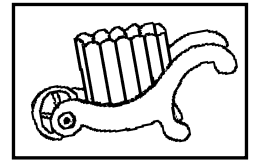


Salty Comments

Facts and Opinion about Open Salt Collecting



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Salt---Salt---Salt

It all started with Kay's gourmet club. The theme for the month was "Rustic Normandy (France)", and three of the recipes called for "Sea Salt" The club encourages you to follow recipes exactly. To avoid a trip to the beach 2 hours away, we started exploring local grocery stores. Several had bottles with the proper labels, but the salt was coarse and there was no indication of which sea it came from. We finally found an 8 oz. bottle at the Kitchen Inc. store identified as salt from Brittany in France.. It cost 50 cents an ounce, so it must be a profitable product. This led us to find out more about the history of the stuff. It turns out there is enough to fill a book – see reference below. We decided to pass along a few of the more interesting bits.

Information about salt goes back thousands of years. In the early days, it was part of the Roman soldiers' pay. There are several versions of this, but we prefer the Encyclopedia Britannica's which says that soldiers were originally given a ration of salt along with their food. The material was so valuable that they sold it rather than eat it. When the army decided to stop the salt ration, they had to give the troops an increase in pay to compensate. This increase was called the "salarium" (salt money, we guess), which led to the word "salary" today. Just where their salt came from is unclear – there might have been salt mines but it could have been made by evaporating sea water. In any event, all salt production was the property of the State.

Before refrigeration, salt was important for preserving food. It kept meat from rotting, and hid the taste when it did spoil. In the 1600's, the food suggested for colonists coming to America included a year's provisions, and "One bushell of Bay salt" was on the list. We learned from Jeopardy that Lewis and Clark spent 7 weeks on the West Coast boiling sea water to get enough salt for the trip home. Maybe the reason for the longer life spans these days is the low salt diets we enjoy (or at least tolerate)..

Today sea salt comes in a variety of colors. Ours is gray when placed beside Morton's., as shown in the figure at the right. The color comes from the clay basins in which the sea water is evaporated. My grandmother used to say, "You have to eat a peck of dirt before you die". Here's another chance to contribute to that total.

The sea salt exhibits one of the properties of the 19th century condiment – it cakes. We put some of it in an open dish (a salt dish, of course) and set it on the kitchen windowsill. The weather outside was cold so the humidity was much lower than in summer, but still the sea salt did not flow after 24 hours. When we tipped the salt dishes on their sides, the gray salt stubbornly refused to fall out. It was not caked very hard, so it would have worked well in the 1877 Christmas Salt Shaker with an internal agitator. In humid weather it would be caked a lot harder, so we could have added a few small chips of glass from the inside rim of the salt dish by prying it loose with a knife blade.

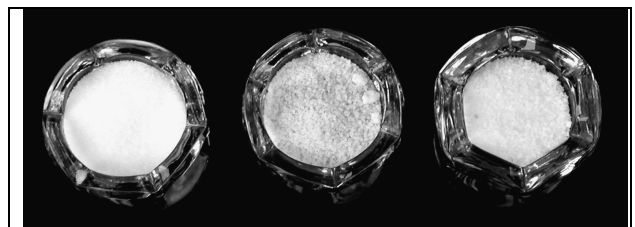
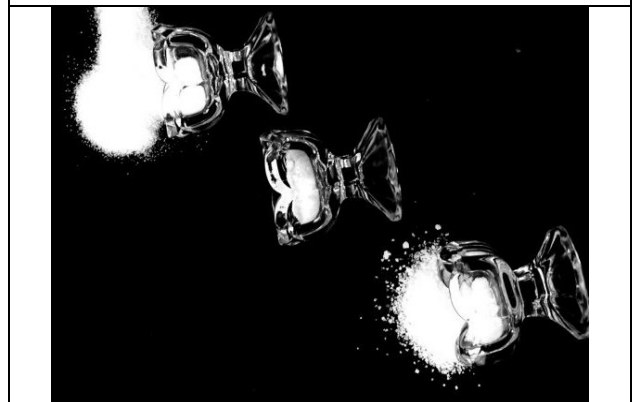


Table Salt, Sea Salt, Kosher Salt



Same Salts Tipped Over

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For those who may not have seen the Christmas Salt Shaker, we show a picture on the right. It gets its name from the patent date on the lid – December 25, 1877. The U.S. Government did not work on Christmas Day – all patents were dated on Tuesday of the week they were issued, and Christmas came on Tuesday that year. In the picture we have removed the top to show the agitator.



