

THE PETRIFIED DIGEST



www.wenatcheerockclub.org

GINKGO MEETING PLACE AND TIME
FRIDAY October 17, 2014, 7 pm
Douglas County Fire District #2
377 Eastmont, East Wenatchee

TUMBLING GRIT FOR CLUB MEMBERS

Graded 30 Grit	\$4 lb.
Un-Graded 60/90 Grit,	\$3 lb.
Graded 220 Grit,	\$4 lb.
Graded 600 Grit	\$5 lb.
Tripoli Polish.	\$3 lb.

Available at the monthly meetings



The Petrified Digest
Valerie Hampton, Editor
PO Box 303
Wenatchee WA 98807

Send your article ideas, trip notes
or photos to ginkgonews@yahoo.com

The Petrified Digest
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 PO Box 303, Wenatchee, Washington 98807

MEETINGS

3rd FRIDAY of the Month, 7 pm
 Douglas County Fire District No 2
 377 Eastmont Avenue, East Wenatchee, WA

OFFICERS

President	Carol Smith	884-3349
Vice President	Darrel Smith	884-3349
Secretary	Christy Price	699-1448
Treasurer	Bonni Martin	421-5242

COORDINATORS

Field Trips	Howard Floyd	662-1016
Shop & Equipment	Bob Witt	669-0819
Program/Education	Carol Smith	
Publicity	Valerie Hampton	884-3578
Social	Maxine Anderson	662-7446 & Candi Floyd 662-1016
Chelan County Fair Booth		
Museum	Carol Smith	
Newsletter	Valerie Hampton	884-3578
	Newsletter email address: ginkgonews@yahoo.com	
Web Site	Jill Timm	663-2961 jtimm@aol.com

The Ginkgo Mineral Society was formed to promote the education of mineralogy and geology; to encourage the collecting of rocks and minerals; to provide field excursions to mineral collecting areas; and to promote interest in lapidary work.

DUES: Individual - \$20.00 Senior - \$15.00 Family - \$30.00 Lifetime (20+ yrs) - Free

Exchange bulletins are welcome and appreciated.

Club Calendar

October		November		December	
17 Friday	Regular Meeting Member-guest rock auction 7 pm - Fire Station	21 Friday	Regular Meeting Member vendor tables - bring items/go gift shopping! 7 pm - Fire Station Rock Auction	19 Friday	Regular Meeting Christmas party 7 pm - Fire Station

Please call Carol Smith at 884-3349 if you are planning to visit the rock shop to make sure someone will be there to open it. The shop is located at Christy Price's home: 4325 Squilchuck Rd, Wenatchee and is usually open on Saturdays.
 Directions: from the intersection of Mission & Crawford Streets at Lincoln Park in Wenatchee, it is 4 miles up Squilchuck Road. Turn left on Cranmer Road and take an immediate left onto Christy's long driveway.



The Old Farmer's Advice "Timing has a lot to do with the outcome of a rain dance."

"If you get to thinkin' you're a person of some influence,
 try orderin' somebody else's dog around."

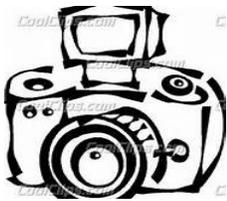
PRESIDENT'S MESSAGE

Our last field trip to Red Top Mountain turned out to be quite an adventure. The weather was beautiful and 23 people turned out for the hike. Two Ellensburg Blues were found that day, one by Carol Smith and another by first time out, Ashley Freeman. Talk about beginner's luck! Ashley says hers is up for sale! Any takers? Our October 17th meeting at the fire station meeting room on Eastmont Street will be our rock auction. There are 24 boxes of assorted rocks to bid on in the silent auction, and 19 individual rocks to bid on with our super-duper paddles for the highest bidder to take home. Everyone enjoyed our new member Gary Rose's wirewrapping demonstration at our September meeting. He will have some items for sale at our November gift buying exchange along with other crafters showing their wares. The lapidary shop is thriving with folks cutting and grinding stones for jewelry and, believe it or not, for the Chelan County Fair next year. That's good planning.....

All for now, see you Friday night at the meeting.

Carol Smith, President

PHOTO CONTEST DEADLINE: FRIDAY'S MEETING

**First Annual Ginkgo Photo Contest**

As announced at the beginning of the year, club photo contest is happening this fall. Hope you have been saving your photos throughout the year to submit at the end of the trips and outing season. Collect your images, sort through for the cream of the crop, then submit them to Jill Timm at jtimm@aol.com or in person at meetings in September and October.

- **Photo Rules:**

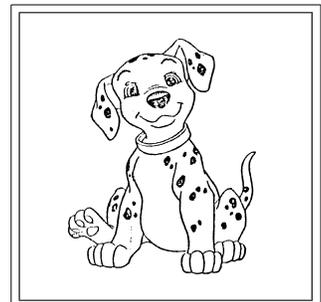
Subject matter needs to be related to the Ginkgo Mineral Society's interests and activities.

