

BRITISH MICROMOUNT SOCIETY



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EDITORIAL

Believe it or not, this Newsletter is being completed on my company's laptop computer, in a hotel room in Tucson! My first visit to the show, and I couldn't resist giving it a mention even though I know many members have visited the event in the past. The sheer scale of things here is mind-boggling, but so are the prices of specimens. (I rather sheepishly asked the price of a large aquamarine crystal yesterday, and was told \$38,000. When I declined to buy it I was generously offered a 10% discount.) However, with a little patience, a number of dealers offering trimmed micromounts and material suitable for trimming can be found and, generally speaking, this material is of good quality and more reasonably priced. So at least I will not leave empty-handed. Obviously just getting to Tucson is an expensive consideration, and I have been lucky in that my visit is combined with business. Nevertheless, I can only recommend it, as I have never seen so many quality specimens from classic worldwide localities assembled in one place. I shall certainly be looking to plan my next Arizona business trip in February 1996!

DIARY OF A COLLECTING TRIP TO SKYE, JULY 1994
Roy Starkey

As has been our practice for the past several years, Neil Hubbard, Mike Bayley and myself headed north to Scotland for our annual mineralogical pilgrimage. The destination this year was to be the Isle of Skye - often known as the 'Misty Isle' on account of the frequently inclement weather!

We stopped overnight at Arrochar en-route to Kyle of Lochalsh, passing through Glen Shiel on Saturday morning. We paused briefly at a road cutting on the A87T near Meall a Charra, in Glen Shiel [NH 027 124] - where spoil material on the south side of the road yielded sparse pale yellow-green beryl crystals in pegmatite. Weather conditions were ideal - a very light breeze with brilliant sunshine and blue skies. Travelling westwards towards Kyle of Lochalsh we detoured slightly to visit another roadside exposure on the A890 about 1/4 mile from its junction with the A87 at Auchtertyre [NG 844 277]. Here, pods of actinolite / talc rock yield lovely specimens of dark green actinolite with crystals reaching 20cm in length. One area of the outcrop, particularly wet and mucky, produces unusual deformed pyrite crystals up to 10mm weathering out of a rotting talc matrix.

The short ferry crossing to Kyleakin provided an opportunity to enjoy a good view of the new bridge being constructed across the narrows. Once completed, this controversial construction project will improve communications for the islanders, although perhaps losing some of the charm of 'going over the sea to Skye'.

Our first port of call was a stretch of current roadworks along the south side of Loch Greshornish. Although a rather hot and dusty place in the afternoon sunshine, the extensive fresh exposures along the A850 at Edinbane [NG 345 525] yielded some quite nice chabazite (phacolite), mesolite, stilbite, analcime and apophyllite. This area is certainly well worth a visit if you're on Skye in the not too distant future.

A brief visit was made to Ramasaig Bay, south of Waterstein Head [NG 160 438] in the hope that we would be able to traverse along the beach / base of the cliffs. This proved to be futile, although providing lovely views of the coastline and seabirds. We also called in at the old disused quarry just east of Dunvegan [NG 267 480] but nothing had changed since my previous visit in 1982. The quarry was once noted for producing nice crystals of apophyllite but all the visible material is badly weathered, with nothing of worthwhile quality.

Our next speculative venture was to follow up Heddle's reference to "the finest chabazite in Scotland", from 'Lyndale'. The Lyndale Peninsula [NG 363 565] runs out into Loch Greshornish, and is a low lying grassy promontory with low basalt cliffs around the coast. We set out in brilliantly sunny conditions, with fine views across to the opposite shore. A careful search of the west coast suggested that whilst zeolites are in evidence in many of the outcrops, nothing spectacular is likely to be found. The best collecting potential appears to be around Rubha Bhreidein opposite Greshornish Point, where chabazite is relatively abundant in crystals up to 5mm on edge. We saw several seals and many seabirds - often the added bonus of coastal mineral collecting in western Scotland.

There is of course the remote possibility that the really good specimens came from the east coast, but that will have to wait for another day!

A return visit was made to Oisgill Bay, Waterstein [NG 134 497] which as usual was quite productive - with levyne fairly common in particular boulders. Our progress northwards along the beach was restricted by the rising tide, but some good large analcime crystals up to 1.5cm were collected from a large block at the northern end.

A road cutting near Ros a' Mheallain, Bracadale [NG366395] showed a low exposure of rotted trachy-basalt with quartz-filled vesicles. Some of these contained small grey banded agates and quartz geodes. Minor veinlets and amygdales of heulandite (microcrystals only) were also collected.