In Brittany, sea salt is made by evaporating sea water in the sun over a period of months. We also read that there is a struggling operation on the south coast of Portugal that operates the same way. They have a problem because the laws of their country do not let them sell their product for human consumption since it contains less than 96% sodium chloride. Their only legal outlet is for use on icy roads or in industry, competing against much cheaper salt from mines. In a rare spirit of international cooperation, the Brittany people buy their output, and sell it as their own. Our bottle of salt may be Portuguese, but at least it comes from the ocean around Europe.

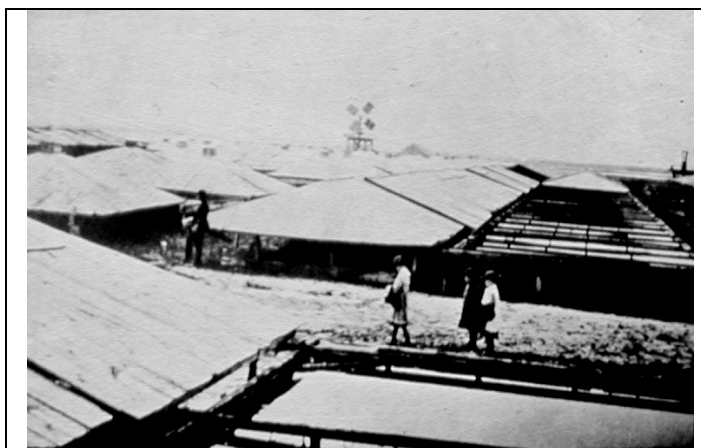


Harvesting Sea Salt

Besides sea salt, recipes sometimes call for Kosher Salt. This is purer sodium chloride, recrystallized from the product of the salt mines and with a minimum amount of additives. It has none of the iodide which is added to most table salt today as a dietary supplement. The Kosher product has small crystals stuck together, which makes it flaky rather than crystalline. The flakes have a large surface area, so it is especially good for absorbing juices when you preserve meat. Recipes warn that regular salt should never be substituted when kosher salt is called for – the food would taste too salty when recipe amounts are used.

The books show other kinds of salt that can be bought somewhere, though our store doesn't carry them. There is pink salt from Peru, made from a salt spring high in the Andes mountains. The brine is evaporated in open basins and harvested by hand, just like in Brittany. The color comes from the red clay of the basins. There is Hawaiian Black Lava salt, where the evaporating basins are black rock. In Denmark, they evaporate sea water in an iron kettle fired with special woods, so the salt has a smoky taste. These special salts are supposed to be added to the food just before you eat it so that their flavor is not lost during cooking.

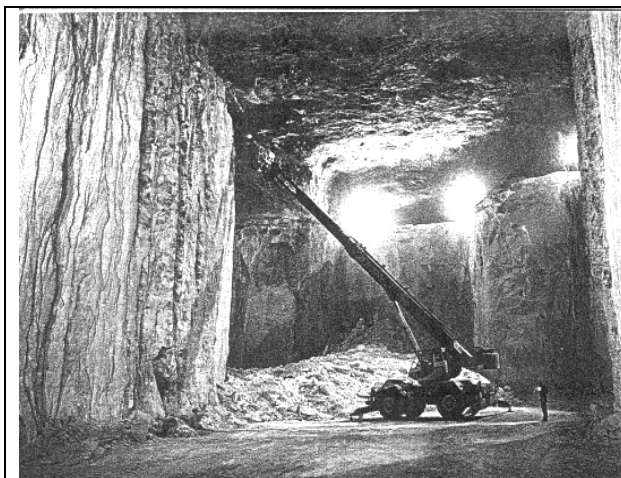
In the early 1800's, the production of sea salt was a community operation on Cape Cod. Over 400 separate evaporating basins were in operation and each had a roof on rollers that was moved off in the morning and back at night or whenever rain threatened. If a thunderstorm came up during the day, the factory whistle was blown and everyone turned out to push the covers in place. The kids at school were included, which they did not mind a bit.