- Photos will be judged by subject matter (something interesting to look at), composition, (presents the subject in a pleasing manner) and quality of images, (sharp focus and good exposure).
- Photos may be digital or print, no frames please.
- All photos need to be submitted to Jill Timm (only) between Sept 1, 2014 - Oct 17, 2014 (at meeting).
- Winner(s) will be announced at the November meeting.

ROGER, THE ROCKHOUND SEZ:

“An archaeologist is the best husband a woman can have;
the older she gets, the more interested he is in her.”
-Agatha Christie-

“There is a certain relief in change, even though it be from bad to worse;
as I have found traveling in a stagecoach,
that it is often a comfort to shift one's position
and be bruised in a new place.”
-Washington Irving-



BENCH TIPS by Brad Smith

SILVER DISCOLORATION

Working with jewelry involves an ever increasing number of skills. Chemistry is one of them that comes into play when dealing with a discoloration on the metal caused by a chemical reaction between it and the environment.

In the case of Sterling silver there are three discolorations we typically encounter: a tarnish, a firescale, and a firestain. Each is different in its cause, in its cure and in its prevention. All three have to do with the metals in the Sterling alloy (92.5% silver and 7.5% copper) and how they react with oxygen and the heat of soldering or with pollutants in the air over the long term.

Tarnish is a grayish coating that builds up slowly on the surface as a result of a reaction of the silver with sulfur-based compounds in the air. Typically these are pollutants from the burning of petroleum fuels, but they can come from other sources as well. I once tarnished all the silver in my display case by putting a pretty specimen of iron pyrite in with the jewelry. Turns out pyrite has sulfur in it! Sulfur combines with the silver to form a grayish silver sulfide film on the surface.

Preventing tarnish involves keeping sulfur away from the metal. Plastic bags will help, and anti-tarnish strips are available from jewelry supply companies to pack near your items. Tarnish is easily removed by hand polishing with a jeweler's cloth or with one of the products sold for cleaning the good silverware for holiday dinner.

Another way is to remove it chemically. Put a piece of aluminum in the bottom of a dish large enough to contain your piece. Heat enough water to cover the silver. Mix in 2 tablespoons of sodium carbonate per cup of water and pour into the dish. Be sure the silver touches the aluminum. Sodium carbonate is the main ingredient in washing soda. Read the labels in grocery and hardware stores.

The second type of tarnish is called firescale. It is the dark gray to charcoal colored film that forms on Sterling or other copper alloy like copper or bronze when we heat it with a torch. The copper in the alloy reacts with oxygen in the air to form a dark cupric oxide coating on the surface. Luckily, the oxide is easily removed by dissolving it in a mild acid - generally called a pickle. It's important that we not let firescale form on a solder joint because it will block the flow solder over the joint.

Prevention can be done two ways. Most common is to use a flux, a borax-based solution applied to the metal before soldering. When melted, borax forms a thin glassy layer that keeps oxygen away from the metal. A second way is to do your soldering on a charcoal block. Together with the flame, charcoal greatly reduces the amount of oxygen in the area being soldered. In either case oxygen is prevented from reaching the metal, so no cupric oxide firescale is formed.

A second oxide can also be formed when soldering copper or a high copper content alloy like bronze or brass. It's called cuprous oxide and is reddish in color. That's why a black looking piece you put in the pickle sometimes comes out red. Problem is that while the black cupric oxide is dissolved by a pickle, the red cuprous oxide is not. The discoloration can be sanded or polished off, but an easier way is to use a "super pickle". This is a mixture of fresh pickle with a healthy shot of hydrogen peroxide from the local store.

I've saved the worst form of discoloration, firestain, for last. Think of firescale (above) as like getting dirt on your shirt that you have to wash off. Firestain is like getting ink on it. The discoloration is not just on the

surface, it seeps down and stains the material. Firestain happens when we heat a piece of silver too hot, too long, and/or too many times.

Firestain occurs when the oxides start to build up below the surface of the metal. You generally don't notice it until after polishing. It appears as a darker area of the surface and is easy to spot when viewed under light bounced off a piece of white paper. Because firestain is below the surface, there's no easy bench tip solution. Depletion gilding may work for some pieces. Otherwise, removing it calls for sandpaper and aggressive polishing.

A much better approach for a piece that will require a large number of solderings is to protect the metal from developing firestain by applying liberal coats of a firecoat. Regular soldering flux will provide some protection but will not be as effective as preparations made specifically for the task.

SOLVENT DISPENSER

Frequently I need to fill a small bottle with alcohol, like an alcohol lamp or one of the nail polish bottles that I use for the yellow ochre anti-flux. Often I can't find a small funnel and end up spilling almost as much as I get into the bottle. It's wasteful, and the fumes can't be too good for you either.