No trip to Skye would be complete without a visit to the tranquil and moody Talisker Bay. This beautiful spot, lined by towering basalt cliffs studded with zeolites, and featuring one of the few waterfalls which flows uphill in windy conditions, is a super place to spend a day. Access to the beach is gained by an easy level walk from the end of the road to Talisker House (please park neatly). Collecting potential exists both north and south of the river, and we first made our way carefully over the slippery boulders and along the foreshore past Heddle's sea-stack on the south side of the bay. The beach boulders yield specimens of analcime, thomsonite, calcite and mesolite. I collected one nice fist-sized cavity of honey brown calcite rhombs dusted with fresh mesolite near [NG 290 315] although collecting seemed rather sparse on this occasion. We paused at Heddle's seastack to collect pink chabazite from the upper levels, keeping an eye on the rising tide so as not to get cut off - remember slippery boulders are not the ideal medium for a rapid return trip!

On our way north to Portree we called in at the small council operated quarry at Sligachan [NG 495 305]. The digger driver was very helpful and readily agreed to let us have a look around (hard hats required). Some years ago this quarry produced many nice specimens of euhedral microcrystals of dark green epidote, but none is exposed at present. However, narrow veins on the eastern wall of the quarry yielded hand specimens of stilbite crystals with calcite.

The skarns of southern Skye are well known for the wide range of rare metamorphic minerals which occur there. At Camas Malag, Kilbride [NG 584 188] we visited three principal outcrops and collected monticellite, magnetite and various unknowns. A peaty slope below a small outcrop also produced several specimens of slightly weathered clinohumite crystals - not beautiful, but unusual. The view from the beach here across to the Cuillin ridge in the early evening is one of the finest views in Scotland - if you've never been before, do make the effort!

On Wednesday we drove north around the coast road through Uig and back down via Staffin, looking for new exposures, roadworks etc. A small field quarry opposite the track to Skudaborg on the east side of the A855 about 1 mile north of Uig [NG 387 652] - showed basalt with many micro-vesicles, and one large pod of coarse analcime and chabazite. Here our trip was nearly marred by disaster when the author's chisel decided to misbehave and leapt out of the rock-face causing a nasty gash on the bridge

of his nose which bled profusely. After more than 20 years active field work I suppose I've been lucky not to have suffered any injury previously, but it still comes as a shock and a timely reminder that protective goggles would be a good idea - if only they didn't steam up so badly! We made our way on to the picturesque setting of Duntulm Castle sited on a rocky headland overlooking the outer Hebrides. At the time of our visit we were treated to superb clear views out to Uist, Harris and Unst. The crag beneath the castle shows quite splendid igneous layering - well worth the short walk down through the hotel grounds to the beach. Our intention had been to find some small outcrops of buchite (a rock containing mullite), but we failed to locate the correct material. Also reported from the same area is a beach sand rich in olivine - but without specific details (lack of preparation!) we were also unsuccessful in this quest!

Following on around the northern tip of Skye we came to a sizeable roadside quarry in highly vesicular basalt, half a mile south of Flodigarry on the A855 [NG 463 710]. Good crystals of stilbite up to 1cm were relatively abundant, together with laumontite, chabazite, analcime, thomsonite and calcite - really easy collecting in the warmth of the afternoon sunshine. Our final call of the day was an almost mandatory walk up to the cliffs of the Quiraing above Staffin [NG 450 688]. It now being 5.0pm clouds were gathering along the top of the ridge and we had to don waterproofs for a short while, although the shower quickly passed. Many micro-cavities are to be seen in the prolific boulders below 'The Prison', with the most likely finds being chabazite, thomsonite and calcite.

Thursday turned out to be the highlight of the entire week. We had made arrangements with a local boatman, Robert van der Vliet, who lives at Eynort, that subject to weather conditions we would attempt a landing on the remote coastal locality of Sgurr nam Boc [NG 361 407]. This locality, featured in Heddle's writing, has been visited by relatively few present day collectors due to its inaccessibility, and still yields abundant specimens of fabulous zeolites - particularly stilbite and heulandite.

Having made ready the boat, we waded out into the middle of the loch and loaded our collecting gear. Once everyone had climbed aboard, the outboard motor coughed into life and we headed out towards the sea. As we left the shelter of the loch behind us it became apparent that there was quite a swell, and Robert indicated that a landing would be impossible. We therefore turned north along the coast admiring the stunning coastal scenery and glorious views up into the Cuillins. Shortly however the water close to the shore seemed calmer and we decided to head straight for Sgurr nam Boc in the hope that we might be able to get ashore. The cruise along the coast south of Loch Eynort gives splendid views of the basalt scenery which features so prominently in Heddle's 'Mineralogy of Scotland'. Eventually we came to the striking sea-stack known as The Belltower, beyond which lies the small beach of Sgurr nam Boc. As we got closer inshore, keeping a close eye for submerged rocks (of which there are many) we could see evidence of large zeolite filled cavities in the boulders on the beach. In spite of the very calm conditions there was still a noticeable swell and it was decided that we would have to jump out into about 3-4 feet of water, fully laden with collecting gear! The adrenalin was keeping us going to such an extent that I don't remember the sea feeling at all cold, and having found our footing Neil and I scrambled ashore to start work. One particularly large block (about the size of a Mini) provided beautiful specimens of white

