, play the flame in short bursts at first until the flux hardens and holds the solder bits in place. Too much heat all at once will cause the flux to boil and bubble and you got trouble as the solder snippets will dance all around and suddenly freeze where you don't want them.

If you have light shank wire, solder two pieces together, leaving one quarter inch at each end not soldered. Spread these prongs apart. Or use the saw to cut the ends apart and then spread them. If you use sheet for the shank, saw it out and then saw three prongs and spread them out. This will keep the ring from turning around on the finger.

When soldering a jump ring on the back of a pendant, place it low enough so it won't show above the top of the mounting.

A propane torch is a little slower than acetylene, but it is good for the beginner as it costs less to start out with. I had both and sold the acetylene and continue to use the propane. It is not as satisfactory for heavy metal and thick elaborate decorations, but for the general run of fabrication for beginners it is satisfactory.

How about making a mounting for an odd shaped cabochon or a baroque stone (same thing).

Saw a piece of sheet silver larger than the stone and allow enough room for any leaves or silver drops or wire curls you will want for decoration. You can lay the stone on a piece of paper and lay the decors around it to judge the size of sheet you will need to saw out. Cut a strip of bezel or saw off a strip of the sheet to fit around the stone. The edges must be straight and meet perfectly. Solder it shut and shape it to the stone. Lay it on the piece of plate and work it until it touches the sheet all the way around. Solder does not, repeat, does not fill gaps~ It is best to solder on the larger decors first with hard solder and so on. Remember the boric acid coating before each soldering step.

Before adding the shank for a ring, clean up the base plate. This is a job for your set of tiny files. File a straight edge first and this you can do on the carborundum wheel. Then champfer it toward the bottom. (Champfer is to bevel the edge.)

Finish with sandpaper or the little round disc sanders manicurists use to smooth sculptured nails with.

Dip and solder the shank on. Clean up and polish. Set the stone in and press the edge of the bezel down gradually all around until it is smooth and the stone is tight.

It may be necessary if the stone is thin or you used a wide bezel; to pad it with pieces of plastic, cut front a plastic lid cut to the size of the stone.

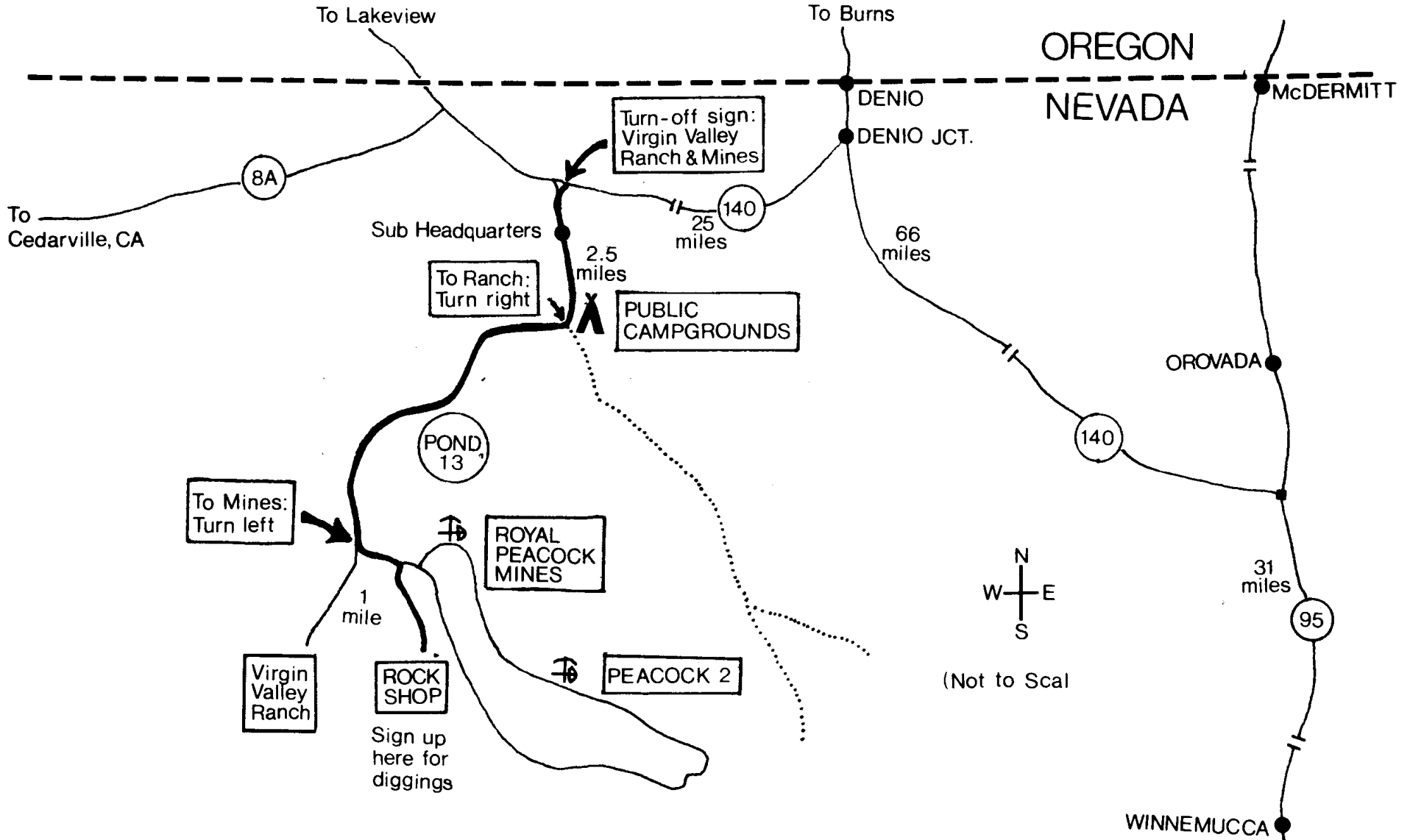
Slip it on your finger and BRAG BRAG BRAG BRAG ! ! ! !

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