OPEN SALT COLLECTORS

NATIONAL NEWSLETTER

ISSUE #10 SPRING, 2006

Chinese Export Porcelain at the Peabody Essex Museum (PEM)

"In 1799, Salem's globe-traveling sea captains and traders established the city's East India Marine Society, whose bylaws charged members to bring home 'natural and artificial curiosities.' The giant clamshells, poisoned arrows, silver hookahs and more than 4,000 other curios they collected formed the nucleus of what is now the Peabody Essex Museum, the oldest continuously operated museum in the country. Today the Peabody Essex owns one million works of art from around the world, along with 24 historic buildings and a library of 14 million books and manuscripts."[1]

Among PEM's "curiosities" is a large collection of Asian Export Art, i.e., artifacts produced in Asian countries specifically for export to the western world in the 15th to 20th centuries.

On Friday afternoon, June 24th, 2005, the first full day of the National Convention, we were treated not only to guided tours of the museum, but also to a fascinating talk and slide presentation by Karina Corrigan, Associate Curator of Asian Export Art at PEM. Several of the photos in this article are photos of an image on the screen behind Karina.

Karina Corrigan of the Peabody Essex Museum

During the 1700s and early 1800s, Salem was a major seaport and the duties on its ships returning from around the world were a major source of revenue for the fledgling republic.

Between fifty-five and seventy percent of the Federal Budget came from import duties (from all the ports in the country). One trip by one ship returning to Salem brought $13,000 in duties. An article in Smithsonian Magazine, June, 2004, reported that "the $16.5 million in shipping duties paid at Salem's customhouse in 1807 accounted for nearly five percent of all federal revenue collected that year."

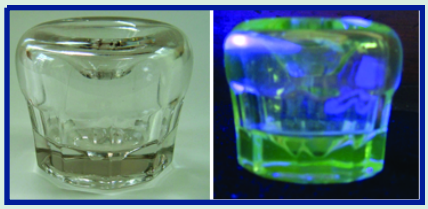
Among the goods brought back was porcelain from China. All trade with the western world passed through the single port of Canton. China imported sea otter pelts, silver, and opium. Among the exports were tea and porcelain. The porcelain, made specifically for export, was often packed in the bottom of the ships to serve as ballast - ballast which could be sold upon the ship's safe return to a western port. "Americans in the early 1800s could buy an ordinary 50-piece tea service imported from China for $3 (about $40 today)."[2]

The raw materials of Chinese porcelain are two white clays, Kaolin, commonly called "China clay," and Petountse, commonly called "China stone." Used together, they create a porcelain clay body which fuses at a

Chinese....cont'd on pg 4

Black Light: Finding the Hidden Beauty of Your Glass

A brief overview of a presentation made by Alice Walsh at the 9th National Open Salt Convention in June 2005



This 19th century inkwell reacts to a black light by turning a soft yellow. You often need a very dark room or a very strong black light to see it, as sometimes there is only a hint of the yellow.

What is a UV Black Light?

It is the source of Ultra Violet (UV) radiation that is, in fact, "invisible" light. This may seem like an oxymoron but consider that people cannot hear a whistle for dogs because it is at too high a frequency for us. In the same vein, UV light is out of range for our optical sensors.

Green Opaline, probably French, mid 1800's and it fluoresces the same color as the transparent yellow piece.

What can it do?

Short Wave UV lights can burn skin and eyes and is used in sun lamps. Long wave, the type we use, causes fluorescence in certain materials. When the invisible UV radiation hits the intended object, the electrons in that object absorb that energy. Technically speaking, the now-energized electrons move into a higher orbit around the atom's nucleus while others fall back into the vacant

Black Light....cont'd on pg 7

Notes From the Editor

You'll notice that this issue of the newsletter includes two more presentations from the 2005 Convention. For those of you who didn't attend this convention, I hope these articles, plus those in the last issue, are sufficient to persuade you to mark your calendar for June 7-9, 2007 for the 10th National Convention, to be held in Indianapolis, IN.

Speaking of the 9th Convention, special recognition deserves to go to the host New England Club (NESOSC) and Lesley Solkoske, their long-serving President. The convention was so successful in all ways, including financial, that they were able to donate $1000 to Open Salt Collectors to benefit the National Newsletter and an additional $1500 as "seed money" for the next convention. Additionally, they purchased a lovely Chinese export porcelain salt from the collection of the late Cackey Marsden and donated it to the Peabody-Essex Museum on behalf of the national Open Salt Collectors. As President of Open Salt Collectors, and on behalf of all open salt collectors everywhere, I would like to gratefully acknowledge these gifts and express our deep appreciation to the New England club for their generosity and thoughtfulness.

Lastly, the "theme" for our next "Readers Participation" feature (see page 6), will be Doulton Lambeth/Royal Doulton. If you have a Doulton Lambeth or a Royal Doulton open salt in your collection, please send a photo and description to me (rcelser@aol.com or Rod Elser, 1470 Morewood Dr., Powhatan, VA 23139) and we'll include it in a montage made from all submissions. Thanks, Rod Elser

The Open Salt Collectors Newsletters are designed with the assistance of **MJ's** - ***a Graphic / Web Design Plus Company***. Contact MJ's at: **(843) 345-6032, mjkoval@knology.net or visit: www.mjs-graphicdesignplus.com**

CONTRIBUTIONS PLEASE!

Debi Raitz, webmaster *extraordinaire* for Open Salt Collectors, has made a number of changes to our www.opensalts.info web site, giving it a "new look." If you haven't visited the site recently, please check it out and send her your thoughts. Additionally, she is looking for photos of reproduction salts that she can post to the site, catalog pictures of newer salts, favorite links for researching salts, links to webpages of individual collectors, and anything else that might be suitable content for one of the newly created pages. You can send your contributions to Debi through the link on the website.

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While we encourage the dissemination of information about open salt collecting, we do like to know in advance when and where material originally appearing in the ***National Newsletter*** will be used. Please contact either the editor (rcelser@aol.com) or publisher (al@agencyconsulting.com) if you would like to reprint anything from this newsletter. When the publication occurs, we also ask that a copy of it be sent to either the editor or the publisher.

The ***National Newsletter*** is the official publication of Open Salt Collectors, a nonprofit organization dedicated to promoting and encouraging the study, collecting and preservation of open salts. This is done through the publication of a national newsletter, maintaining an informational web site, promoting membership in open salt collecting clubs, publishing informational and educational articles in collector publications, and through other means as may be appropriate from time to time. The officers of Open Salt Collectors are: Rod Elser, President; Al Diamond, Vice President; Mike Zagwoski, Treasurer; Linda Drew, Marketing Director; and Debi Raitz, Web Master.

The ***National Newsletter*** of Open Salt Collectors is published twice per year, in the spring and fall. Subscriptions are available either directly or through any of the collector's clubs. The subscription rate is $10/year. Information about the clubs is located on p.3. Direct subscriptions can be made by sending your name, address and check to Mike Zagwoski, OSC Treasurer, 2 White Birch Lane, Horsham, PA 19044.

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OPEN SALT COLLECTOR'S CLUBS IN THE UNITED STATES

New England Society of Open Salt Collectors NESOSC):

Meetings/Newsletters: Two meetings per year, generally held in the MA, CT, NH, and northern NY areas plus two club newsletters and two National Newsletters per year for Regular Members; Associate Members do not receive the National Newsletter.
Dues $20/yr./family for Regular Membership; $10/yr./family for Associate Membership; due in January.
Send to NESOSC, c/o Karen Wetmore, 4 Clear Pond Drive, Walpole, MA, 02081.
Officers: Lesley Solkoske, President; Warren Pilling, Vice President; Maria Martell, Secretary; Karen Wetmore and Sue Brown, Co-Treasurers.
Future Meetings: For further information about the meeting or the club, contact Lesley Solkoske (lgsolkoske@cox.net or 203-440-3686) or Mimi Waible (MimiAHW@aol.com or 978-443-3613).