stilbite up to about 30cm across, and close by we were able to collect well crystallised pink bladed crystals of heulandite. After about an hour and a half ashore Robert decided that we would have to leave due to the swell getting up, and this proved to be somewhat more difficult than landing. After three attempts at different points we waded out and managed to clamber into the boat, handing our rucksacks to Mike and Sue who had opted not to come ashore. This rather hairy operation was all over in under a minute and with the engine revving against the current we headed out to sea and home.

I have been wanting to visit Sgurr nam Boc since first acquiring a copy of Heddle fifteen years ago - Thursday 7 July 1994 was the day I realised this long held ambition, and when one looks at the stilbite crystal groups it is difficult to believe they are from Scotland.

If you fancy attempting a landing yourself, contact Robert van der Vliet, The Blue Lobster, Glen Eynort, nr Cuillins, Carbost, Isle of Skye. Tel: 0478640 320. You will find Robert most helpful and enthusiastic - he also offers very reasonably priced bed & breakfast, with optional evening meal. Do remember however that you must have ideal weather conditions (no wind at all from the west) in order to have a chance of making a landing, and that you will-get WET!

Our final day on Skye was spent in the south of the island, visiting the skarns around Kilchrist near Broadford [NG 616 200]. Here we collected plentiful well crystallised magnetite on the dump, and also visited the locality for ludwigite at the lower marble quarry. Reasonably rich specimens of this rare boron mineral were not difficult to find.

En-route to Armadale to catch the ferry home we made a short excursion to a talc vein on the hill due west of Loch Barravaig [NG678098]. This locality produced some very nice rich vein specimens of 2cm thick light green talc.

All in all this was a very successful collecting trip, aided enormously by the phenomenal weather. Temperatures were in the 24-27 centigrade range and we never needed anything more than a T-shirt all week. Representative material from the above described localities has been deposited in the collections of the National Museum of Wales, Cardiff; and the University Museum, Oxford.

A SIMPLE MICROMOUNTING TECHNIQUE

David Green

For some years I have taken the (Braithwaitian) view, that micromounts should be permanently mounted in boxes where possible. Although sound in theory, this has two practical drawbacks (aside from admitting that Peter is correct!). The first is the time and effort required to mount a specimen (as compared with Blu-tacking into a box); and the second is that the specimen cannot subsequently be removed (e.g. for photography, or if the box becomes damaged). A couple of years ago, experimentation led to a technique which minimises time and effort, and which allows most specimens to be removed and replaced in their boxes. I have since mounted several hundred specimens using this technique, which seems fairly robust, and which is possibly worth sharing with other members.

Some micromounters stick specimens on pedestals directly onto the bases of the boxes, but the finished mounts are not particularly strong. An alternative, neater method is to set the pedestals into a base which fits in the box. Foam board, matt black on one side and white on the other, is excellent for making the pedestal bases. It is available from art shops in a variety of thicknesses, the best being 6mm. The hinged inch-cubed boxes used by most of us are 27mm by 26mm internally. Cutting the foam board into rectangles of this size using a sharp scalpel can quickly provide several hundred bases. The dimensions must be accurate, however, in order to provide a snug push-fit into the boxes.

With a little practice, a leather punch can be used to make a central hole to accept circular balsa sticks (which form the pedestals). I find that the quarter-inch diameter balsa wood available from model shops are ideal for many micromounts. These fit snugly into the holes made in the foam board bases by a 6mm leather punch.

Blackened balsa pedestals, trimmed to the contour of the specimen base and cut to size, are pushed into the pre-punched holes in the pedestal bases. The trimmed specimens are then glued to the pedestals and set aside to dry before being fitted into the boxes. No glue is required either to fit the base into the box, or the pedestal into the base, both joints relying solely on being good push fits. This type of mount is permanent in normal use (and during transportation!), but has the advantage that specimens can be removed, attached to their pedestals, using a pair of curved forceps.

It still requires some time to make a mount; a minute or two per specimen. Considering the time and effort involved in collecting, selecting, trimming and documenting, this is a small investment.

A STORAGE METHOD FOR MICROMOUNTS

David Roe

Some of us are born to disorder and, as a result, dump our prized mineral specimens in cardboard boxes piled randomly into drawers or, even worse, leave them in their original tomato boxes in the garage. Others feel that the mark of a good Micromounter is to be part of a neatly ordered cosmos in which mineral samples were created in order to be neatly glued on to hand crafted supports and then placed respectfully into blackened boxes. These boxes are then labelled by a calligraphic craftsman and placed with funereal solemnity into a drawer alongside several hundred nearly identical boxes. I regret that I belong to the latter group (I blame it on being dropped on my head when a few months old) and long for my micromount collection to be regimented rows of boxes in logical sequence.

