MINERALOGICAL SOCIETY OF WESTERN AUSTRALIA

Newsletter No. 1

September 2000





Some crystal habits of wulfenite from Whim Creek, W.A.

MINERALOGICAL SOCIETY OF WESTERN AUSTRALIA (Inc)

Office Bearers:		
President:	Peter Clark	
	34 McDonald Street,	
	Como, W.A. 6152	Tele. (08) 9368 1778 (h)
Vice President:	Jeffrey Manners	
	58 Berkley Road,	
	Marangaroo, W.A. 6064	Tele. (08) 9342 8648 (h)
Secretary/Treasurer:	John Reeve	
	13 Buchan Place,	
	Hillarys, W.A., 6025	Tele. (08) 9401 1963 (h)

Membership Details:

Joining Fee	\$5.00
Adult Member	\$20.00
Newsletter only	\$15.00

An application form for membership can be obtained by writing to :-The Secretary, J. Reeve Mineralogical Society of Western Australia (Inc) 13 Buchan Place, Hillarys, W.A. 6025

Ordinary meetings of the Society are held on the 1st Wednesday in March, May, July, September, and November in the Rotary Hall, Sandgate Street, South Perth commencing at 7.30pm. The January meeting will involve social activities at a time and place to be notified.

Visitors are most welcome.

Newsletter of the Mineralogical Society of Western Australia 13 Buchan Place, Hillarys, 6025 Western Australia, Australia

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Newsletter Number 1

Forward Diary

September 6	<u>Annual General Meeting</u> The President will deliver the paper on Greenbushes presented to Combined Mineralogical Societies meeting in Broken Hill.
October 14	Field trip to Greenbushes (Details at the meeting)
November 1	Ordinary Meeting Four short talks by Members
January, 2001	Activity and venue to be decided (Date in January to be determined)
March 7, 2001	Ordinary Meeting
May 2, 2001	Ordinary Meeting

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EDITORIAL LOCALITY SPECIES LISTS

In common with the other State Mineralogical Societies, Western Australia has adopted a set of Objectives that includes "to establish and maintain a register of mineral species and their occurrences". With the increasing requirement to rehabilitate mining sites, there can be little doubt that a full species listing for a mine or significant mineral occurrences will become a valuable document for future generations of mineral collectors. This point was the theme of a paper by Pete Dunn published in the Mineralogical Record (Vol. 22, No.2), and is a subject worthy of editorial comment.

Dunn is of the view that locality species lists constitute prime, basic documents on the overall chemistry of deposits, and are of critical importance to a full understanding of the mineralogy of specific occurrences. In this regard, Dunn maintains that the best persons to edit locality species lists are usually senior collectors or mineralogists who have collected at the localities for many years. Dunn adds "....whole clubs or societies can become involved in a group effort, adding a sense of cohesiveness and accomplishment to the group's activities. Indeed, some societies have played a major role in the scientific documentation of specific localities which they have adopted as their chosen province of activity or focus."

The preparation of a locality species list is not governed by a set rules, however three basic criteria need to be taken into consideration (as delineated elsewhere in this Newsletter).

It is encouraging that senior Society members with experience and expertise are also of the view that the preparation of locality species lists should be important projects for this Society. The descriptive mineralogical work done by Peter Bridge, Ernie Nickel and others on various Western Australian localities provides a valuable and solid base for the Society's future endeavours. I would like to propose that the Londonderry pegmatite area be the first site for the Society's attention. The locality has been well researched and documented, but continues to reveal new species not previously recorded (for example, carnotite was confirmed in 1996).

As the Society has committed itself to hosting the 2005 Combined Mineralogical Societies meeting in Kalgoorlie, it would seem to me that the abovementioned project would be a worthy endeavour associated with the meeting.

John Reeve Society Secretary

MICRO MINERAL AIDS

Contribution from Ted Fowler

SELF CLOSING TWEEZERS

Why buy them, when you can make your own! I have several styles, all based on the common wooden clothes peg. These pegs consist of two identical wood sides, held together and activated by a coiled wire spring.

The peg "handles" are lengthened by 5 cm for better leaverage and handling control. Pegs are made from 1 cm wide whitewood, so we obtain some scrap wood 1 cm x 8 cm long and 5 mm thick. This is glued onto the last 3 cm of the peg handle, giving a 5 cm extension. The inside of these handles have a bevel sanded into them to match the existing bevel of the original peg.

