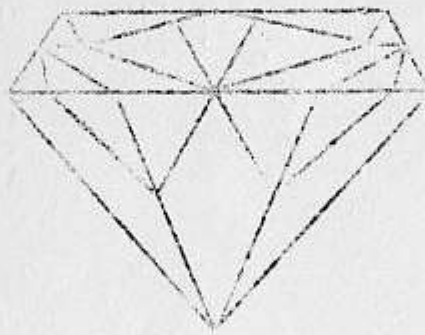


STONE
CHAT



NORFOLK
MINERAL
LAPIDARY
SOCIETY

In this issue we have a new contributor, one of our much travelled members, we hope you will find some inspiration from his article. Many of our members have travelled at home and abroad in the last year and it wouldn't take long to sit down and write a short account of their adventures. Why not try to spare half an hour during the Christmas break to jot down your story, we will correct the spelling mistakes and add a few of our own!!!

NEWS..... NEWS..... NEWS..... NEWS.....

..... At our meeting in November we were issued with an ultimatum, thank goodness, from Roy. He is willing to arrange the Annual Dinner wherever we like... provided it is at the Village Inn, Little Melton on Friday 12th February. After last year's "fun" when trying to decide the venue I for one don't blame him. Names to Roy by Jan. 5th meeting please.

..... The January meeting will include "The History of Norwich" in words and pictures. We hope you will like the idea.

..... There is a rumble of discontent from some of our committee members regarding the lack of interest shown by some of our members in club events. If we want these hard-working members to remain on the committee we must ALL do our best to support Club events be they jumble sales, gem fairs, dinners or this magazine. Some members do not even send their apologies for missing our monthly meeting. I think we should all remember that the Club will not survive without such members as we have on our committee.

..... Talking of jumble sales, we are holding ours at the Roxley Hall, Yarmouth Road on 5th December. Please support this event; we will all benefit from the proceeds.

BEST WISHES FOR CHRISTMAS AND THE NEW YEAR FROM THE

EDITORS OF STONE CHAT... SEE YOU SOON

POINTS TO PONDER - WHOSE DELINQUENCY?

We read in the papers,
We hear on the air
Of killing and stealing
And crime everywhere.

We sigh and we say
As we notice the trend,
"This young generation-
Where will it all end?"

But can we be sure
That it's their fault alone?
That maybe a part of it
Isn't also our own?

Kids don't make the movies,
They don't write the books
That paint a gay picture
Of gangsters and crooks.

They don't make the liquor,
They don't run the bars
They don't make the laws
And they don't buy cars.

They don't make the drugs
That addle the brain;
It's done by the older folks,
Greedy for gain.

In far too many cases
We find this to be true
The label "Delinquent"
Fits older folks, too.

CUTTING REMARKS

how to cut those difficult and unusual stones.

OPAL

A book could, and in fact has, been written on how to cut and polish this beautiful stone in all its varieties. Cut with as thin a blade as possible using a water based coolant or if thin enough rough out with a grinding wheel very gently with plenty of water. This gem contains a fair proportion of water, is slightly absorbant and sensative to heat. The fire in the stone is often in a very thin layer so particular care should be taken when grinding. A terrific polish can be obtained with cerium on felt or leather kept wet and at a low speed.

RHODONITE

Very light pressure should be used when grinding and polishing this silicate. Sanding should start with a sharp new disc and finish on a well worn fine disc. This should avoid the tendancy to undercut. Polish with cerium on leather using light pressure.

SERPENTINE

Care should be used when sanding and polishing to use plenty of water. Polish with cerium on damp leather.

TIGER EYE

Find the plane of Chatoyance by wetting and cut parallel to this. Grind at a fast speed using a 220 grit wheel. If a coarse wheel is used it should be very true. If your piece starts to undercut, use a sharp disc at a fast speed and plenty of water. If this fails to cure the problem try sanding across the grain instead of in a circular motion. Polish with cerium on hard felt.