In this I am continually frustrated by the basic random chaos of the universe in general and my mineral collection in particular, which is regularly reduced to a disordered jumble of boxes. For the few of my fellows who share this strange trait, may I share a few thoughts which can provide an improved method of handling and make access to individual boxes easier. Conventionally, I use the standard square hinged-lid boxes and I have come up with a simple storage tray which can be fairly easily constructed.

I use a 3 or 5 ply board cut to a convenient size so that it can either slide into a small cabinet or be stacked in drawers. To prevent the boxes from sliding on the tray, and to provide a method of securing the boxes in fixed locations, I make a matrix of string on the surface as follows. Firstly, I make a series of 5mm notches with a hack saw blade around the perimeter of the tray, at intervals a couple of mm wider than the box. I also allow a few mm around the edge (to allow room for the hinges etc.).

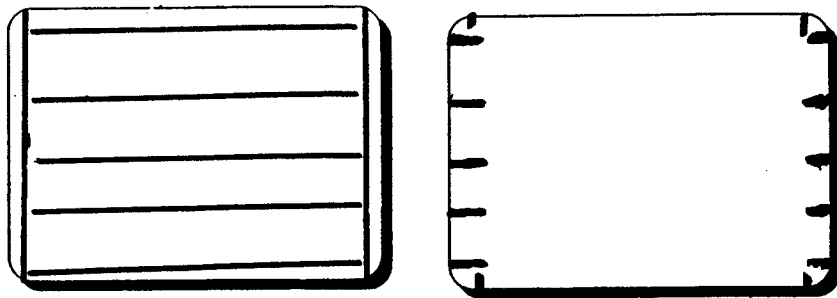


Figure 1: Sketch of String Arrangement for Micromount Storage Tray

I then take some standard white (jute) string and wind it into the notches to produce the matrix. The string is anchored in position using PVA glue (preferably slightly diluted) and the adhesion can be improved by leaving under pressure over night. The excess string can then be cut off from underneath the tray, and to improve the appearance the tray can be painted. To satisfy my primeval need for an aesthetically satisfying appearance, I sprinkle the tray while the paint is still wet with a similar coloured flock, obtainable from hobby shops, and brush off the excess when dry. I am currently using an attractive red flock which may explain my frequent identification of chalcotrichite from the most unlikely mineral localities! When the boxes are placed on the tray, they are easy to slide "between the tracks", yet they can be placed in sequence easily, and retain their relative positions. Furthermore, the trays with the boxes in place can be carried from one room to another, stacked on top of each other and generally handled and stored with ease. I have built a couple of small cabinets each containing 15 trays of 7-by-7 boxes, and the trays are simply suspended on rails fixed to the cabinet sides.

CHROMATOGRAPHY AND MINERAL ANALYSIS

David Roe

As an ex-chemist, I am much enthused with Max Wirth's pioneering methods of using chromatography in mineral identification, and I intend to see if it can be developed further. In particular, I would like to make it more "layman-friendly" by the use of "kitchen sink" technology. As Max will admit, some of the chemicals are exotic, expensive, and none-too-easy to obtain if you are not working in a chemical laboratory. He also explains that although the solvent mixes appear at first glance to be rather esoteric they are a textbook specification and may be open to modification and simplification and this is an area I want to look at.

My local chemist has been happy to sell me methanol, but I haven't yet dared to ask for ethanol, and he looked blank at a request for methyl ethyl ketone. Ironically, a few years ago, I used to wash my hands in the latter and it is also used in 2,000 gallon loads in the printing industry. Acetone is widely available from glass fibre resin suppliers, while some garages stock methanol for use as an anti-freeze ingredient (although they may not supply it across the counter). I have only just realised that the local UniChem pharmacist is a good contact; apparently, a pharmaceutical company recently distributed free display racks for their products that included a UV lamp for the detection of forged £20 notes. These may soon be replaced by the next new pharmaceutical promotion and could well be made available to suitable acquisitive mineral collectors. If anyone has any other thoughts to share on chromatography methods, chemicals and equipment, could they please contact me?