Open Salt Collectors of the Atlantic Region (OSCAR):

Meetings/Newsletters: Four meetings per year generally held in the PA, MD, NJ, DE, and VA area; 4 club newsletters per year plus the two issues of the National Newsletter for Regular Membership; Associate Members do not receive the National Newsletter.
Dues: Dues $15/yr./family for Regular Membership; $5/yr./family for Associate Membership; due in January.
Send to OSCAR, c/o Linda Kump, 71 Clearview Lane, Biglerville, PA, 17307-9407.
Officers: Al Diamond, President; Mike Zagwoski, Vice President; Sally Hegedus, Secretary; Linda Kump, Treasurer.
Future Meetings: For further information about the meetings or the club, contact Al Diamond at Al@agencyconsulting.com or 856-779-2430.

Midwest Open Salt Society (MOSS):

Meetings/Newsletters: Two meetings per year in the mid-western area, plus two club newsletters.
Dues: $6/yr./family, payable January 1st. A subscription to the National Newsletter through the club is available for an additional $10/year.
Send to MOSS, c/o Ed Bowman, 2411 West 500 North, Hartford City, IN 47348.
Officers: S. Keith Tucker, President; Sandy Bernfield, Vice President; Sue Imhoff, Secretary; Ed Bowman, Treasurer.
Future Meetings: For further information about the club or meetings, contact Ed Bowman at the address above or edbowman@netusa1.net.

Central-Midwest Open Salt Society (C-MOSS):

Meetings/Newsletters: This Chicago area club is closely associated with MOSS Dues are voluntary to cover the cost of mailings and door prizes. There are three meetings a year. For further information about the club or meetings, please contact Keith Tucker (10386B, Fox River Dr., Newark, IL.; phone 815-695-9651or kntwalnutfen@webtv.net).

Open Salt Seekers of the West-Northern California (OSSOTW-NC):

Meetings/Newsletters: Four meetings per year--January, April, July and October-that are generally held in the northern California area. Also, four newsletters per year, distributed in accordance with the meetings.
Dues: $10/year/family, due January 1st of each year. A subscription to the National Newsletter through the club is available for an extra $10/year. Send to OSSOTW-NC, c/o Claragene Rainey, 950 Whispering Pines Dr., Scotts Valley, CA 95066.
Officers: Sarah Kawakami, President; Linda Witt, Vice President; Claragene Rainey, Treasurer; Joan Wrenn, Secretary; Jim Wrenn, Gazette editor.
Future Meetings: Meetings in January, April, July and October. For further information about the meetings or the club, contact Sarah Kawakami (925-757-9603 or hgsalts@earthlink.net).

Open Salt Seekers of the West-Southern California (OSSOTW-SC):

Meetings/Newsletters: 2 meetings per year generally held in the southern California area.
Dues: Club membership is $10 per person, due January 1st of each year. Club membership together with a subscription to the National Newsletter is $20/year.
Officers: Holly DiDomenico, Secretary; Janet Hudson, Treasurer.
Future Meetings: For further information about the meetings or the club, contact contact Linda Drew (lindadrew@aol.com or 650-598-0190).

Hosting a Collectors Meeting:

There are few aspects of collecting open salts more enjoyable than getting together with fellow collectors, whether to trade stories, share knowledge or show off favorite salts. Unfortunately not everyone lives near enough to one of the existing clubs to participate regularly in their meetings. It isn't necessary, however, to have a club to host a meeting with other collectors. Few collectors live so remotely that there aren't fellow collectors in at least nearby states. If you would be interested in hosting a get-together with some other collectors, Open Salt Collectors is ready to help. We'll work with you to identify and invite other regional collectors and even provide a program around which the meeting can be developed. Just let us know how we can help. You can contact Linda Drew (lindadrew@aol.com or 650-598-0190), Rod Elser (rcelser@aol.com or 804-598-8771) or Al Diamond (Al@AgencyConsulting.com or 856-779-2430) and we'll give you all the help you need.

Note: All this information - **plus more** - about the salt clubs can be found on the web at **www.opensalts.info**

Grateful thanks for Debi Raitz for developing and maintaining this site.

Chinese....cont'd from pg 1

temperature of about 1300 °C.

Pounding Clay

The clay is mixed with water and allowed to cure (as slurry) for months. Then the water is removed (photo at left), leaving dough-like material which is formed into small slabs (photo at right).

Clay Slabs

During the forming of the porcelain object it may be decorated with color applied to the clay before it is glazed.

A common and popular coloring agent is cobalt, introduced from Persia in the 14th century. Cobalt decoration is a very economical process because it requires only a single firing. It is applied to the raw clay form (photo at right), appearing gray during the application. It is during the firing that the beautiful blue color appears. Most other colors are applied over the glaze and require additional processing. The colors applied later in the process can be fired at lower temperatures. Their firing temperature determines the order in which they are applied, with the lowest temperature colors applied last.

Pieces Accidentally Fused Together

Applying Cobalt Coloring

Sometimes, pieces were not glazed all over. Leaving one side or a portion of one side unglazed allowed the workers to stack pieces inside the kiln. If two pieces in contact were both glazed at the area of contact, they would typically stick together (photo at left.)

Once the pieces were ready for firing they might be placed in a huge dragon kiln. These large, serpentine mound structures could extend 100 feet up the hillside. The pieces to be fired were placed along its length. The fire was started at the bottom end of the kiln. As the fire slowly consumed the fuel, it would over a period of 4 to 5 days gradually move up the length of the kiln, heating pieces as it approached and burning its way past them. As the fire moved farther up the kiln, the pieces it had passed slowly cooled.

"Dragon" Kiln

The kilns were often hundreds of miles from the port of Canton, requiring tremendous work to produce and transport the many artifacts made for export.

Blue, Red and Gold Colors

The collapse of the Ming Dynasty in the 17th century led to the destruction of many kilns. The Japanese saw an opening and moved in to the export market to satisfy European tastes. The colors they used were somewhat different from the traditional Chinese export colors. In the late 17th century, after the Chinese rebuilt the kilns, they developed the Imari palette with more reds and golds and a darker blue (based on Japanese porcelain) to compete with the Japanese in Europe. For the plate in the adjacent photo, the blue is applied under the glaze and the red and gold were applied over the initial glaze. Those colors are typically fired at about 800 Celsius, compared to the 1300 Celsius required to fuse the porcelain. The gold, fired at the lowest temperature, was applied last.

Green Sweetmeat Plate

Exquisite Detail on Plate

Plate Showing use of Pink Color

Other colors were introduced as additional materials were found to widen the color choices. Among these were green, shown in the photo of the sweetmeats plate (left photo below), and pink (center and right photos below), introduced around 1720, which is a suspension of gold.

Chinese....cont'd on pg 5

Chinese....cont'd from pg 4

17th Century salt in the Peabody Collection

Since open salts were widely used in the western world, they were among the items produced in China for export. The early 17th century salt cellar on the left was based on a wooden model of a Dutch salt. The potter mistakenly thought the protrusion on the base was for decoration. It was actually the lid which had been removed from the model and placed on the base.

Trencher style salts were popular for export. The salt at the right and the six trencher salts below were all shown in the presentation. These salts are from the collection of the late Catherine Marsden, long time member of the New England Society of Open Salt Colletors and several are also pictured in the Open Salt Compendium.

Unusual pedestal-type trencher salt

1 Smithsonian Magazine, June, 2004.
2 Smithsonian Magazine, Ibid.

Many thanks not only to Karina Corrigan for doing the original presentation at the 9th Convention, but also to Jim Wrenn, Newsletter Editor for Open Salt Seekers of the West--Northern California, who prepared this article and took all the photos as well.