Salt Works on Cape Cod

(3)

When Kay and I were students at Cornell together, there was a salt mining operation a few miles up the shore of Cayuga lake. This used the old brine recovery process, where hot water was pumped down into salt beds and the resulting brine then evaporated. Today the same operation has been converted to conventional mining, where the material is physically scraped off the wall of underground rooms created by mining equipment. It is brought to the surface by conveyors, and used directly on roads or for other industrial purposes. There are many of these salt mining operations around. We read of one in Avery Island, LA, the home of Tabasco sauce. The land sits on top of a salt deposit estimated to be 40,000 ft. deep (almost 8 miles!). The mining equipment is sent down the shaft in pieces and assembled below. When it wears out, it is abandoned in place. They carve out rooms in the salt at the rate of 2,500,000 tons per year, and send the salt up to the surface. When one layer is mined, they dig a shaft and make another layer below it. Tabasco sauce is still made using this salt, but the peppers for it are now grown in Mexico where the hand labor for picking them is much cheaper. Most of the mine's production is sold as industrial grade. In the picture, note the size of the men standing at the far right.



Underground Salt Mine

Not all of the early salt came from the ocean. One of the most famous salt works was on the shores of Onondaga Lake, near Syracuse, NY. The New England and OSCAR clubs held a joint meeting there several years ago. In colonial times, the Onondaga Indians knew of salt springs in the area but weren't interested in them. Rain water percolates through the thick layer of soil to the salt stratum below and comes up saturated with sodium chloride. Enterprising colonists boiled this highly saturated brine to get salt. A business was started, and a lease negotiated with the Indians to use the 10,000 acres of land forever for the price of 150 bushels of salt per year. This lease is still in effect, but the salt used for payment is ordinary table grade, made elsewhere. The business really took off when Governor Clinton of New York was persuaded to dig the Erie Canal. His decision was influenced by the State tax on the salt produced – easier distribution for the salt led to more production which meant more money for the State coffers. The canal let the salt get to market via Lake Erie to the west and the Hudson River to the east. At Onondaga Lake State Park the old boiling kettles are still there for tourists to see, but they are not operated .

One of the historic salt mining areas is in Timbuktu in Mali. There are thousands of pits at the site of an old lake bed in the desert. A thousand years ago anyone who tried to visit the area was killed – the source was too valuable for outsiders to discover. Today the salt is harvested in the traditional way. A pit is dug about 10 feet deep to reach the layer of white salt underneath the brown layers. Eighty pound slabs about 2 feet by 4 feet are carved out, and lifted to the surface. The product is hauled to market by camel caravans, and is reputedly much superior to the salt on our table. The Outside Magazine article in the references tells of a recent visit to this mining area.



Timbuktu Salt Mine

(4)

You can read a lot of publicity about French salt and even buy some of their product on the internet. One of the web sites is: <http://www.seldeguerande.com/anglais/accueil.htm>. This gives you complete information about salt production, tours of the operations, events planned for tourists, and how to order packages of their products. You can find even more web sites about the area by searching for “guerande”, which is the region where it is produced. The picture on the right shows a package of their “Fleur de Sel”, the purest grade. This is raked off the surface of the basins so it has the minimum amount of clay in it. The package shown sells for just under 4 euros (about \$4.00), but we don’t know how much the shipping cost might be.



Salt from Brittany

There are many more interesting facts about salt over the years in the book by Mark Kerlansky referenced below. If you want to explore the subject first hand, go to your nearest gourmet foods store and see what special kinds of salt they sell. We’d also suggest a visit to Onondaga Lake Park near Syracuse, NY to see the old salt works and hear about the history of the area.

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References:

“Salt – A World History”, by Mark Kurlansky.

“Hung, Strung and Potted”, by Sally Smith Booth

Magazine article: Outside Magazine, October 1997, “Forbidden”, by Tim Cahill. If you have a computer, go to: <http://www.outsidemag.com/magazine/1097/9710contrib.html> and click on “Tim Cahill”.