David Roe, 20 Lutterburn Street, Ugborough, Ivybridge, Devon PL21 0NG

SOME INTERESTING NEW FINDS FROM THE NANT-Y-CAGLE MINE

Steve Rust, Steve Burchmore, and Ed Foy

The Nant-y-Cagle mine, otherwise known as Eaglebrook, is a classic micromineral locality which has been renowned for many years for its fine supergene copper, lead and zinc minerals. The minerals were first described in 1983 by Alun Jones, but recent collecting from the East Shaft dump has revealed a number of species which are previously unrecorded from this mine. It must be stressed from the outset that most of the minerals described in the text of this article have been identified by visual means only at this stage, because, with the exception of laurionite, they occur in amounts insufficient for x-ray analysis. However, the specimens have been carefully compared with confirmed material from other UK localities.

Caledonite has been found on a number of specimens, and has possibly been overlooked in the past because of its superficial similarity to serpierite. It occurs as light blue aggregated prismatic crystals to 0.75mm. Some scattered spherulitic aggregates to 0.75mm in diameter have also been found. Occasionally, the crystals show a broad prism face with chisel-shaped terminations. Caledonite is associated mainly with anglesite, corroded cerussite, and galena.

Laurionite from Nant-y-Cagle has recently been confirmed by XRD analysis at the Natural History Museum, in London. It was found as cleavages to a few mm² in area on two micro specimens, and was originally mistaken for lanarkite. The massive material is generally colourless to white, with the merest hint of blue. Small cavities have allowed the development of thin bladed crystals to 1mm in length, while others show prismatic forms to 0.75mm in a cavity with ferroan dolomite. The crystals show perfect length-parallel cleavage, and the cleavage flakes show some flexibility. The laurionite is partly encrusted with tiny mattheddleite crystals, and occurs in association with anglesite, probable susannite-leadhillite, and caledonite. The first occurrence of laurionite in the United Kingdom was at Wheal Rose in Cornwall, where it was found by Sir Arthur Russell. However, Nant-y-Cagle is the first Welsh occurrence.

Mattheddleite has been found on laurionite (as noted above), as tiny, colourless, acicular crystals to 0.15mm in length. These crystals show major hexagonal prisms with acute pyramidal terminations. Mattheddleite encrusts the laurionite, and lines small cavities within it. It is associated with anglesite, caledonite, and a 3mm² cleavage mass of (probable) susannite-leadhillite. The matrix is a highly oxidised remnant of galena, with limonite replacing ferroan dolomite, and chalcopyrite.

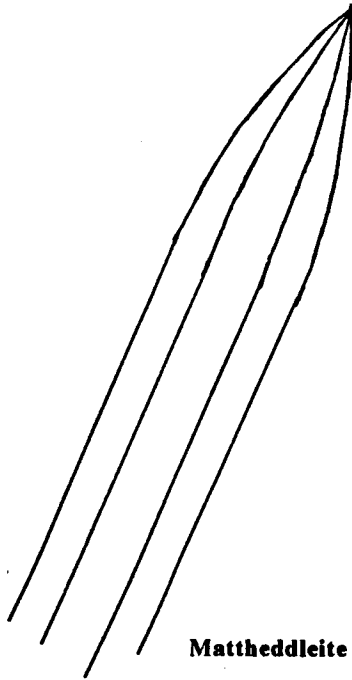
Phosgenite has been found as blocky, colourless crystals to 0.75mm on five micro-specimens. The crystals show a large pinacoid, and striated prism faces parallel to the c-axis. The prism edges have a rounded appearance. On some specimens, tiny drum-like phosgenite crystals are scattered on cerussite. On others, phosgenite occurs in small cavities in relatively fresh galena, commonly with anglesite and cerussite. On two of the specimens covellite is also associated.

Ramsbeckite has turned up at a number of British collecting sites and has recently been found at Nant-y-Cagle. It occurs as typical emerald green crystals to 0.5mm, scattered and aggregated in cellular quartz or on partings in mudstone, with partly oxidised sphalerite. Ramsbeckite is associated with schulenbergite, langite, brochantite, and linarite.

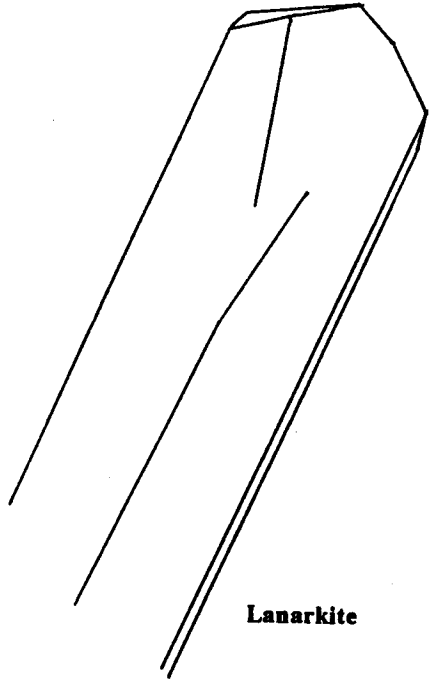
Table 1 provides a list of minerals provisionally identified from Nant-y-Cagle. In addition to those listed, two minerals have yielded unknown XRD patterns, and there are several minerals as yet unidentified.

