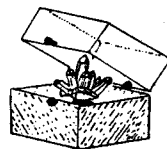


BRITISH MICROMOUNT SOCIETY



NEWSLETTER No.9 November 1983

The front page of the newsletter is always the most difficult to put together, and I always leave it to the end, in the hope that something interesting and exciting will arrive on my desk to fill it. No such luck this time, so I'll try a potjted collection of thoughts on the BMS.

Firstly, it must be said that the 2nd British Micromount Symposium held in Leicester on 1/2nd October was again a tremendous success, and greatly enjoyed by all those who attended. Many of you have returned the delegate survey form, but I would appreciate it very much if all those who have not completed their copy would do so and send it to me. If anyone hasn't had a copy, or has lost theirs, please send a SAE to my address and I'll send one by return. It may be of interest to offer an early analysis of the returns already to hand - generally speakers and topics met with universal approval, and the venue was much better than last year for space availability. Leicester is a popular venue for next year. Swapping time was held to be adequate, but more time should be made available if possible - perhaps we should run the weekend on continental shifts? A good variety of topics have been suggested for presentation next year, and their appears to be a lot of interest in focussing on British Secondary Copper Minerals. Finally I would like to quote a few abstracted comments from survey forms - 'Thoroughly enjoyed weekend', 'Super weekend', 'See you in 1984? - DEFINITELY!', 'Organisation and Speakers first class - very informative and not difficult to understand', 'Very well organised and I enjoyed it very much', 'The symposium ran as well and better than any other 'professional' symposia I have been to', 'Marvellous weekend', 'Too much time has been wasted re Sunday afternoon', 'Lasting impression - sheer amazement! Smooth organisation helped of course, but staggering enthusiasm. I have been a member of a lot of clubs and societies but have never felt the sheer vitality present in this one - long may it continue!'

Those of you who attended the weekend will know that much to my embarrassment, a collection was made on my behalf and I was presented with a box full of silver and pound notes - accompanied by instructions to go and buy a specimen or book. I would like to take the opportunity to thank you all for this very kind gesture, and to tell you that I have invested in a very fine Scorodite from Hemerdon Ball, Devon, through the good offices of Yvonne Barstow, who is sadly discontinuing Richard's business. I would like to say on behalf of the Society that we all wish her well in her new future. Anyone wishing to purchase stock during the final clearance sale should telephone Yvonne direct for an appointment.

Many of you will also know that one of our friends - John Nowak has recently been in hospital for a major operation, and as a result had to miss the symposium. A small parcel of specimens was collected for John, and sent onto him with our best wishes and a mineral card. He has written to say how much he appreciated the gesture, and that it has given him something to cheer him up, and induced him to use his microscope for the

first time since he returned home. John is making a good recovery, and we all look forward to seeing him back in circulation soon.

BRITISH LEAD MINERAL RESEARCH PROJECT

As proposed at the Symposium, the BMS is to conduct a survey of all British Lead Mineral occurrences - using both reference material in members' collections, and published sources and original research. The aim is to compile an authoritative report for future publication, which may form part of a series of mineral monographs on British Mineralogy. This is a very worthwhile project, and will require a lot of effort by all concerned, but is precisely the sort of exercise which we as an essentially practical orientated society are well equipped to carry out. Many of you have found new localities for minerals during your studies, and if you consider the manpower resource available to us, of experienced trained eyes looking down microscopes the possibilities are very considerable. At a conservative estimate of say 10 hours per member per week, that totals 44,000 microscope hours per year, not including time spent actually working in the field - let's say 2 weeks per year at 6 hours per day - a total of over 7000 man hours spent digging in and on spoil heaps, underground or in quarries. All this resource should be available to the Society, and together with the specialist knowledge of some of our membership we should be able to make a first class job of the project.

Initially what is required is for each member to complete the enclosed survey form, as accurately and fully as possible. Please use continuation sheets if necessary and be especially carefull over doubtful identification of species. PLEASE INDICATE IF YOU ARE NOT CERTAIN (i.e. chemically confident). After the initial survey, a series of follow up questionnaires will help to identify areas requiring further work, and hopefully an interim report can be circulated next year.