CONTINUING OUR QUESTION AND ANSWER SERIES ON MINERALS

Q. When you were answering my questions earlier you mentioned "fluorescence" can you tell me more?

A. This will have to be rather technical, but here goes:

When the ultra-violet light from the sun strikes our skin it is absorbed and turned into heat and we can become sunburned. Some things absorb the u-v energy but re-transmit some of it at a lower frequency. If this is in the visible range of 7200-4000A we see it as a strange coloured light appearing to emanate from the substance which is exactly what is happening. In the early 1800's Sir George Stokes saw a blue glow from the mineral fluorspar when it caught the u-v from the sun, and described it calling the phenomenon "fluorescence".

The Ultra-Violet Spectrum

For the technically minded, the Long-waves go from 4000A up to 3000A (where the sunburning rays are) and the Short-waves continue up to 100A where X-rays start. An Angstrom is 0.000000001 mms. long.

<u>Comparative Cost of U-V Lamps</u>		<u>Mains/Battery</u>	
Long-wave or "blacklight" 3654A		£45	£149
Short-wave 2537 & 1849A		£68	£156
Multi-band		£71	£156

A new filter has been produced, to allow U-V rays through but not light waves, that lasts. U-V is limited to 3800 in flint glass, 1800 in quartz and 1250A in clear fluorite, so the SW tube is made of high silica glass. The 1849A is absorbed by air and will go a few inches only and you must not stare into SW sources without protection such as spectacles.

Fluorescent Minerals under the U-V Lamp

The few substances that Fl. appear to be activated by a small amount of an impurity. Calcite is particularly sensitive to this can be obtained in all the colours of the rainbow according to the different activators. 1% to 5% of Manganese will make Calcite Fl. red with the strongest colour at 3%.

Many secondary Uranium minerals (Uranyls) give a bright green Fl. and are more easily found with the

lamp than with a geiger counter.
The highly prized crystals of Scheelite siccovered to
Fl. bluish-white with a SW lamp.
Cornish and N.England fluorites Fl. blu whatever their
natural colour, while Derbyshire specimens do not Fl.
at all.
Diamonds and Rubies often Fl.
Some Barites will Fl. cream or white LW.
Wernerite from Quebec is exceptionally good Fl. chrome
yellow LW and also Fl. SW.
Aragonite, Adamite, Opals and some Agate Fl. green and
Hydronzincite, Celestite and Colmanite can Fl. white.
Many others can also Fl. in many colours.
Another use for the U-V lamp can be the study of Fl.
and phosphors of modern postage stamps. Forgeries,
Fungi, Bacteria, Oils, Advertising, Criminology,
Tracing and Dection are a few other fields open to the
owner of a lamp.

Phosphorescent Minerals Under Ultra-Violet Light

When the source of U-V is removed Fl, stops instantly.
When the object continues to glow for a fraction of a
second or even a few seconds this is termed Phospho-
rescence. Vey few of the Fl. minerals also Ph.
Some activated Calcite specimens are good and so are
some Opals.

Our Chairman, Martin Stolworthy, has recently
discovered a new source of Ph. material. His clear
Selenite crystals from Shelford Quarry are in two
sorts. The silver greys don't do much but the clear
creams not only Fl. well but Ph. strongly for several
seconds.

A good bock on the subject is F.H.Fough's "Field
Guide to Rocks and Minerals" containing Fl. and Ph.
data for each mineral

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POINTS TO PONDER

. Sucess covers a multitude of blunders.

You will be happier if you will give peoplea bit of
your heart rather that a piece of your mind.

GEODE HUNTING IN SOUTH OMAN

We set off from Thumrayt, the Sultan of Oman's Air Force Base, after breakfast, taking with us a three gallon insulated water container and enough food for 24 hours in case of vehicle breakdown. We were also carrying three spare wheels and had left word of the direction and area in which we would be hunting in case a search was required.