Table 1: Minerals from the Nant-y-Cagle Mine

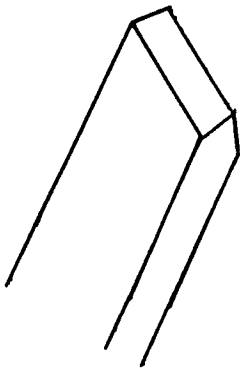
Anglesite	Galena	Millerite
Aurichalcite	Gold	Phosgenite
Bindheimite	Hemimorphite	Pyrite
Brochantite	Hydrocerussite	Pyromorphite
Caledonite	Hydrozincite	Ramsbeckite
Cerussite	Lanarkite	Schmiederite
Chalcocite	Langite	Schulenbergite
Chalcopyrite	Laurionite	Serpierite
Chrysocolla	Lautenthalite	Siegenite
Copper	Leadhillite-susannite	Smithsonite
Covellite	Limonite-goethite	Sphalerite
Cuprite	Linarite	Tucekite
Devilline	Malachite	Woodwardite
Dolomite	Marcasite	Wroewolfeite
Dundasite	Mattheddleite	Wulfenite



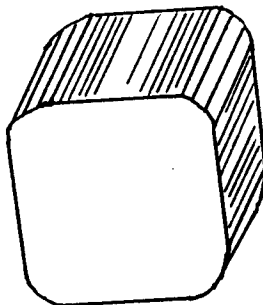
Mattheddleite



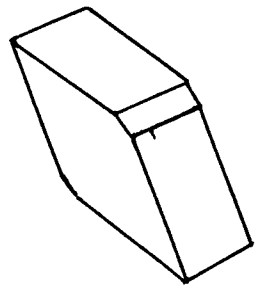
Lanarkite



Caledonite



Phosgenite



Ramsbeckite

Figure 1: Some Crystal Habits from Nant-y-Cagle

RUGGLES MINE, NEW HAMPSHIRE, USA

Roy Starkey

Whilst on a recent business trip to Boston (Massachusetts) I was interested to see amongst the tourist literature in the lobby a leaflet promoting "The World Famous Ruggles Mine" - described as "Just off Route 4 at the Village Green, Grafton, New Hampshire". (This is only about 120 miles drive from Boston !) The full colour leaflet goes on to describe the drive right to the top of the Isinglass Mountain over an excellent access road. Here the visitor is greeted by a vast panorama of valleys, forest and surrounding mountains. At the entrance to the 189 year old Ruggles Mine, and only a short walk from your car, the open pit and tunnels are available to explore at your leisure! Mineral collecting is permitted, with over 150 minerals recorded including beryl, mica, amethyst, rose and smoky quartz, garnet etc. The uranium minerals such as gummite and autunite are said to be prized by collectors the world over!

Commercial production of mica in the United States first began at the Ruggles Mine in 1803. New Hampshire was the sole producer until 1868. At first with hand drills, black powder and horse drawn dump carts, then with steam drills and winches, and in recent years with dynamite and modern equipment, a legend has been carved in the solid rock by Hardy New Hampshire miners.

The mine is famous for its huge books of mica, measuring 3-4 feet across and weighing over 100 pounds. General Electric once worked this mine and others in the area for mica. The Bon Ami Company operated the mine from 1932-1959 for feldspar, mica and beryl. Feldspar production during this period ran about 10,000 tons per year. During this time, one mass of beryl was found which filled three freight cars and paid for a whole year's operations.

Apparently the story began back in 1803 when Sam Ruggles, a shrewd hard working farmer, set about working the deposit. He hauled it to Portsmouth with his agricultural products and shipped it to relatives in England to be sold. An estimated 30 million dollars in valuable minerals have been recovered from the mine since 1803.

So, if you're ever near Grafton, do call in and tell us what you find - I can't see my company funding a 240 mile round trip to go mineral collecting on expenses!

"PREVENTATIVE CONSERVATION OF MINERAL COLLECTIONS"

A One Day Workshop at Cambridge University, October 22, 1994.

Peter Wallace

Eleven members met at the Conservation Unit, where the workshop was to be held well before the 9.30.am starting time, so it was D.I.Y. coffee time while Chris Collins, the Conservator, completed his preparations.

The workshop got under way with Chris explaining the role of the Conservation Unit and his remit as Conservator. Copious notes were handed out by Chris who then went on to outline the aim of the workshop, which was to provide a basic modern approach to the

care of geological - and particularly mineralogical - collections. Emphasis was placed on simple and low cost methods of storage, ensuring the long term stability of collections, be it of two or two million specimens. Topics covered during the day included, health and safety, agents of deterioration, identifying decay of specimens, monitoring and controlling the environment of collections, storage and packing, specialised treatment of specimens(eg.pyrite decay), and cleaning.