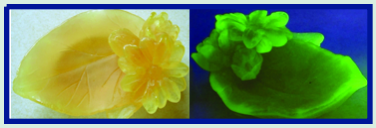
Examples of Chinese Export Porcelain Trencher Salts

To tie in with this article on Chinese Export procelain, we asked readers to send in photos of their trencher salts. The next page is a montage of the photos that were submitted--certainly many thanks to each collector who shared their photo(s) with us! For the next issue of the newsletter, the theme of our Collector Participation page will be "Doulton Lambeth/Royal Doulton" open salts." **If you have a Doulton Lambeth or Royal Doulton open salt in your collection, please send a photo of them, together with a brief description, to Rod Elser (by email to rcelser@aol.com; or by mail to 1470 Morewood Drive, Powhatan, VA 23139).**

Nanking Export Porcelain #1 - Side view
Canton Export Porcelain #1 - Side view
Chinese export porcelain.
Hexagon base with 6-lobe top rim and profuse with decoration.
Nanking Export Porcelain #2 - Side view
Canton Export Porcelain #2 - Side view
Canton Export Porcelain #3 - Side view
Small condiment dishes that weren't often exported
Very colorful Famille Rose pattern trencher
MOTTAHEDEH
VISTA VA ALEGRE
PORTUGAL
Similar to one pictured in the Open Salt Compendium,
A 2002 eBay purchase for $20.00 (it does have a corner chip) that according to the seller had been dug in the French Quarter of New Orleans.
New Vista Alegre trencher
A trencher salt but French Faience; marked on the bottom (#322) and dates to about 1880.
Tobacco Leaf
Has an Oriental mark but with all the crazing it's illegible.
This is reproduction; they often come with armorial decoration. Mark on bottom shown in photo above.
Looks early but not certain
Rare pair of Dutch Delph c. 1735; not Chinese export but from the same time period
Canton style trencher from 1779-18
Three porcelain 19th century trenchers sold as a lot by Skinner Auction on eBay for less than $400.
Reproduction "Vista Alegre Mottahedeh Amorial" trencher; original dates to 1736-1795; made in Portugal and seen on eBay for $30-40.
"Buyer be Ware" Reproduction Trenchers.
Tobacco Leaf pattern export trencher, c1770-80; sold on eBay for $2000
REPRODUCTION OF THE TOBACCO LEAF PATTERN COMMONLY FOUND ON CHINA TRADE PORCELAIN IN THE SECOND HALF OF THE XVIII CENTURY.
METROPOLITAN MUSEUM OF ART
Mottahedeh
New Vista Alegre trencher salt with gold decoration; sold on eBay for $30.
Export trencher, rare Canton type with Nanking border
Reproduction "Vista Alegre Mottahedeh Amorial" trencher; original dates to 1736-1795; made in Portugal and seen on eBay for $30-40
New Vista Alegre trencher salt with green decoration and gold trim; sold on eBay for about $40.
New export trencher with lion or dog design purchased on eBay.
Export trencher with "Mandarin" design.
Blue chinese export trencher.

Black Light....cont'd from pg 1

spot. The falling electron gives up this certain amount of energy as visible light. The act of converting invisible light energy into visible light is called fluorescence.



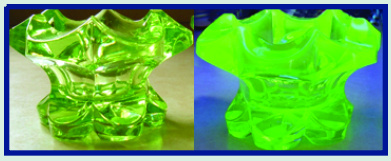
This translucent open salt or dish is a contemporary piece made by Daum of France in their Pate de Verre style. This color almost certainly has to be black light tested. The author states she never would have guessed it would fluoresce.

What does it mean to collectors of antiques?

It can help determine the chemical elements within an object, to examine decorative surface details, and perhaps most importantly for the average collector, to detect repairs.

What is the basic use for black lights?

The basic use for black lights is to check for signs of fluorescence. Different ingredients have different reactions and can help determine age. A pale yellow reaction to a black light indicates the presence of a decolorizing agent such as manganese that was used in glassmaking for decades if not hundreds of years. In bottle making, its use dates from about 1880 to 1914. With EAPG its use began much earlier in the 1800's. WWI brought an embargo with Germany so companies began using selenium to offset the aqua color naturally found in much common glass. Both of these elements fluoresce a pale yellow under a UV.



These large, heavy open salts were made by McKee Bros in Pittsburgh, mid 19th century. The color is referred to as Apple Green. They will glow bright neon green.

After 1930 other chemicals, such as arsenic, were used to create a perfectly colorless glass. (Interestingly, arsenic was also used to create the fiery opalescence that is so popular). So if a piece of glass, such as an Early American Pattern Glass, turns a pale yellow under UV, there is strong evidence that it was produced before the first quarter of the 20th century. If you have a firm knowledge of patterns and the piece has evidence of extensive wear, the odds are increased even more if the item fluoresces that you have an authentic 100+ year-old piece of EAPG. So evidence of wear, pattern identification and now fluorescence can all be used in determining attribution and identification. Keep in mind, however, that not all old glass will fluoresce; it depends on whether or not manganese or selenium was used during its production as an additive to make the glass colorless.

Bryden-era piece made at Pairpoint Art Glass Company during the second half of the 20th century. The opaque yellow contains gold or selenium which when re-heated changes to pink.

What about Uranium?

Uranium glass is the generic term for any glass that uses uranium as a colorant in opaque colors such as Jade or Jade-ite. This type is also called Uranglas in German and was quite popular both here and in Europe in the 19th century. Uranium was discovered in 1789 and named after the planet Uranus that was discovered in 1781. We know some early experiments were conducted using uranium as a colorant but the results of these experiments have been lost. In the early 1800's uranium oxide was being used in Europe as a colorant in paints and glazes and by 1840 its use was widespread in Bohemia's famous glassworks in their production of "uranium glass." Its use soon spread across Europe, being used by such famous firms as Baccarat, Val St. Lambert, and Thomas Webb. It also reached America and was used by Frederick Shirley, inventor of Burmese glass, as well as by numerous glass companies in the production of canary and custard glass. Transparent yellow "uranium glass" is also known as Vaseline glass. Glass that has uranium in it will generally have a green glow when exposed to UV light.

Open Salt, made by Webb in the Ivory color. The color is a cream rather than the heavier deep yellow found in the Burmese, but it still glows bright, neon green.

How can the use of these chemicals help date a piece of glass?

- If it reacts to black light with a very pale yellow, it is probably from 1800 - 1930
- If it reacts a neon green, it is probably from 1840 - 1940
- If it reacts neon green but the yellow color is harsh, or looks like a contemporary design, it is probably from after 1970

What surface details can be checked with a black light?

- Cracks (repaired with adhesive)
- Tinted adhesives
- Chemical washes or treatments
- Repainted, over paint and blends

Different materials absorb ultra violet energy and then release visible light, or fluoresce, at different rates. New paint will react differently than old paint. A good example would be a hand-painted Mt. Washington or Nippon Salt. If someone touches up a worn area, the new paint would fluoresce differently than the old. It's not so much the color of the reaction, just the difference, however slight, that shows that it's not the same paint applied at the same time.

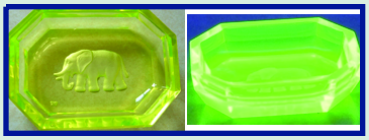
Likewise, if a foot or handle to a piece has been reattached, the adhesive used will likely (but not always) appear white, yellow

Black Light....cont'd on pg 8

Black Light....cont'd from pg 7

or black under UV. Some of the newer, clear polymer substances, however, can be tinted to match transparent and opaque glass and appear to blend in perfectly.

"Crizzling" in old glass or the cloudiness of sick glass can be covered up with some varnishes, but again it will show up when using the black light. Unfortunately not all adhesives and other materials react to UV light.



Early 20th century open salt, made with an intaglio design of an elephant attributed to Henrich Hoffman because the little butterfly in the corner. It is an example of Vaseline glass, which is a transparent yellow.

What kind of back light should I purchase?

An early medicine bottle; it has to have manganese in it to get this color, but there was no noticeable reaction to the UV light. It could be that artificially altered glass looses its reaction.

For antique detection purposes, only long wave black lights are used. The short wave light can sunburn your eyes and damage skin. It is used, however, to sterilize food and medical instruments. It will make some things fluoresce, however, such as oil paintings over 160 years old and even some newer postage stamps.

If you buy a black light, the bulb should read BLB for "black light blue." Short-wave black lights can be as small as the size of a quarter and placed on a key chain or as large as 18" long for mounting in a cabinet.