A number of members have indicated an interest in helping to a greater extent and this has resulted in the following appointments:-

Derbyshire Area Officer - Mike Smith
Cumbria Area Officer - Trevor Wolloxall
North Wales Area Officer - Mike Rothwell
Others - Neil Hubbard, Martin Stolworthy
National Organiser - David Middleton
General coordination - Roy Starkey.

We would like to hear from anyone else who would like to be responsible for coordinating particular areas of the country, and who may have good sources or access to reference material. Areas which warrant individual attention include: Cornwall, Mendips, South & Mid-Wales, Leadhills, Scotland, North Pennines, etc.

If you want to get involved please contact David Middleton or Roy Starkey
MOST OF ALL - PLEASE CAN EVERYBODY SIT DOWN AND FILL OUT A SURVEY SHEET
DO IT TODAY WHILST YOU THINK OF IT - THANKYOU FOR YOUR SUPPORT. R.S./D.M.

SAFETY NOTE

Nigel Hoppe has written to remind members that 8-hydroxyquinoline is listed as a respiratory irritant in its dry powder form. This is one of the reagents mentioned during Max Wirth's fascinating talk on paper chromatography. Due care should be taken when handling any chemicals.

SPECIAL OFFERS

Michael Edwards has advised me that he is able to offer some special reductions on Meiji Zoom kits for a limited period. Hopefully we shall enclose an information sheet with this newsletter if available in time. If you want more details contact Michael direct.

The formation of a Branch of the British Micromount Society. by Elsie Hansford.

On Saturday 3rd September in the afternoon 6 members of the British Micromount Society attended an Inaugural meeting to consider the formation of a branch of the B.M.S. in the south east area - the purpose being to enable Micromounters to meet more often to share their interest. Initially about 15 members were circulated with the idea and expressed interest. However, 5 members considered the Venue too far for travelling - 3 members wishing to attend - 'Forgot' the date and 1 member hoped he would but obviously could not attend.

Due to the small attendance, discussion ensued as to whether a branch should be formed and it was agreed that it should. It was then decided by mutual consent that the branch would be called "British Micromount Society South East Branch (South of the Thames)". This is not to exclude members from the region north of the Thames but it was considered that the Thames was natural barrier and that B.M.S. members who lived north of the Thames could if they wished form their own area branch. However, we would not exclude any member north of the Thames if they wished to join us at any of our meetings.

It was felt by those attending this meeting that at this stage of the branch's formation it would be best if the meetings were informal and to consider later whether the branch is put into the hands of a Committee to run it's activities.

It was agreed that the Venue for the first two meetings would be 16 Preston Drive, Bexleyheath, Kent, whilst the possibility of other venues would be looked into (hopefully a venue where other B.M.S. members would not consider it too far for travelling).

The 1st meeting has been arranged for 26th November at 4 p.m. and the 2nd meeting provisionally on 18th February 1984 at 4 p.m. and we welcome any B.M.S. member who would like to attend.

It was decided that a permanent feature of every meeting would be the swapping and sale of Micros. The 1st meeting will also be devoted to Photography through the Microscope and members attending are asked to bring a film (slides or negs) and micros. Agfa 12 exp. film is recommended so that members can photograph their own micros during the session.

For further information please contact Miss E Hansford, 46 Wydeville Manor Road, Grove Park, London SE12 0EW. PHONE: 01-851-0320.

LOCAL GROUPS (Ed. Note). Any members interested in establishing a local group please write-in giving details and we shall publish information in the next newsletter. There are many areas of the country where a number of members live within a short travelling distance of each other, and may wish to get together more frequently than national BMS events allow. Details of all events can be published in the newsletter, and we shall be pleased to receive reports of meetings and activities for future publication.

NEW PUBLICATION

The Exhibitor, Competitor & Judging Manual for Mineral, Lapidary and Allied Crafts Exhibitions and Competitions, is published by the Federation of Lapidary and Geological Societies.

The booklet is published in A5 format in a blue card cover, and includes discussion of and guidance on mounting and staging exhibitions, competition entries and judging criteria. In the main the manual is outside the scope of BMS interests, but does include a small section on micromounts giving a suggested scoring system for competitions. The content of the book is very wide ranging, and will appeal to lapidary clubs and mineral societies keen on establishing some sort of national consensus on competition standards. The manual is a useful addition to the literature for club secretaries and will provide a discussion document for further refinement. Copies are available from Peter Reynolds, 31 Waterloo Road, Sutton Surrey. (Check price when ordering).