As the spring "joint" (which holds both halves of the peg together) is an open joint, that is, the two sides are free to move laterally, it improves handling to provide two "rails" so the peg handles can only move in the one plane. This is achieved by two small sections of scrap anodised aluminium or brass strip being epoxied to both edges of one side of the peg (see diagram).

After setting, the free side of the peg can now only move in the one arc, and the peg tips will always come together perfectly. The business end of the peg can now be sanded/bevelled to the desired shape, before fitting selected tips in place.

I have two sizes with rubber tips (see Henderson, page 274, Wight page 76-77), one 3 mm wide and the other 6 mm wide. Tips are made with ordinary office-use rubber bands 3 and 6 mm wide. Cut sections 25 to 35 mm long - these are then glued onto acetate sheet - I use portion of the "plastic" boxes in which dress or business shirts are packaged. tips are then glued onto preshaped pegs, acetate on the outside so that when the peg is closed, the extended 3 mm rubber tips are just touching. With the larger size,we leave the rubber tips about 6 mm apart - this is done to hold larger specimens.

While the rubber gives a cushioned and good gripping surface, the acetate backing stiffens the rubber and strengthens the gripping power slightly, sufficient to hold specimens without damage. To further improve the gentle action of the "tweezers", I also cut a 6 mm square of rubber band, and glue it to one inside edge of the original peg jaws (see diagram) to cushion the closing action.

Acicular sprays of natrolite, gypsum, aurichalcite or other delicate crystals can be picked up quite safely with these tools. As the tweezer is self closing, once the specimen is gripped., it will stay held in place without fear of crushing. Gripped specimens can now be inspected under the scope, dunked into the ultrasonic for cleaning or positioned for pedestal mounting (see Speckels, page 61) without any further effort or change of holding pressure.

These wooden peg tweezers can also have the tips modified to dupicate the benefits of other self-closing tweezers, at a fraction of the cost of commercially produced tools. Lengthen the peg "handles" as before, always make them with the "rails" as outlined above, the square off the business ends with a small saw or sander. Drill the ends

longitudinally with a 3 mm drill, about 20/25 mm deep. I use sections of broken bicycle spokes epoxied into these holes and extending 7 to 10 cm. Inside edges of the spokes can be ground flat for 20 mm or so from the tip, using gentle pressure on the side of a grinding

wheel. The result is a self-closing tweezer - if points do not match perfectly, bend one or both spokes until they meet satisfactorily. Any variation in length can be ground back and smoothed on the grinder. Make two as above, and on completion place one set of tips in a vice and gently bend the tips to $60^{\circ}/90^{\circ}$ as preferred to make a variation - curved tip self-closing tweezers!

Bibliography

Henderson, W. (1986) Microminerals. Mineralogical Record, Vol. 17, No.4, pp273-274 Speckels, M. (1965) The Complete Guide to Micromounting. pp 61-62 Wight, Q. (1993) The Complete Book of Micromounting. pp 76-77



WOODEN CLOTHES PEG WITH SPRING ACTION.



SHAPED NOSE RUBBER TIPS FITTED





RUBBER TIPS MODEL

The Yinnietharra Dravites

Contribution by Jeff manners

Like everyone I relish in the discovery of a new mineral species, especially when it is from an existing locality. When I was told that the black tourmalines from Yinnietharra were reclassified from ferridravite to povondraite I was excited, as were many other collectors that had heard the same news.

About six months ago I exchanged some material with a geologist in Tasmania and on seeing my recently relabeled povondraite crystals from Yinnietharra was curious to know how and where I had obtained this new information. This request certainly made me stop and question the authenticity of the information that I had received and thus I started on a lengthy journey of discovery that was rewarded by the expansion of my own knowledge and in achieving the correction of a mistaken identity.

A phone call was made to the person who told me of the mineral renaming. He had read an article in the Australian Gemmologist (Vol.19, 1997) and this was the source of this new information. The relevant section of the article stated:

"The station is well known for its deposits of well crystallised brown dravite tourmaline and black povondraite – which was formerly known as ferridravite."

Wanting to be sure of my information I decided to make some more inquiries and was to learn that the W.A. Chemical Laboratories had done the original analysis and that I had a copy of this information (Min.Record March – April, 1977, pp 109-110). This report had concluded that the black dravites were indeed dravites. Still not satisfied I was fortunate to be able to confer with Dr. Ernest Nickel. He was able to explain that the reason for the different appearance between the two nearby deposits was due to a very minor addition of Fe in the black dravites, however not sufficient to classify them as povondraite.

So armed with all this new found information I was obliged to advise all those to whom I had sent black dravites that this is what they were and not povondraites.