What is Irradiated Glass? (also known as Purpled Glass; Baked Glass; Nuked Glass; Altered Glass; Sun-purpled Glass; and Gammathyst.)

In the mid 1990s people started noticing a lot of purple glass turning up in antique shops, much more than had been common in the past. Some older glass has always been found with a very slight to a very noticeable lavender hue, the result of a natural reaction between sunlight (which obviously contains UV light) and the manganese sometimes added during the manufacturing process. However, it was soon learned that this "natural process" could be replicated and even "enhanced" through the use of artificial UV light. Historically this hasn't been a major problem for collectors as the quantity of glass being altered was relatively small. This changed though when commercial-size irradiation units, in use primarily to sterilize food items, were also used to process larger quantities of glass, changing colorless glass to lavender or even deep purple. Irradiated glass is simply glass that has been altered using a shortwave UV lamp; a germicide lamp or the highly intense gamma rays used in these food sterilization plants. Technically speaking these lamps emit high doses of UV rays that cause the manganese in the glass to react and absorb all the visible light in the spectrum except violet-hence we see purple.

How about a quick summary?

- Black lights can detect certain additives, such as manganese and uranium that can help date and identify an object.
- They are also able to highlight cracks in the glass, as well as detect adhesives used in a repair and to contrast repainted surfaces
- Short wave UV lights can be used on older glass made with manganese to change the color to purple

Alice Walsh is an exceptionally knowledgable glass collector and a long-time member of the National American Glass Club and we are very appreciative of her presentation.

References:

Books:

The Black Light Book: for Antiques & collectibles by Antiques & Collectors Reproduction News, 1998; PO Box 12130, Des Moines, IA 50312 (800) 227-5531

Uranium Glass by Ken Tomabechi, 1995; Iwanami Book Service Center, 2-3 Jinbocho Kanda Chiyoda-ku, Tokyo, 101 Japan. (Additionally: Book Review of *Uranium Glass* in Nature Magazine, vol. 379, January 4, 1996 and Author's reply, Nature Magazine, vol. 383 Oct. 31, 1996.)

Yellow-Green Vaseline! A Guide to the Magic Glass revised edition by Jay Glickman & Terry Fedosky, 1998 The Glass Press, Antique Publications, PO Box 553, Marietta, Ohio

A Picture Book of Vaseline Glass by Sue Davis, 1999. Schiffer Publishing, Atglen, PA

Internet:

www.vaselineglass.org Glass organization devoted to the study of Vaseline Glass

www.parkcity.ne.jp/~ken-toma/ Dr. Ken Tomabechi's web page includes beautiful photos of his collection and basic information about the history and make-up of Uranium glass

www.insulators.com/articles/rinker.htm Rinker on Collectibles What's Wrong with the Real Thing?

www.fruitjars.com/ref/articles/news.asp?article=16 Nuked or Irradiated Fruit Jars by Bob Clay

A PASSION FOR THE "GLASS THAT GLOWS"
By: Al Diamond

Diamond's Vaseline Glass Collection #1

Most of us have seen examples of what is called Vaseline glass in the U.S. and is commonly known as the glass that glows green under black lights. But isn't it strange that the heyday of Vaseline glass was during the last half of the 19th century when no one had black lights? The next time you come across a nice piece of Vaseline glass, try taking it outside on a sunny day - or, if you are as eclectic a collector as Sherry and me-- fire up one of your oil lamps and take a look at the Vaseline glass in the glow of the lamp. You will find that the piece shines as if it were under black light.

Diamond's Vaseline Glass Collection #3

Diamond's Vaseline Glass Collection #2

150 years ago, in simpler times, elegance and amusement had to be found in the products of the day. People were thrilled with stereopticons and stereoviews as their source of family entertainment. And glass that glowed was considered "au courant." People would display their Vaseline glass (or Custard glass in Europe) in their windows and would use it in their sitting rooms to impress their friends with their elegance. But this beautiful glass also had a dark side.

During the 19th century, glass that glowed was also known as 'Bad Luck Glass'. Why? It was called 'Bad Luck Glass' because before pressed glass became a thriving industry most glass was blown. This required manual handling and intimate contact with the glass and its coloring agents. One coloring agent that caused the glow to glass was uranium oxide. Known since the early 18th century, it was used in Europe for coloring glass that would glow in sunlight. But, for reasons that were unknown then (but are quite apparent now), continuous exposure to the coloring agent uranium oxide during the glassmaking process caused glass blowers to become ill and live shortened lives. *

Yet the desirability of Vaseline glass caused production to thrive until early in the 20th century. Was it a change in taste that caused so many people to pack up their green and yellow-green glass and store them in the attic? No. The reason for the demise of the popularity of Vaseline Glass was THE INCANDESCENT LIGHT BULB!

Diamond's Vaseline Glass Collection #4

One of the side effects of Mr. Edison's greatest invention was that glass that glowed in sunlight or under oil lamplight was simply green and yellow-green under incandescent light. Since it no longer retained its glow, Vaseline glass lost its popularity and the population of Europe and the U.S. found new forms of glass, pressed for general use and elegant for display.

Diamond's Vaseline Glass Collection #5

While never really dying completely, Vaseline glass eventually saw resurgence with the advent of simple and inexpensive long-wave black lights (one of the side benefits of our "hippy" generation - "The colors, man…the colors").

Sherry and I have collected Vaseline glass for as long as they have collected Open Salts. Anyone visiting our house has probably been subjected to our 'Glowing Room'. We turn on the black lights and turn off the other lights in the family room and the whole room glows green from hundreds of pieces of Vaseline glass, as large as vases and cookie jars, as small as tiny animals and open salts and as esoteric as rare Vaseline necklaces and carriage and automobile flower vases (mounted in carriages and early automobiles in which fresh flowers were placed each morning).

Diamond's Vaseline Glass Collection #6

The attached pictures reflect over 100 Vaseline open salts as well as many hundreds of other forms of the "Glass That Glows." You all have a standing open invitation (call us first so we can clean before you come!) to view our Vaseline glass if you're ever in the Free State of South Jersey.

* For some updated information about uranium oxide in glass making, see page 20.

Al is President of OSCAR and Vice President of Open Salt Collectors.

Collecting Salts
By Dick and Jackie Peifer

Collecting open salts offers many ways to express your collecting personality. Some collectors only collect masters; some cut crystal; and others only silver salts. And some collect all kinds, which describes the Peifer collection. We do have a special collection, though, because we also collect antique and art glass salt shakers. We try to collect an open salt and a shaker in the same pattern; this is almost always an Early American Pattern Glass (EAPG) pattern.

Many technology improvements occurred in the glass industry during the second half of the 19th century. Glass was able to be produced very inexpensively, which in turn created a vast market in as much as the average person could now afford the many items made of glass. Along with this market came changing tastes and even changing life styles (although one thing remained constant—fierce competition). One of the changes that occurred was the manner in which salt was served. The master salt had always been necessary simply because salt got hard when it absorbed moisture; but when stored in an open dish, it could easily be broken again. During the final years of the 1800's, a reliable and inexpensive process was finally developed to coat the salt crystals with a chemical that prevented the absorption of moisture. The result of this was that salt could finally be served in shakers, which also explains why salt shakers were not produced in significant quantity until the 1890's. Good ideas don't catch on immediately, though, and for a time the glass industry was forced to make both open salts and shakers. For example, if we look at Heisey Glass Company, they made quite a few patterns in both master open salts and shakers. The Plain Band and Punty Band patterns are good examples.

Photo #1--Fandango Pattern

When we find an open salt, whether a master or an individual, we immediately check to see if a shaker was made in the same pattern. If there was, we search for it and if we're successful, we call it a "double." Some of our great doubles are the Fandango pattern (see photo #1). The individual open salt in this pattern is relatively easy to find, but the shaker is much more difficult to get a hold of because we must compete with what seems like a million Heisey collectors! Another double that seemed easy was the Fancy Arch pattern (see photo #2).