WANTED Back numbers of the Mineralogical Record - please contact Roy Starkey. Fair price paid for clean copies. Thankyou.

BOOK REVIEW PROJECT - Geoff Deverell

On occasions all journals publish a book review, but these are nearly always on new publications. I would like to suggest that our members review books, papers or pamphlets, in their own libraries, or those they may have obtained through their local library. If these reviews were collated then a members' opinion on the document could be published, perhaps one per newsletter. To reduce bias, I would suggest that no review is published until at least three opinions were to hand for collation into a general consensus.

I further suggest that the review is in two parts - the factual side which will give the number of pages, illustrations, date of publication, publisher, title, approximate price etc., and then the subjective side which gives what one thinks of it.

It should be possible to produce a fairly brief description of content its scope, quality of indexing, photos etc.

I enclose a draft Review Form - copy enclosed with this newsletter, and would ask all members to complete it, and return to me for collation. Like most things this will rely on the membership's enthusiasm for success - please give your support. Thanks, G.J.D. - Mylor, Church Hill, West End, Southampton, Hants.

PRaise INDEED !

I noticed the following item on Excalibur Minerals Latest listing - STARKEYITE - Barvue Mine, Barville, Quebec, Canada. Dull white masses of starkeyite sparsely scattered over rock matrix. Decidedly lean and ugly, but an unusual locality for this rarity. $\frac{1}{4}$ " @ \$6.00; Thumb nail @ \$10.00; a few $1\frac{1}{2}$ - $1\frac{1}{2}$ " @ \$20.00 each.

I was unaware of the existence of the species - it is a hydrated magnesium sulphate - $MgSO_4 \cdot 4H_2O$. R.S.

INDUSTRIAL NEWS - Eric Otty

The Clogau-St. Davids Gold Mine at Bontddu, North Wales, which produced 2 Tonnes of gold between 1890 and 1910 is now being systematically explored by the Caernarvon Mining Co. Samples from dumps of waste rock left by previous owners assayed from 0.7 - 5.0gm/Tonne Gold, and a shaft is now being sunk below the old workings in order to obtain representative bulk samples. These 15 Tonne samples will be sent for assay at Hemerdon Mine, Devon, where a comprehensive bench testwork programme has been made available by Amax U.K.

Aberdeen Barytes Co. (a subsidiary of Dresser Minerals) shut down their fluorspar production operations at Ryder Point near Wirksworth Derbyshire on 8th June 1983, and are now restoring the land. This site provided 80,000 t.p.a. acid grade fluorspar, and the closure follows that of the Youlgreave deposits which represented Dresser's most recent Derbyshire operation. The company has now withdrawn completely from fluorspar working in the U.K.

Hemerdon Tungsten Deposits - The tungsten deposits in the area of Hemerdon, Devon have now been proved sufficiently to indicate that they could make a substantial contribution to world supplies. The joint venture by Amax and Hemerdon Mining & Smelting has now sent 10,000 Tonnes of ore to the Thames-side treatment plant of Murex Ltd. at Rainham, Essex where metal recoveries of 60% have been achieved. This plant normally treats ores from abroad and the processing is very complex. Wolframite and Scheelite require separate calcination and chemical treatment to cause decomposition to sodium tungstate - Na_2WO_4 solution. Through precipitation and filtration, impurities such as silica, tin, arsenic, phosphorus and molybdenum are removed, and the purified solution is then treated with calcium chloride to

produce synthetic scheelite. This is turned into Tungstic Oxide which is reduced by hydrogen in natural gas -fired furnaces and very pure tungsten powder results.

The main mineralised zone contains reserves of 45 million Tonnes of rock grading 0.17% tungsten trioxide and 0.025% tin. It is estimated that the reserves could supply all the tungsten needs of the U.K. for at least two decades and still leave some for export. It could help the U.K. balance of payments to the extent of £22 million a year.

PUNCHED CARDS - A SYSTEM Max Wirth.

Determining the optical properties of a mineral from a grain slide is not too difficult if no great accuracy is sought, but then one has to hunt through Dana or some similar textbook to find a matching description. This problem can be solved by a set of punched cards. I have compiled a set for the most commonly occurring minerals - about 250, and I find it very useful, particularly for zeolites. Of course optical identification is no good for isometric or opaque minerals.