The group was then divided into threes and instructed by Chris to write down on a large sheet of paper what would, in our opinion, cause deterioration of mineral collections. When each group had completed this task Chris collected the answers which were pinned on the wall. A spokesperson from each group was nominated to explain and define their causes of deterioration of specimens. A summary of all the answers was made, and causes such as humidity, bad storage methods, light (on light sensitive minerals), packaging, biological decay, human stupidity, acidity of storage trays and cabinets etc. were discussed. Humidity tests were carried out using indicator strips placed in the collection cabinets in the conservation unit.

After coffee break we had a somewhat light-hearted diversion when Chris produced a dozen eggs and various packaging materials and instructed each group to package an egg and then drop it out of the first floor window! If the egg survived, the packaging was deemed to be safe for mineral specimens. It must be said that only one egg survived this test. Various packaging materials such as styrofoam and plastazote which could be used for lining card trays or cabinets, and making cutouts to hold specimens in trays, were demonstrated and discussed.

Lunch was taken at this point, although members were rather reluctant to down tools. After lunch we moved on to discussing cleaning of specimens, and at what stage cleaning becomes development and the ethics of this procedure. Chris demonstrated an air abrasive machine, and some of those present then took turns. Treatment of iron oxides was discussed using the "Waller Method", as was sulphide oxidation, and treatment of pyrite decay demonstrated using ammonia. The setting up of "micro-environments" using Tupperware or similar containers, for the storage of specimens with special needs was discussed and explained.

To summarise, it must be said that we all learnt a great deal, but how much we put into practise remains to be seen. Perhaps a little more "hands on" would have been welcome but all those attending agreed that it was an excellent day, well organised by Chris Collins who was assisted by Steve Laurie for part of the day. Thanks were given to both the above gentlemen.

RASHLEIGH
John Pearce

The Mineralogical Record has recently published a facsimile of Phillip Rashleigh's famous Specimens of Some British Minerals in it's Antiquarian Reprint Series. In the facsimile edition, Volume 1 (1797) and Volume 2 (1802) are bound as one. This beautiful reprint contains 54 full-page colour plates depicting 240 specimens from

Rashleigh's mostly Cornish collection. It also contains a colour portrait of Rashleigh by John Opie, and an eight page historical and bibliographical background of Rashleigh, his collection and his books. The cost in the U.K. is \$320 (or around £205).

We anticipate that this publication will be of great interest to many BMS members, but that few will want to spend £205 on it. We are therefore proposing to purchase one copy for the BMS Library, which members can borrow for a specified period (details are still to be worked out, but borrowers will be expected to pay the postage involved). It is also intended to purchase a second copy for a BMS Lottery; tickets being available as soon as the purchase is confirmed, and the final purchase of tickets and the draw will be made at this year's Symposium in Leicester. The price of each ticket will be amazingly expensive, but the odds will be significantly better than in the National Lottery. Details have yet to be finalised.

All this depends on whether copies of Rashleigh are still available. Watch this space for further information.

NORTHERN BRANCH MEETING, 29th OCTOBER 1994.

Mike Rothwell

This meeting of the Northern Branch was held at the Manchester Museum in Oxford Road, Manchester. Our host was David Green who, together with his "volunteers", Alan Burgess, Beryl Harrison and Beryl Taylor, arranged a splendid afternoon's entertainment with non-stop refreshments.

Seventeen members and guests made the trip to Manchester and were able to enjoy unrestricted access to the Museum's "behind the scenes" collection. Alan had arranged a special display of recent acquisitions including magnificent material collected by David from Sgurr Nam Boc and Moonen Bay on Skye earlier in 1994, and also some fine specimens collected in Gunheath Pit and Greystones Quarry in Cornwall during September 1994.

Of the "oldtimers", on show, my eye was drawn to a splendid blue baryte from West Cumberland and a Roughten Gill pyromorphite richly endowed with half inch crystals and still carrying an original Bryce Wright label.

Although most of the specimens on display could be admired without the aid of a microscope David had set up sufficient microscopes for the usual examination of micros brought along by the members. To mention one or two; Steve Rust had some recently collected corkite from Roughten Gill tips and some excellent material from Penberthy Croft. David Green brought along some fine torbernite from Gunheath and I took along some plumbogummite from Higher Roughten Gill, kindly given to me by Dave Charlton from his recent find, as well as some wulfenite, mottramite and vanadinite, collected in Newhurst Quarry at Shepshed during the Russell Society trip on 1st October 1994.

As ever on these occasions the afternoon passed far too quickly. We left rather reluctantly at five o'clock when the Museum closed having had a most enjoyable

meeting. Our thanks to David, his helpers and the staff of the Museum for their kind hospitality.