Ahead of us was an 80 km (50 mile) drive across desert which in that area isn't all sand but mainly rock and scrub with very little vegetation. Most of the time the route followed a track which almost disappeared in places in the more barren areas. We had decided to search in some rocky gullies about half a mile from the track. When we arrived there we parked the Landrover in a prominent position so that we could easily find it and split up to look for anything out of the ordinary. At lunchtime we returned to the Landrover for a welcome break after which we continued our search further afield.

As we didn't want to be in unfamiliar territory after dark, we called it a day in mid-afternoon and returned to base with our treasures. We arrived back in time for the evening meal.

The following day we attacked our rocks with a hammer and cold chisel and found one or two good samples. The geodes were irregular in shape, rugby ball size, with a thin outer skin. Inside; the many hollows contained masses of gleaming white calcite crystals, small but perfectly formed. Some we discarded as sand had entered the geodes and given the crystals a dull brown colour.

All in all a very successful trip, quite unlike any that I have undertaken before.

GLOBE TROTTER

.....
POINT TO PONDER

Lord, grant me patience, but I want it right now.

PLACES TO GO.....

Llechwedd Slate Caverns - Blaenau Ffestiniog - North Wales

At these caverns you travel into the mine on the old miners tramway through rock formed 350 million years before the Alps were built. You can see a reconstruction of a 19th century slate chamber, watch slate being split in the mill and try for yourself.

The underground workings now consist of over 25 miles of tunnels connecting vast chambers from which slate has been extracted. The workings extend a total depth of 900 feet. The section now open to visitors is part of the original level opened in 1840. Different lighting techniques are used to bring out the beauty of the rock and in one area to recapture the original atmosphere of the mine.

The tramway, on which you travel, is powered with battery operated electric locos, hauling specially designed passenger cars. The track is on level ground throughout - there are no cages involved - and emerges into daylight three times during the half mile round trip. Please note that it is rather cool in the caverns, even on a hot day, and that dogs are not allowed on the tramway.

During the season the caverns are open daily - last train into mine at 5.15 pm. There are restricted opening hours in winter. Enquiries telephone Blaenau Ffestiniog 306 (STD 076-681)

Llechwedd is at the northern end of the town of Blaenau Ffestiniog on the A496. To reach it you will travel through some of the most beautiful, although lesser known, scenery in North Wales. Combined with a ride on the Ffestiniog Narrow Gauge Railway with its fantastic views of the Vale of Ffestiniog will give you a day you will always remember

SEPTARIAN NODULES

Septarian nodules are formed when clay and silt are deposited and then crack internally, due to shrinkage while consolidating. The cracks are then infilled at a later date, usually with calcite, forming star shaped structures which are revealed when the nodule is cut in half. Sometimes small cavities are left allowing the calcite to crystallise.

The nodules which we find in Norfolk and Suffolk are all deposited on the beaches having been weathered out from boulder clay built up during glacial movement. They are grey to brown in colour and calcite can be seen as wavy lines on the surface of the nodules.

You can find specimens of these nodules on various beaches in Norfolk and Suffolk more particularly between Lowestoft and Hopton. The best area is between Lowestoft North Beach and Corton village.

Cars can be parked on the coast road opposite the pitch and put course near to where a small road runs down to the beach.

Care must be taken when collecting in the summer, in the area to the left of this road, not to step on nude sunbathers as this part is a designated Nudist Beach.

GOOD HUNTING

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POINTS TO PONDER

Some people can learn from other people's mistakes; the rest of us have to be the other person.

One advantage of putting off until tomorrow what you can do today is it may get too late to do it at all.

NORFOLK MINERAL & LAPIDARY SOCIETY
formed March 1973

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Meetings

First Tuesday of each month (except August)
7.30 for 8 pm at the Crane Centre,
Telegraph Lane
Norwich

Workshops

All other Tuesdays also at the Crane Centre.