Photo #2--Fancy Arch Pattern

We have been looking for some doubles for years. For example, the open salt in the Washington State pattern is quite common, but the shaker is apparently very rare. We have seen a photo of one and know a fellow collector who has one, but we haven't yet been able to find one for our doubles collection, which currently numbers around 40.

Photo #3--Banded Star Pattern

Photo #4--Electric Pattern

Photo #5--Two Panel Pattern

Some patterns have both an individual and a master salt as well as a shaker-we call this a "triple." Finding these really causes us to search and finding all three pieces in good condition can be a real challenge. One of our triples is in the Banded Star pattern (see photo #3), and this came together quite easily. Another triple is in the Electric pattern (see photo #4). Finding the two salts was the most difficult part, and we remember finding the shaker in New Hampshire. Two Panel is another very popular pattern and comes not only in clear but also in several colors. As can be seen in photo #5, we have succeeded in finding all three pieces in blue. In the Fine Cut and Block pattern, we have the individual and the shaker, but haven't yet been able to add the master. We did see one at a show in Indianapolis one year, but thought we'd look around a little before buying it. Unfortunately we got caught up in other things and only later realized that we had forgotten to go back and buy the salt!

The lesson here is that a true collector must just keep on looking! It is always fun for us to find the pieces for our doubles and especially triples, and to do the accompanying research-this is what collecting is all about!

Dick and Jackie are long-time, active members of OSCAR.

On the Salt Trail
By Ed Bowman

Well, I guess it is time for another of my adventures on the Salt Trail. Back in the summer of 2005, I received a call from Lorraine Ayers, asking if I would be willing to talk at the November OSCAR meeting about how I use my computer to catalog open salts. Since I figured that I would have completed my outside projects of painting and residing the house by then (and also hoping I would get most of the leaves on my 7 acres under control before I left), as well as be ready for trip on the salt trail, I told her I would. My last trip looking for salts had been to the National Open Salt Convention in June to Salem, MA with my daughter, so I figured I'd be ready for another one by late fall. By the way, if you did not make it to the convention, you missed a great time-so start planning for the next one in Indianapolis, IN, June 7-10, 2007.

As it got closer to the time to leave I started planning my trip. I already had a general plan in mind, but just before I left I got the word that Russell Vogelsong at Summit Art Glass had passed away, and that they were not sure what they were going to do. Since they make my Mini Hens and Salts, and many of my molds were there, I adjusted my trip to be able to stop and talk to his wife, JoAnn.

Condiment Set

Cut Glass

English Porcelain

Pressed Glass

Neal RP9 Lacy

I like to take my time when traveling, periodically stopping and walking around, and antique malls make a perfect place to do this. I left on Thursday morning and headed east thru Ohio with my first planned stop at Jeffrey"s Antique Mall in Findley, Ohio. It is a large mall and takes some time to go through. On this trip they had lots of salts to look at, with some that would have been of interest to not only the novice, or intermediate collector, but the advanced collector as well. There was a large variety of old clear glass salts in good condition; colored Cambridge and Bird & Berry salts; a colored 10-panel pedestal with a plum-colored area of frosted fruit & leaves, like #223 in The Open Salt Compendium (the price, however, was a little more than I wanted to pay); a couple of Monot-Stumpf and Mount Washington salts; some nice china ones; several pedestal table salts; china swans; Elfinware baskets; assorted silver salts; several intaglio's; and an assortment of old colored glass salts. It made me I wonder if maybe a collection had been auctioned in the area recently, but the people at the mall did not know of one. Of course I already had most of these salts, but I did leave with a few. First was a Boston & Sandwich round pedestal lacy, Neal RP 9, at a good price; a set of 6 nice, round cut glass salts; an English Hobnail condiment set on a leaf-shaped tray; a nice covered English transfer ware salt??; some pressed glass salts (always have to add to these); and finally some Nippon salts.

With so much to look at, I ended up spending more time than was on my schedule, so decided I needed to get on the road to Ravenna, OH for my stop at Summit Art Glass. Unfortunately I had to skip my planned stop at the Medina Antique Mall, where, on my trip to the Convention, I had found a couple of nice salts.

I arrived at Summit in the late afternoon and had a nice visit with JoAnn. They have not decided for sure what they are going to do yet, but are shut down and not making glass due to several reasons—the high price of natural gas being one of the most important ones. They were sorting and marking all the molds, so I decided to pick up some of my molds on the return trip. Because of their weight, it will take 2 or 3 trips for me to pick them all up and it is a 500-mile round trip from my home. So I adjusted my return schedule to stop in this area on a Sunday night and pick up a load on Monday.

Limoges China

So then it was on down the road to Clearfield, PA where I spent the night. I was up again early Friday morning and headed east on I80 toward Lewisburg for my next planned to stop. It was a lovely day and the leaves along the way were in great color, so nice to look at.

My first stop was at a mall on top of the hill, where I have found salts in the past. They had moved to another building in the same area, but this time there were no salts of interest, so it was on down to the Roller Mill. I didn't find much of interest here either, but they did have a few and I found 5 nice Higbee 3-footed, diamond point discs salts (H&J 2930) and 3 nice Limoges intermediate celery salts. I then headed north to the Bald Eagle Antique Center. I had never stopped here before and it was a small shop in comparison to many, but very friendly people. Here I found a Crider convention salt at a good price, and passed it on at the OSCAR meeting at a fair price (which was not even close to the price the one on eBay recently brought). I also found a dark blue and a light blue Leaf & Rib salts (H&J 435), a dark blue chick-in-egg "just out" salt (H&J 948)-kind of rough condition like most are; and a NESOSC 1978-1988 cobalt salt.

Salt Trail....cont'd on pg 12

Salt Trail....cont'd from pg 11

Then it was time to move on down the road toward the Ayers. I made a quick stop at the Peddlers Village at Tannersville; it was a nice stop but I didn't find anything of interest, so I drove on down I80 to US 209. This is where it got fun! Driving by myself, I thought there was a few miles to go before I got to US209, but I looked quickly at an exit sign, saw that it US209, so I made a quick exit. Unfortunately, and as you can guess, it was Business 209, so I spent a lot of extra time in the Friday afternoon traffic. That put me behind my schedule; plus it was dark by now so what did I do but drive right past Dingmans Ferry Road (yes, there was a stop sign, but I still went straight and only as I went through the intersection did I realize I should have turned!). Then when I finally got to the Ayers, I drove right past their drive too—but, to be honest, I've done this same thing in the daylight!

I got a warm welcome from the Ayers family as they had kindly invited me to stay the night. I had lots of time to look at their collection again and visit with salting friends who came to their open house that evening. Thanks again to Fred and Lorraine for their gracious hospitality.

On Saturday morning Fred and I headed for the meeting. Fred showed me some short cuts and a nice scenic ride. When we arrived at the OSCAR meeting site, I set up my projector for the presentation, and my salts for Buy and Sell. I got to visit with lots of salting friends and then it was time for the meeting. I presented how I used the computer to catalog my collection. I used a video projector with my laptop computer; special thanks to Al Diamond who ran the computer for me during the presentation. There were lots of salts to enjoy at both the Show and Tell and at the Buy and Sell. I had a great time at the meeting and it was a very nice location (I think this is to be the location for the 2006 NESOSC/OSCAR joint meeting).

Well, as with all good things they must come to an end, but you always have memories. I loaded up my car and headed back down the road toward home, planning to drive to West Middlesex, PA, where I would spend the night. On most trips like this one, I would have driven on home on Sunday and not made any more stops; however, since I planned to pick up some of my molds on Monday at Summit Art Glass back in Ohio, I decided to try to hit some antique malls and areas that I had not been to because of the time of day I'm normally driving through (generally either before they open or after they close).

Double Fiance like

Sunderland Master

On Sunday morning I headed to Valley View Antique Mall in Brookfield, OH. They had a few salts. I did find a nice Faïence like double with toothpick holder that was marked around top "MADONNA AMBRO - SANT." There were no marks on bottom though. I also found a Royal Rosenthal pepper to go with the salt I already had, and an unmarked china shell with matching spoon. Then it was on down to the Pottery City Galleries in East Liverpool, OH-not much in the way of salts here, but lots of pottery. I did find a little Italian pottery salt and a nice Nippon l3 handle toothpick that was marked as a mustard.