Punched cards of minimum 80 holes can be purchased, but I think that the libraries of most establishments will have old stock at the back of their cupboards, collecting the dust.

On a mastercard I type one characteristic against each hole, being careful to make the range wide enough to take approximate values. The following properties are those that I have found most useful:-

Plates	Birefringence	2V 0-15°	Colour:
Needles	0 - upwards	15-20°	Black
Mamillary	0.006	25-50°	Brown
Prisms	0.01	50-70°	Red
Amorphous	0.02	70-90°	Yellow
Grains	0.03	OAP = length	Blue
Fibrous	0.04	OAP T	Green
Isometric	0.06	OAP /	
Uniaxial	0.06 upwards	Igneous	
Biaxial	Pleochroic	Sedimentary	
+	Extinction Parallel	Metamorphic	
-	Extinction oblique	Mineralised	
Fast	No cleavage	Zeolite	
Slow	Good Cleavage	n lower than 1.57	
	Twinning	n higher than 1.57	

One card is made out for each mineral and the appropriate holes are cut away, based on any textbook data available or ones own observations.

Generally five or six characteristics are sufficient for the sorting procedure, leaving at most two or three cards. The obvious are eliminated and what is left (if anything !) can be looked up.

Everyone should prepare their own set tailored to their resources and special requirements. I have for instance left out hardness and specific gravity since I never have enough samples for this. You will get a great kick out of testing your first dozen or so punched cards.

CHANGE OF SOCIETY ADDRESS - IMPORTANT

It is likely that Roy & Mary Starkey may be moving house shortly - as such the BMS address will change from 15, Whitehall Drive, Dudley, West Mids. If possible an advice will be enclosed with this newsletter. Arrangements will be made by post to be forwarded directly by the GPO. A new telephone number will also apply.

SECOND BRITISH MICROMOUNT SYMPOSIUM - Leicester 1/2 October 1983

Long before the scheduled start time of 10.00 am, people laden with microscopes and specimens were gathering in the car park outside the Department of Geology. Inside, boxes galore were being carried upstairs and delegates began to set up their workstations for the weekend, in the demonstration laboratory. Within the first half hour, the lab was transformed from its earlier peace and calm to a whirlpool of excited people gathering around benches littered with goodies - yes it had begun !

Roy Starkey in his Introductory Address welcomed delegates to Leicester and to the Second British Micromount Symposium, and expressed the Society's thanks to Professor Tarney & Bob King for allowing us to use the Department of Geology. After a few administrative matters had been cleared up - including the good news that membership fees will remain at £3.00 for 1984, it was the turn of the first guest speaker - Doug Morgan, to take the platform with a talk on 'Introduction to Crystallography'. This proved most enlightening, and many members found that perhaps the science was not so difficult as they had at first believed - helped no doubt by Doug's lucid style of presentation and excellent crystal models - was it a 'Matchboxogon' ?

Next, Eric Otty related the story of his travels in Colorado USA, with a look at the 'Minerals of Colorado'. We were treated to a look at many of the famous names of the mineral world and the early gold mining towns, as well as some spectacular scenery.

John Hall and John Pearce followed on with an examination of the secondary microminerals to be found in the slags from the Meadowfoot Smelter at Wanlockhead - including an account of the discovery of Elyite by JP's wife Pam - the first British occurrence. This talk was accompanied by some very beautiful photomicrographs of the tiny crystals in the gas cavities. At the end of the talk a general discussion on the genesis, age and identity of the secondary products provoked much interest, as well as the question of whether slag minerals are worthy of the attention of mineral collectors as 'true minerals'.

After a welcome break for lunch Roy Starkey returned to describe the discovery of a new British locality for Phosgenite at Clevedon near Bristol, Avon. The mineralogy of the complex barytes pebbles was discussed, along with a review of other known Phosgenite localities, and the prospects for further discoveries.

The remainder of Saturday afternoon was given over to practical work and a mass swap/sale/exchange session, with hundreds of specimens and species changing hands. Nigel Hoppe mounted a display on Computer Cataloguing, and Mike Smith had a selection of mineral oddities - including a very fine Cyanotrichite from a brass door knob found in a demolished vicarage.

At 17.30 delegates assembled for dinner at the adjacent Park Pavilion Restaurant where a pleasant meal was enjoyed before resuming the evening programme.