SOUTH-EAST GROUP MEETING, NOVEMBER 27, 1994 **Austin Lockwood**

Thirty-one members attended the 46th meeting of the South-East Group, held at the Ringway Community Centre, Grove Park, London. The group continues to make progress with a number of projects, including the preparation of study collections, and the arrangement of a field trip to the Isle of Skye, planned for May 1995. (Full details of the plans for this field trip can be obtained from Austin Lockwood, but in view of pressure on numbers, it is likely that participation will be limited to South-East Group members only.)

Latest finds by members included the following:

Eddie Foy had excellent volborthite, from New Cliff Hill quarry in Leicestershire, and wulfenite with cerussite and pyromorphite from Bwlchglas mine in mid-Wales. (One specimen had 42 orange bi-pyramidal wulfenite crystals!) Martin Stolworthy found yellowish wulfenite at Kinniside mine, in Cumbria. June and Austin Lockwood had deep purple fluorites from Dirlow Rake, and a Silurian fossil brachiopod, infilled with calcite rhombs from Wenlock Edge. Colleen Thompson had superb goethite from New Cliff Hill, showing black, acicular crystals with a very high lustre. Steve Burchmore showed some very nice native silver from the main dumps at Driggeth mine. The Wallace family brought olivenite and chalcophyllite from East Wheal Damsel, and duftite, mixite and linarite from Penberthy Croft. The Wallaces, and Bob Snowball, also had boleite from Padstow Consols.

Thanks to Peter Wallace for a show of slide he had taken, and for an explanation of his photographic methods. We hope that a slide show will become a regular feature of our meetings in the future.

SOUTH-EAST GROUP STUDY COLLECTIONS **Austin Lockwood**

Several study collection are now available and it is necessary to establish the conditions under which these may be borrowed. These are as follows:

- a. Only one study collection may be borrowed at a time.
- b. The duration of loan is to be between meetings, (i.e. on average for three months).
- c. If a member having a collection on loan is unable to attend a meeting, he should make every effort to have the collection returned so that it is available for loan to another member.
- d. Members will be require to sign the record book being kept by June Lockwood

before borrowing a collection and should ensure that the book is initialled when the collection is returned.

- e. Members are expected to take every care of the collections whilst in their possession, and should report any loss or damage to June.

It is hoped to build up the number of study collections to cover most of the classic UK sites, and contributions of further sets will be most welcome. Please hand these to Austin Lockwood who will ensure that they are catalogued and properly boxed.

THE TREASURES OF THE EARTH.
(A Russell Society Exhibition at Loughborough University,
on 22nd October, 1994)

Mike Rothwell

The weather forecast for 22nd October was pretty dreadful for the north of England and Wales so Richard Bell and I abandoned plans to go collecting and elected to go to Loughborough instead.

A couple of hours after setting off we were beginning to wonder if this had been wise. Getting soaked in the Caldbeck Fells being definitely preferable to sitting in a stationary car in Burton on Trent admiring a Brewery from outside for thirty minutes. It seemed that everyone had decided to go somewhere with the result that no one was going anywhere very fast. We refused to give up, however, and some three and a half hours after leaving Merseyside we finally reached Loughborough and the exhibition.

I have never seen a more interesting display of British minerals in one place before. The interest being heightened by the way the exhibition was organised. There were 24 displays in all, fourteen of them all British minerals. These were each dedicated to one particular mine, quarry or region, displaying not just fine specimens but also the kind of material that can be found nowadays. This together with photos and maps considerably enhanced the interest. With the exception of north Wales most of the areas of Britain noted for mineralogy were covered. To capture the imagination further there were exhibits on thin sections and on faceting, both of which seemed to draw considerable interest from the visiting public. Non British mineralogy was represented by three stunning exhibitions, one on calcite, one on zeolites from India and one on the minerals of Tsumeb. Finally, not to forget our fraternity, there was a micromount workshop.

We both thoroughly enjoyed the limited time we had available and fortunately the journey home was less congested. Everyone involved deserves congratulating for an excellent initiative; they put most museums to shame! If it happens again I urge you all to go. In the words of Michelin (***), "Worth a Journey".

NEW MEMBERS

- Peter Hay: 8 Hove Park Way, Hove, E.Sussex. BN3 6PS.
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- Monica Price: University Museum, Parks Road, Oxford. OX1 3PW.
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- Gerald Towe: 15a Warwick Road, Knowle, Solihull, West Midlands, B93 9LE
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New members are urged to inform the editor should any of their particulars (as noted below) be incorrect:

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(Please note that the deadline for articles for Newsletter 41 will be June 1, 1995.
Please let me have contributions as soon as possible in order to spread the typing
load. Many thanks.)