Shell w/spoon

Italian Pottery

Red Art Glass

Then it was on to my stopping point for the day in New Philadelphia, OH and the Riverfront Antique Mall. I have been here several times and it is a nice large mall and takes time, so I planned on ending the day here. I've generally found a variety of salts here, but the prices may be a little high. Some of the items I saw included a set of Royal Bayreuth pedestals with lambs; a set of cut glass boats; a round intaglio in a jeweled frame; some art glass salts; and a blue Bird and Berry Napkin ring with pepper shaker (I don't not have blue one, but the price was a little high). I did get an amber regular optic Fostoria salt, and a nice red art glass salt with amber rigaree. After that it was time to call it a day and get something to eat and hit the sack for the night.

On Monday morning I headed toward Ravenna to stop at the I76 Antique Mall before going on to Summit. This is a nice mall right off I76 and they usually have some nice items. They did have some salts and several of them came home with me: an amber coal cart (a very nice addition to my personal collection); a Torquay pedestal with "Take a little Salt" on the bowl; a pink Sunderland luster master; and a nice sterling silver salt with matching pepper and spoon. I also bought a double salt with an unusual handle. It came with lids and spoons, and had open work with orange plastic liners. It was marked "SAIGON ARBEN", and paper inside said "from John when he was in Vietnam." I paid a little more than book for the first three, but wanted them for my collection. Then it was time to head over to Summit.

At Summit I loaded up the press and molds for my mini hen-on-a-nest salt and a few other salts and toothpicks from their remaining stock that I had picked out the previous Thursday and then headed toward home, which is just over a 4-hour drive.

Salt Trail....cont'd on pg 13

Salt Trail....cont'd from pg 12

When I had left home just a few days earlier, my leaves had been under control, with only the oak trees still holding out.

Coal Cart

Torquay

Sunderland Master

Silver Set

Vietnam Double

The leaves on the oaks usually come down late; the tornadoes that went through southern Indiana on Sunday morning, however, had produced strong wind in my area and when I drove in the drive those winds had brought down the oak leaves and I had a drift of leaves about 3' deep across in front of my house and barn. I quickly knew what I would be doing on Tuesday! Of course that was still better than what I have across my drive as I write this--one 3-foot snowdrift and two 2-foot ones!

Well, so comes to a close another trip on the Salt Trail. There is always lots of anticipation during the hunt, disappointment when nothing is found, and jubilation when that special salt is found and/or a great price is spotted. There are still a lot of salts out there to be found. We just have to look, be patient and when we find that special one, be willing to pay "a little more" if necessary. Some that I found on this trip were great deals and some I over paid for, but I like them all and that is what my hobby is about. I truly enjoy my salts.

Ayers Duck

Although I found some nice salts on this trip, the best one of all was a gift from Fred & Lorraine-one of Fred's wooden, handmade ducks together with a spoon. Thanks again to this wonderful couple for your hospitality and the great salt too!

I hope you all have great trips on the Salt Trail, and remember that special salt may be just around the corner in the next shop. Well, I guess I can't stall any longer and have to now go shovel the snow out front.

Ed is a "member-at-large" of all the clubs and a frequent contributor to the National Newsletter.

Sandy Jzyk sent along this photo from a recent Southeby's auction. Pictured are four silver salts made by Balzac of Paris circa 1750-1753. Not only are they rare, they are quite unusual since they are covered.

Hawaiian salt, side view

Hawaiian Open Salts
By Nancy Villaverde

Hawaiian salt, bottom view

The inclusion of a “Hawaiian salt” in the skit at the 9th NOSC was sort of a joke, since "Hawaiian salt" refers just to the coarse grained salt made here. Unfortunately there are very few Hawaiian open salt dips. There are, however, a few old ones, made by hand from Koa or Milo wood by native craftsmen. They are still used to hold the coarse local salt at luaus. Some time ago I bought one of these from an antique shop here, although it probably dates no earlier than the 1930's or even 1940's. The size is about 2" x 2" and the bottom is engraved with the maker's name (Bouman?) and Milo, the type wood from which it is made. There was another older one, cracked, which I left behind, but have since regretted not also adding it to my collection. Hawaiian open salts don't come along everyday and in reality are probably among the rarer ones around!

Aloha from Nancy!

10th National Open Salt Convention (NOSC); June 7-9, 2007; Indianapolis, IN.

Mark your calendar now so you don't risk missing this wonderful biennial event!

BACK ISSUES FOR SALE

We're pleased to report that we have had reprints made of the earliest issues of the National Newsletter and are now able to offer them to anyone who wasn't able to enjoy them when they first came out. You can either use the order form below or send the same information to the noted address; the cost is $5/issue, which includes postage. If you're a new subscriber, these earlier issues are as packed with articles, information and beautiful photos as are our current issues.

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#5-Fall, 2003	8th National Convention; Crider Art Glass Salts; Mimi Rudnick Award	
#6-Spring, 2004	Salty Observations; Chick Salts; Lusterware Salts; Trip to England	
#7-Fall, 2004	Colored Lacy Salts; American Belleek; Intaglios; Yeoward Crystal	
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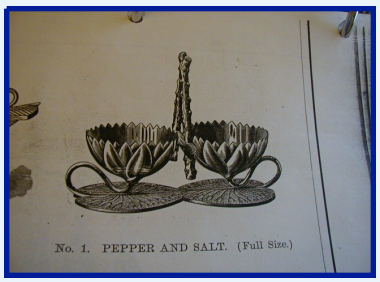
ASK MARY
By Mary Kern

There are so many unanswered questions in the World of Open Salt Collecting and I am sure the list will grow as new generations of collectors begin to research the origins of their salts. I do believe the one most often asked and the one we are all trying to find a definite answer to is about those pesky "double salts" - Just what the heck was their original purpose? Lesley Solkoske has an 1873 catalog from the Meriden B Company showing a double listed as "NO. 1 Pepper and Salt" (which is shown here), while French catalogs list them only as SALIERES (Salts). Ed and Kay Berg speak of a gentleman who grew up in Europe and whose father owned a restaurant. It was the young man's job to fill the double bowls each morning-one side with salt and one side with pepper. I recently acquired the pictured Royal Holland Pewter double with lids marked "S" and "P"; I understand that Ed and Kay have a similar style in silver plate. I still required more information on establishing that these were meant to hold salt and pepper. The English, as with most Europeans, refer to salt and pepper shaker sets as "Cruet Sets". Searching the web under that title, I happened to find the two extremely unusual doubles pictured. The information and pictures are courtesy of http://www.muederjoe.com/, Alexander Zacke, in Austria.



Meriden 'No. 1 Pepper and Salt'

Pewter 'S and P' Double

Vienna Bronze Double

The Dutch country girl is circa 1900 and described as follows: "Crafted by one of the famed Vienna bronze studios, this highly appealing figural cruet set portrays a Dutch country girl. Dressed in traditional costume with a long dress and apron as well as the classical wooden shoes, the young woman is depicted in a self-assured posture with her arms propped up at her waist. With a subtle smile playing around her lips she is looking down at the large baskets on the ground next to her as if to say: 'I can easily handle that!'. These leaf shaped and handled vessels serve as the actual containers for pepper and salt."

Orange Shoes Double

And the orange shoes: "This highly unusual ceramic cruet set was manufactured by the Bernhard BLOCH Company in Austria around 1880. Crafted in the shape of elegant orange colored and heeled ladies slippers with golden applications, the inside of each shoe can be used for either salt or pepper."

I am now 100% convinced that the double salts were used primarily for salt and pepper, OR salt and paprika, OR salt and salt for heavy users, OR between two dinning guests ---- As I stated in the beginning -- There are so many unanswered questions in the World of Open Salt Collecting!