The first British Micromount Society Photographic Competition was well supported with a universally high standard of entries - including some very fine shots of some rather rare minerals. The winner was voted to be a bright green tabular crystal of Zeunerite from Cligga Head Mine, Perranporth, Cornwall - taken by Roy Starkey (Cries of fix!) Doug Morgan presented Roy with the newly manufactured trophy - a quartz crystal group framed by a 35mm plastic slide mount on a hardwood base.

There followed an entertaining slide show of more minerals and shots of members taken by other members without the subjects knowledge ! A variety of interesting locality slides were also discussed.

Finally members retired to a local hostelry to while away the remaining hours until bedtime.

Sunday morning saw no relaxation of the pace, and all delegates were hard at work by 10.00 pausing for the occasional cup of coffee, before the lecture programme commenced. Bill Swindell kicked off the proceedings with a talk and demonstration on 'Techniques and Equipment for mineral Photography'. Delegates were shown how conventional SLR camera equipment can be adapted for photomicrography as an alternative to using a microscope, and various options were explored. The pros & cons of Tungsten lighting and Flash illumination were discussed, and the session provoked a lot of interest following on from the Photographic Competition. One of the key points to remember when using tent lighting is to provide for a hole through the tent for the camera lens !

Next came an informative look at the technique of Paper Chromatography as a mineral identification technique. Max Wirth explained that you could time your presentation by reference to the rate of solvent advance up a sheet of filter paper, and that this would enable him to keep to programme. The method allows qualitative distinction between elements, and this point was well illustrated with reference to Pyromorphite and Mimetite - two minerals which the mineralogist has constant difficulty in identifying conclusively.

Trevor Wolloxall and David Middleton gave an illustrated talk on British Lead & Copper Secondary Minerals, and we travelled across many of the country's mining fields to look at the species found at various classic localities. After Bill's talk on photography, we had all learned a new word 'specular reflection', and Trevor was dismayed to find how many it is possible to get onto a 35mm frame ! We shall all be striving to achieve even greater levels of photographic perfection next year.

In the short space before lunch, Trevor Bridges introduced delegates to the principles of pH, equilibrium and oxidation, with reference to a stranded goldfish - which made everything seem much clearer than textbooks !

Following on from the morning session, Trevor continued his discussion of The Chemistry of Secondary Mineral Formation, with a look at the many and varied reactions that can and do occur in a vein containing galena, sphalerite, pyrite and chalcopyrite, in contact with rain water and air. Stage by stage it was revealed how the many secondary products are formed, and under what conditions, leaving the audience with a considerable insight into how all those interesting blues and greens are produced.

The next session was a discussion and practical work on British Lead Minerals, and it was proposed that the Society should commence a project to document and research the occurrence of all lead species in the UK, with a view to producing a definitive publication at some future date. A sub committee was formed to coordinate activities and further information appears elsewhere in this newsletter.

The final part of the afternoon was taken up by discussion of what the Society should be doing in the future, whether to move to a formal constitution with officers and a committee, and the formation of local groups. On these latter two issues it was generally decided to do nothing at the present time.

Lastly, Roy Starkey thanked all the delegates, speakers and Bob King for making the event such a success, and also special thanks to Elsie Hansford for producing all the Literature and handling the administration for the Symposium, and Mary Starkey for assistance in preparing for the event, and provision of life giving refreshments during the weekend. Max Wirth proposed a vote of thanks to Roy Starkey for all his work, both in respect of the Symposium, and also the general success of the BMS.

THE MAJUBA HILL MINE - Pershing County, Nevada, USA. by Ron B. Gibbs.

Majuba Hill is best known for its suite of copper arsenate minerals. Many new species have come to light recently as micromounters explore the mineralogy. It is also one of the few tin deposits in the United States.

Claims were first located in 1907 after cassiterite was found as float. Mining commenced in 1916 but ceased soon afterwards. Mining resumed in 1942 for four years but only sporadic exploration and minor production occurred to the present time. Total recorded (and not always accurate) production amounted to 30,000 Tons of copper ore and minor amounts of tin ore.

The mine is developed through 3 adits, the upper and middle being interconnected and the lower isolated from the rest of the workings. The principal stopes of interest to collectors have been the copper stope and the tin stope.