A neat and inexpensive solution is to use a lab dispensing bottle to store small quantities of the solvents you frequently use. It has a wide mouth for filling and a fine tip for dispensing. You can get a small stream or just a drop or two. With the bottle's fine tip I don't spill a drop.

There are many suppliers on Google. One I've used is Carolina Biological Supply Company at www.carolina.com The bottle is Catalog #716580 Unitary Wash Bottle, Low-Density Polyethylene, 125 mL US\$ 5.35



SILVER SOLDER FROM SCRAP

Sometimes you need a lot of silver solder to complete a piece the way you want it to be. For me it was when I was trying to join several castings. But silver solder is expensive, so I found a way to make my own from scrap with a little help from a penny.

First step is finding out what's in a solder. A search through the reference books (Tim McCreight or Erhard Brepohl) or a Google search will turn up recipes like:

- * Hard - AG 80% CU 13% ZN 7%
- * Medium - AG 70% CU 20% ZN 5%
- * Easy - AG 63% CU 30% ZN 7%

The silver (AG) and the copper (CU) are easy to come by, but finding some zinc (ZN) has always been my problem until I found out that our pennies are almost all zinc. According to Wikipedia a US penny minted after 1982 weighs 2.5 grams and is 97.5% ZN and 2.5% CU. So all I had to do is add a penny to some copper and a pile of silver scrap.

I chose to use Sterling scrap so I adjusted for the amount of copper in it as well as the amount of copper from the penny. Here's what I used for components of Medium solder:

- * Sterling - 36.90 grams
- * Copper - 9.35
- * Penny - 2.50

Melt the silver and copper first in a melting dish, mix well with a carbon rod or titanium solder pick, add the zinc

(penny) last, mix again, and pour into a small mold. The zinc is added last because melting it causes some to vaporize, and the fumes are a safety problem (They're a gray-green color). Be sure to have good ventilation.

To check the solder's melting temperature was correct (medium), I put a sample of the homemade solder on a piece of copper sheet along with a known sample of hard, medium and easy solders. I then heated the plate from the bottom and watched as the easy first melted, the medium melted, the homemade melted, and finally the hard. Additional notes on converting the ingot to sheet, strip or wire form - If you have access to a rolling mill, that will be the fastest way to proceed. Either roll out the ingot into a sheet and cut strips or roll it out as wire if your mill has the grooves. If you don't have a mill, all you have to do is forge out the ingot into a rough sheet of the gauge you'd like and then cut thin strips with bench shears. Be sure to anneal the sheet every so often as you forge it.



SPOT SANDING BRUSH

Sometimes you have a little discoloration or debris to clean from the bottom of a pocket, from an area of coarse textured surface, or from a small space between two soldered objects. Finding something to get into those close areas is always an effort in creativity.

One tool I have for these special occasions is a glass fiber spot sanding brush. It's great for cleaning a small area and doesn't leave deep scratches, only a faint satin finish.

There's probably several manufacturers of these pens, but one is the PrepPen Adjustable Sanding Pen selling for US\$ 7.96 from Amazon. You can see it at

<http://www.amazon.com/Prep-Pen-PrepPen-Adjustable-Sanding/dp/B000J18RT6/>

Get all 101 of Brad's bench tips in "Bench Tips for Jewelry Making" on Amazon, <http://amazon.com/dp/0988285800/>

SAY WHAT?

Let's face it - English is a crazy language. There is no egg in eggplant, nor ham in hamburger; neither apple nor pine in pineapple. English muffins weren't invented in England or French fries in France. Sweetmeats are candies while sweetbreads, which aren't sweet, are meat. We take English for granted. But if we explore its paradoxes, we find that quicksand can work slowly, boxing rings are square and a guinea pig is neither from Guinea nor is it a pig. And why is it that writers write but fingers don't fing, grocers don't groce and hammers don't ham? If the plural of tooth is teeth, why isn't the plural of booth, beeth? One goose, 2 geese. So one moose, 2 meese? One index, 2 indices? Doesn't it seem crazy that you can make amends but not one amend? If you have a bunch of odds and ends and get rid of all but one of them, what do you call it? If teachers taught, why didn't preachers praught? If a vegetarian eats vegetables, what does a humanitarian eat? Sometimes I think all the English speakers should be committed to an asylum for the verbally insane. In what language do people recite at a play and play at a recital? Ship by truck and send cargo by ship? Have noses that run and feet that smell? How can a slim chance and a fat chance be the same, while a wise man and a wise guy are opposites? You have to marvel at the unique lunacy of a language in which your house can burn up as it burns down, in which you fill in a form by filling it out and in which, an alarm goes off by going on. English was invented by people, not computers, and it reflects the creativity of the human race, which, of course, is not a race at all. That is why, when the stars are out, they are visible, but when the lights are out, they are invisible.

I DIG ROCKS!