Piggies Fairing Salt

Now for a short and easy one: "Fairing" pieces. These are normally seen listed as German Fairing and are normally cute little figurals. Most of us have porcelain figurals in our collections, and those that do more than likely have a Fairing piece as well. The most adored and delightful of these are the Pink Piggies; the favorite one of my collection of Piggies is pictured here. These pieces were either won at a Fair or a Carnival—hence the name "Fairings"--or purchased as mementos. They are more likely a contemporary item to the old Carnival Glass dishes won in this country with an accurate toss of a nickel or thin dime at a Country Fair.

Please send Mary any questions you might have about open salt collecting and she will put on her research hat to try to find the right response. Mary can be contacted by email at AskMary@webtv.net or by mail at 6889 Glenroy St., San Diego, CA 92120-1217.

A Brief History of Salt
By Rod Elser

Close-up of solar salt crystal

Salt is a biological necessity of human life, but we live our daily lives practically unaware of this basic fact. Most of our food already has salt added to it: check the labels on almost any prepared food in the house.

Salt-NaCL (40% Sodium and 60% Chlorine joined by the strongest of all chemical bonds, an ionic bond); neither Sodium or Chlorine exists separately in nature, but they are found abundantly in this compound state. Common salt is a rock; the only one we eat! It is one of the four elemental components of taste, along with sweet, sour and bitter. Salt sharpens the taste of other foods.

Seawater contains an average of 2.6% salt by weight, or about 120 million tons per cubic mile. In only two cubic miles of the ocean there is enough salt to build a wall equal to the length and mass of the 1500 mile long Great Wall of China and still have enough left for an additional 500 miles. Current estimates put the amount of salt in the oceans at about 40 million billion tons.

Salt varies in color from colorless when pure to white, gray or brownish. Sea salt is unrefined and as such, has a much higher content of other minerals. Sea salts vary in taste and color due to the differences in the mineral content from one sea to another.

Salt will still melt ice until 6 degrees Fahrenheit, but it works best at temperatures just below freezing. Fortunately most snowstorms occur when the temperature is near freezing. Salt acts by lowering the freezing point of water.

Boiling brine in Syracuse, NY

Salt is essential to the nutritional and physiological process of all animals, including humans. It is a necessary part of all body tissues and fluids. The amount in the body must be maintained within narrow limits through a number of physiological mechanisms that control concentration and secretion of salt so the amount eliminated balances with the amount ingested. Concentrations too high or too low may result in death.

Salt is also one of the most effective and most widely used of all food preservatives. Its industrial and other uses are almost without number. Sometimes, however, we need to separate the salt to get to the history. And there's a lot of history to get.

The fact is that throughout history, salt has been an exceptionally important element of life. It has served as money at various times and places, and it has been the cause of bitter warfare. While there are records of the importance of salt in commerce in Medieval times and earlier, in some places, salt trading today gives a glimpse of what life may have been like centuries ago.

Cutting lake salt in Bolivia

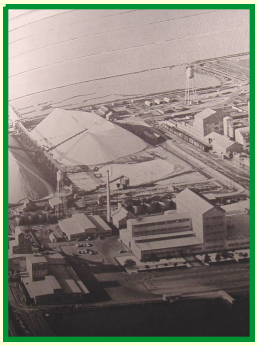
Salt was in general use long before history, as we know it, began to be recorded. Some 2,700 years B.C/—about 4,700 years ago—the Peng-Tzao-Kan-Mu was published in China, and is the earliest known treatise on pharmacology. A major portion of this writing was devoted to a discussion of more than 40 kinds of salt, including descriptions of two methods of extracting salt and putting it in usable form that are very similar to processes used today. Chinese history recounts the discovery of salt. And the Chinese, like many other governments over time, realizing that everyone needed to consume salt, made salt taxes a major revenue source.

In ancient times, salt (or the lack of it) could drastically affect the health of entire populations. Trade in salt was very important, and salt was valuable enough to be used as currency in some areas. Everyone must have salt, so it has been a commodity much abused by monopolizing attempts, whether by

Salt..cont'd on pg 17

Salt....cont'd from pg 16

individuals, corporations, cities or even nations. The city of Rome may have begun as a salt-trading center, like Venice after it. The highly organized salt trade of China was observed by Marco Polo, who recorded that the major item of trade on the Yangtze River was salt, shipped upstream from the coast to the interior cities. The Chinese produced salt by several methods: the evaporated it, boiled seawater, and pumped brine from wells drilled into salt beds. Modern oil drilling traces its technological roots back to Chinese methods originally evolved for salt production.

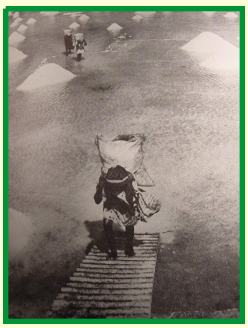


Leslie Salt Co. on shore of San Francisco Bay

Certainly the salt traders of the Roman port Ostia raised the price so high that the state was forced to take over the industry about 506 B.C. Man-made salt ponds along the Mediterranean shore date back to at least to Roman times; and salt was already being mined in the Alps when Rome was founded.

From about 1000 BC onward (and possibly much earlier), a brisk salt mining and salt shipping trade was centered on the valley of the Salzkammergut, in what is now Austria. The surface deposits were worked out by 1000 AD, and the salt miners drove galleries 400 meters into the mountainside, reaching depths below the entrances of 100 meters.

Salt was taxed by governments from the ancient Chinese and Romans to late medieval Burgundy, where salt was taxed at more than 100% as it came from the salt works. Extended to the whole of France when Burgundy was absorbed, the notorious salt tax "la gabelle" became necessary to the French government. Cardinal Richelieu said that it was as vital to France as American silver was to Spain. The repeal of the salt tax was a major goal of the revolutionaries of 1789, but Napoleon restored it as soon as he became Emperor, to pay for his foreign wars; and it continued until 1945. In the U.S., New York state financed the Erie Canal, which opened in 1825 and was known at the time as the "ditch that salt built," with its salt tax.

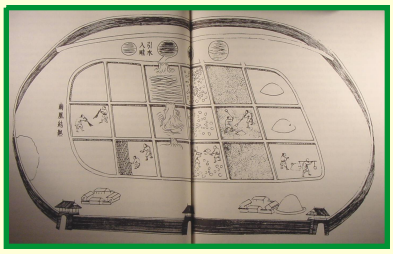


Harvesting salt in Colombia

Salt has almost always been of crucial economic importance. A far-flung trade in ancient Greece involving exchange of salt for slaves gave rise to the expression, "not worth his salt." Special salt rations given early Roman soldiers were known as "salarium argentums," the forerunner of the English word "salary." References to salt abound in languages around the globe. From the Latin "sal," for example, come such other derived words as "sauce" and "sausage." Salt was an important trading commodity carried by earlier explorers.

Salt has also played a vital part in religious rituals in many cultures, symbolizing immutable, incorruptible purity. There are more than 30 references to salt in the Bible, using expressions like "salt of the earth." And there are many other literary and religious references to salt, including use of salt on altars to represent purity.

At harvest time, the Hebrews presented salt to Jehovah. From the Bible, "Ye are the salt of the earth." Other biblical references are when the Lord speaks to Aaron and his sons: "It is a covenant of salt for ever before the Lord unto thee and to thy seed with thee." And Moses talking to the people of Israel: "Neither shalt thou suffer the salt of the covenant of thy God to be lacking from thy meal offering, with all thine oblations thou shall offer salt." Leonardo da Vinci's painting of the Last Supper shows an overturned saltcellar, the ancient symbol of ill omen and betrayal, before Judas. One of the 4 Aztec deities was a salt goddess. American Navaho Indians prayed to "Salt Woman." American Hopis revered "Salt Man" as their war god. At European royal banquets, guests quickly learned their standing with their host by their position at the table; by whether they were above or below the salt. Spilling salt was considered bad luck. The English believed that for every grain spilled, a tear would be shed in sorrow; another belief was that the spiller would have to wait outside the gates of Paradise for as many years as there were grains spilled. In Russia, peasants placed salt in the coffins of the dead to preserve them in the hereafter. In the Near East, no person taking part in an agreement sanctified with salt would dare violate it. In the Far East, mothers rub newborn babies with salt to assure good health. Even today Japanese actors and Sumo wrestlers sprinkle their stages with salt to ward off evil spirits.