Mineralisation accompanied the intrusion and brecciation of Tertiary rhyolites into ? Triassic metasediments. Primary minerals were localized in brecciated zones and by faulting. They include the following species:-

chalcopyrite	cassiterite	fluorite
pyrite	quartz	unknown uranium mineral
arsenopyrite	tourmaline	

Later faulting localized subsequent supergene enrichment and formed rich orebodies of chalcocite, cuprite and chalcopyrite which formed the bulk of the recorded production. Supergene minerals are much more diverse and include the following:-

arthurite	chenevixite	goudeyite	scorodite
azurite	clinoclase	malachite	spangolite
brochantite	cornetite	metazeunerite	strashimirite
chalcantinite	cornubite	mixite	torbernite
chalcocite	cornwallite	olivinite	tyrolite
chalcophyllite	cuprite	parnauite	
chrysocolla	cyanotrichite	pharmacosiderite	

Majuba hill is mainly a micromount locality and good specimens are abundant. Cassiterite is not easy to find in the tin stope these days but the best clinoclase - olivenite - cornwallite specimens are found there. Needles of olivenite spearing balls of cornwallite intermingled with sprays of clinoclase are especially gorgeous. Nearly every mineral that occurs at Majuba Hill can be found in the copper stope. Specimens with scorodite clusters, bright arthurite crystals, tablets of metazeunerite and cubes of pharmacosiderite on chenevixite were found on the authors last visit. It is truly a micromounters paradise !

At the present time the mine is under lease and locked, and written permission must be obtained to collect. However good specimens are available through several dealers.

(Ed. Note. Ron would be pleased to exchange with members for Cornish material - and I can personally vouch for the quality of the Majuba Hill material - it is very similar in associations and quality to: the best of classic Wheal Gorland material - the clinoclase groups are reckoned to be the finest in the world - see Am. Min. 31, 243-258 & 31, 259-260. Ron's address is :- 210 La Mina, Ajo, Arizona, 85321, USA.).

NEW FIND

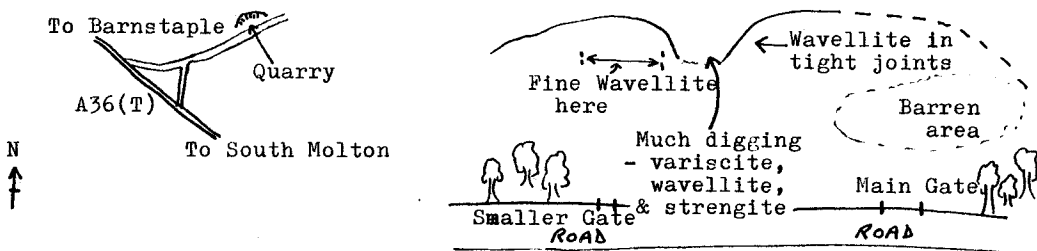
The British Museum have confirmed Cyanotrichite (syn. Lettsomite) on a specimen which I sent in from Mulberry Openwork, Lanivet, Cornwall. I think that this is a new locality. The cyanotrichite occurs as sky blue acicular crystal tufts with bright green transparent chalcophyllite. Roy Starkey.

Ed. Note. - any similar reports of new finds - a few words to a few sentences will be very, very welcome for publication. This shows that the Society is active, and has a useful role to play in recording occurrences,

by David Ifold

Grid Ref. Sheet 180. 653290

This quarry was lost for many years until the late A.W.G.Kingsbury rediscovered the location. Although museum grade specimens of wavellite can still be found, much hard digging, with a pick and shovel is needed in this very overgrown quarry. The local rock is a grey-black mudstone with steeply dipping beds striking along the quarry face. Wavellite occurs in joints usually cutting the beds at right angles.



Blue and green Variscite occurs in one area of the quarry. Strengite has been reported but not confirmed. Strengite is said to make up the opaque white material dismissed by many collectors as decomposing wavellite.

Although the quarry is on private property I have never been turned away. The quarry forms part of the Fortesque Estate.

Careful reading of the paper by S.R.Pattison suggests an additional locality for wavellite to the north of South Molton.

Additional information:

A.W.G.Kingsbury - Some minerals of special interest in S.W. England forming p247-265 of 'Present views of some aspects of the Geology of Cornwall and Devon'. R.Geol.Soc.Corn. 1964

S.R.Pattison, A day in the north Devon mineral District. Trans.Roy.Geol. Soc.Corn. VII, 223-7. 1865.