Salt making in ancient China

Many of the oldest trade routes were originally created mainly to carry the salt traffic. To this day the caravan traffic

Salt..cont'd on pg 18

Salt....cont'd from pg 17

of the Sahara is largely to trade salt. The oldest paved road in Italy is the "Via Salaria," which was used to bring salt to Rome. London has its founding in the salt traffic. Worchestershire was the primary source of the salt in England and from there it was sent by pack trains to cross the Thames River where Westminster now stands. The Thames at times was too swollen to cross, so a fortified village grew up to protect the salt while it was awaiting transit. The village became London.

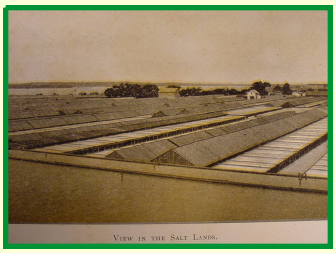
Solar evaporation in Syracuse, NY

Since ancient times salt, since it was a necessity, was either a governmental monopoly or had a heavy tax placed on it. High taxes on salt and strict governmental regulations regarding its production were contributing factors in the French Revolution. Even early in the 20th century, Ghandi led a peaceful revolt in India against the British government's monopoly on salt. Interestingly, in America there has never been a Federal tax imposed on salt.

Salt making encompasses much of the history of the United Kingdom, particularly in the Cheshire area. Medieval European records document salt making concessions. On the Continent, Venice rose to economic greatness through its salt monopoly. Further north, Halle is Germany's "Salt City" and World War II historians record how the Nazis plundered European artworks and secreted them in the salt mine at Merkers, Germany. Salt making was important in Slovenia and the Adriatic/Balkans region as well where Tuzla in Bosnia-Herzegovenia is actually named for "tuz," the Turkish word for salt. So is Salzburg, Austria, which has made its four salt mines major tourist attractions. Bolivia's salt producing region is a tourist attraction with one hotel constructed entirely of salt and fascinating salt-bearing caravans of llamas. France has always been a major producer of salt and any discussion of salt making in France includes discussion of the gabelle, the salt tax that was a significant cause of the French Revolution. The magnitude of the gabelle is impressive; from 1630 to 1710, the tax increased tenfold from 14 times the cost of production to 140 times the cost of production.

Saracuse Salt Works Post Card

Historians believe that Native Americans produced salt from salt springs at least 500 years before the arrival of Europeans. Written records from 1654 indicate that in Onondaga, N.Y. the local Indians made salt by boiling brine from salt springs. Colonial Americans soon found that they could produce salt in the same way. The first patent issued by the British in America gave Samuel Winslow of the Massachusetts Bay Colony the exclusive right to produce salt there for 21 years.



Turn-of-the-century post card photo of solar evaporation in Syracuse, NY

While salt played a relatively minor role in the Revolutionary War (British Lord Howe was elated when he succeeded in capturing General Washington's salt supply), it played a key role during the Civil War. Early in the war Union forces captured key Confederate saltworks in Louisiana and Texas, leaving the operation in Saltville, Virginia the South's most critical source of salt. Salt was needed not only to directly aid the war effort through, for example, the manufacturing of gunpowder and curing leather, but perhaps even more critically, for the preservation of food. Lacking today's methods of food preservation, people in the 1800's used salt to preserve both pork and beef. Beef took about 1 pound of salt for each 10 pounds of meat, while pork took even more. Lacking the necessary salt, much of the meat produced by Southern farmers simply rotted and never made it to the hungry troops or townspeople.

Saltville was finally attacked by an overwhelming Union force on December 21, 1864. After a 36-hour battle, the Confederate forces retreated and the Yankees moved in, destroyed over 100,000 bushels of salt and burned down all the buildings and production equipment. This only made a bad situation with salt availability in the South even worse. Prior to the war salt was sold for about 17 cents a bushel. By the end of 1862, salt was selling in Richmond, VA for $35 per bushel and by the end of the war the price had risen to nearly $300 per bushel!

While in the earliest times salt was produced by either simple solar evaporation or by boiling brine, mass production was well underway by the early 1800's. Interestingly, one of the other products manufactured by the Boston and Sandwich Glass Company was salt. Excess heat from their glass manufacturing operations was used to boil seawater to produce salt, with production reaching 6-8 bushels per day (which required boiling down over 2000 gallons of seawater). By the late 1800's, however, salt manufacturing had progressed to where it was being produced (or crys-

Salt..cont'd on pg 19

Salt....cont'd from pg 18

tallized) in enclosed vacuum pans, just like it still is today.

So if you're ever tempted to once again put salt into one the open salt dishes from your collection, remember that you'll be putting a lot of history into the dish as well!

References and Resources:

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Research on Chinese Export Porcelain

Debi Raitz has done some research on Chinese export porcelain and found especially interesting *Collecting Chinese Export Porcelain* by Elinor Gordon (Main Street Press, Inc., Pittstown, NJ 08867; 1984). Although there are no salts pictured, many decorations are explained and dated. Using it she was able to identify the pattern on a salt she bought from Carol Van Norman's collection. It was made in England, but the outside decoration is very similar to that on a c1705 K'ang Hsi platter, part of one of the earliest armorial services made for an English family. It is all underglaze blue with the family coat of arms in the middle. The border decoration is what caught her eye; the book says it represents the Chinese arts and some of the pa pao (Eight Precious Objects), as can be seen in the photos. Some of these "precious objects" match almost identically the decorations on the bowl on the salt. This is clearly a case of the British pottery companies copying one of the highly popular designs used by the Chinese.

A Little More on Vaseline Glass

By Rod Elser

As I was playing Editor with Al Diamond's article on Vaseline Glass, an obvious question popped into my mind—if producing Vaseline Glass was so dangerous in the 19th century, what has changed so that it can be safely produced today? Al quickly forwarded this question on to Terry Crider, a studio glass artisan, who provided this answer: Many of the trace minerals and elements commonly found in "one-a-day" vitamins are commonly used in glass melting. The amount used in glass melting, while relatively small, can still be very dangerous because of the fumes released as these minerals and elements are melted. Proper ventilation, however, eliminates the worst of the danger, at least in smaller glass studios. Unfortunately the glass houses in the 19th century didn't have good ventilation and the workers suffered accordingly. Specifically regarding the use of Uranium oxide, in its natural state, it is radioactive but only slightly, so it takes a lot of exposure over a prolonged period to have a negative health impact. Additionally, early glassmakers would have been using the “hot” oxide while glassmakers today use “depleted” oxide, which has only about 1/3 of the radioactivity as the hot variety.

Terry will be speaking at the March OSCAR meeting and we hope to have an article about his presentation in the Fall issue of this newsletter.

Here is an early advertising song sent to us by Lesley Solkoske that was created by the Worcester Salt Company, Worcester, CT, probably around the turn of the century.

Worcester Salt Song #1
(sung to the tune of John Brown's Body)

A man went into a grocery store
His mind was ill at ease;
He bought some pork and lard and tea,
and butter and eggs and cheese,
There's something I've forgotten, said he,
It isn't soap or peas
What can that thing be?

Chorus:
Glory, Glory Hallelujah
Glory, Glory Hallelujah
Glory, Glory Hallelujah
He wanted Worcester Salt.

A baker baked some loaves of bread,
They tasted flat and sour,
He put in lard and sugar and milk,
And also yeast and flour.
Now what do you think, this careless gink
Forgot what made it sour,
He left out Worcester Salt.

Chorus:
Glory, Glory Hallelujah
Glory, Glory Hallelujah
Glory, Glory Hallelujah
He left out Worcester Salt.

This lovely Sandwich boat salt was part of the collection of Ms. Mary Pentin, who was a speaker at a 2005 OSCAR meeting.

Extremely rare Opaque Deep Violet Blue Neal CD-4 Covered Lyre lacy salt. To be sold at the May EAPG Auction of Green Valley Auctions.