DEALER NEWS

Tetrahedron Minerals recently issued a new list, which includes a number of Cornish Classics, a micromount of Cerussite from Glenderratterra Lead Mine, Cumbria, and Prehnite from Dumbarton, Scotland. Write P.O.Box 226, Paraparaumu, New Zealand.

Hatfield Goudey's new catalogue has a fine selection of material from worldwide localities, and includes Anatase from Tremadoc, Botallackite from St Just Cornwall, Mimetite from Drygill, and a fine choice of Majuba Hill micros and species from Tsumeb and Laurium. Contact H.G. 1145 West 31st Avenue, San Mateo, California, 94403, USA.

OVERSEAS NEWS

Exchanges wanted: Jon Mommers, 82 Hertford Rd, Sunshine, Victoria 3020, Australia would like to exchange with BMS members. He has a good selection of Australian material to offer including Fluellite, Malachites, Pyromorphite, Zeolites, Coppers, Wavellite, Crocite, Aragonite etc. He would like to exchange about 15-20 micros at a time.

The SAMS newsletter for October 1983 gives a further listing of South African type locality minerals, and details of a field outing to Leeuwenkloof when quartz, calcite, chalcopryite, galena, malachite, cerussite, hemimorphite and smithsonite were found in the 'big hole'.

The first edition of Mineral Exchange has now been published, a review will appear when issue No.2 is available. Contact Tetrahedron Minerals if you wish to subscribe - see last newsletter.

NEW MEMBERS

Fifth Supplementary list to the 2nd Edition of The Directory. 10/10/83

David Ifold (Please change address to; -)	* Two very late new entries:-
42 Castle Hill Gardens	* David Green, 61 Nowell Lane,
Great Torrington	* Leeds, LS9 6JD. Yorkshire.
North Devon	* 0532-493866
EX38 8EX	* Jill Goltz, 79 Lache Lane,
Tel. Torrington 3527	* Chester. CH4 7LT
	* 0244 - 677017 (Details next time)
	* * * * *

John Bottomley	Surface only; Worldwide; No spec. area
East Bank	No spec. group; 1 year; 1 year m/m;
High Spring Gardens Lane	100; Watson Stereo; Photogrpahy of
Keighley	m/m; Postal exchanges; Queckett
West Yorkshire	Microscopical Society;
BD20 6JT	
Tel. 0535 602747	

David Clough	Underground & Surface; Worldwide;
Rathlin	Cornwall; No specialist group;
Pendeen	12 years; 1 year m/m; 100; Photography
Penzance	of m/m; Postal exchanges; BMCA.
Cornwall	
TR19 7DW	
Tel. Penzance 788819	

Henry Tampling	Underground & Surface; Worldwide;
16 Preston Drive	No spec. area; No spec. group;
Bexleyheath	10 years; Just started m/m;
Kent	Meiji BM1; Sidcup Mineral and
DA7 4UQ	Eapidary Society.
Tel. 01-303-9610	

FINAL REMINDERS

1. If you have not yet paid your subscription for 1984 (most people paid at the symposium) please do so promptly. At the latest by 31st December. Still held at £3.00 per annum. Your cooperation will be greatly appreciated please do it now before you forget, and save me wasted time chasing. R.S.
2. Please send in a book review sheet to Geoff Deverell - enclosed herewith.
3. Please send the completed Lead Minerals survey form to David Middleton as soon as possible, indicating if you would like to help, either in a particular area, or on documentary/library research. D.Middleton, 14, Lane Green Avenue, Bilbrook, nr Wolverhampton. WV8 2JT. Thankyou.
4. Please send in items of news and information for the next newsletter, any contributions for 'British Micro Localities' Series especially welcome. One line notifications of unusual mineral occurrences will add a great deal of interest to the newsletter.
5. Please look out for my change of address, and allow longer than usual for replies to correspondence - decorating etc will interfere - thanks. R.S.
6. Have a very happy Christmas, and good hunting in 1984. Please write and tell us of your finds as you sort through your collected material, all contributions very welcome. Look forward to seeing you all next year - if not before !

BMS 15, WHITEHALL DRIVE, DUDLEY, WEST MIDLANDS, DY1 2RD, ENGLAND.
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