During this time of discovery, my Tasmanian geologist friend conducted a new microprobe analysis of a black dravite that I sent him and the result was a confirmation of the original work done by the W.A. Chemical Laboratories. If anyone reading this article should have any queries, please do not hesitate to contact me as I have a copy of the original and recent analysis and can email the information to interested parties.

My Email address is: jeffmanners@one.net.au

MINERAL SPECIES LIST CRITERIA

Define the Geographic Scope

The geographic boundaries must be defined by features likely to be permanent in Nature – geology, topography, sealed roads.

Clarify the Locality Nomenclature

This may involve the preparation of a mine history. Often changes in proprietorship can have a direct bearing on the locality description for specimens collected over time.

Define the Mineralogical Scope

It would be reasonable to prepare a list for the totality of the locality including the country rock and alluvium. However in some instances the list may be limited to the main orebody, a zone or vein.

In the broader context of the document, the following documentation guidelines add lustre to the document:

- a) date the list
- b) list only valid mineral species
- c) relate species to source (literature or analysis technique)
- d) use symbols to indicate qualifying or site-specific information
- e) capture awkward information which does not fit the list format in addenda
- f) consider making several lists, say a list by chemical grouping to compliment the main list
- g) distribute the list widely for the benefit of all
- h) arrange for a formal publication of the list in the Society's Newsletter or in periodicals of wider circulation.

SAFETY ON FIELD TRIPS

All persons participating in Society organised field trips do so as volunteers and each person is responsible for their own safety.

The following should be observed:

1. Always wear protective glasses when using hammers, picks etc. Work gloves are recommended.

2. Take steps to avoid sunburn i.e. Wear a hat and appropriate clothing. During hot weather ensure that you have an adequate supply of drinking water.

3. When in open cuts check that there is no overhanging material as it may collapse. Keep clear of edges.

4. Do not enter old mines and watch out for and avoid old shafts. The latter can be particularly dangerous if you are accompanied by children.

5. When working on loose rocks take care to avoid rocks that may roll. Use protective footwear.

SPECIAL NOTICE TO MEMBERS Amendments to the Constitution

Following the lodging of the Constitution with the Department of Fair Trading, the document was deemed not to be in order and accordingly has been returned for amendment.

Notice is given to Members that at the Annual General Meeting of the Society to be held in September, 2000, it will be moved that the following amendments be made to the Constitution :

1. Clause 3 : MISSION and OBJECTIVES

That the following paragraph be added (alterations in italics) The property and income of the Society shall be applied solely towards the promotion of the objects or purposes of the Society and no part of that property or income may be paid or otherwise distributed, directly or indirectly, to Members of the Society, except in good faith in the promotion of those objects or purposes.

2. Clause 26 : CUSTODY OF RECORDS That Clause 26 be amended to read as follows (alterations in italics)

26. CUSTODY AND INSPECTION OF SOCIETY RECORDS

- (a) Except as otherwise provided in these Rules, the Secretary/Treasurer shall keep in his/her custody or under his/her control all books, documents and securities of the Society.
- (b) A Member may at any reasonable time inspect without charge the books, documents, records and securities of the Society.

3. Clause 23 : DISSOLUTION

That Clause 23 be amended to read as follows (alteration in italics)

23. DISSOLUTION AND DISTRIBUTION OF SURPLUS PROPERTY ON WINDING UP OF THE SOCIETY

- (a) The Society shall be dissolved in the event of membership of less than three persons or upon the vote of a three fourths majority of Members present at a Special General Meeting convened to consider such a question.
- (b) If upon the winding up or dissolution of the Society there remains after satisfaction of all its debts and liabilities any property whatsoever, the same shall not be paid to or distributed among the Members, but shall be given or transferred to another Association incorporated under the Act; or for charitable purposes, which incorporated Association or purposes, as the case requires shall be determined by the resolution of the Members when authorising and

directing the Committee under Section 33(3) of the Act to prepare a distribution plan of the surplus property of the Society.

(c) In the event of the winding up or dissolution of the Society, the Commissioner of Taxation shall be advised of the date of dissolution within 30 days of the dissolution.

24. Clause 31 : AMENDMENT OF RULES

That Clause 31 be amended to read as follows (alterations in italics) Subject to the provisions of the Associations Incorporation Act, these Rules may be amended, rescinded or added to from time to time by a special resolution carried at any General meeting *provided that not less than three fourths (75%) of Members voting at the meeting agree to the motion and* provided that no such amendment, rescission or addition shall be valid unless the same shall have been previous submitted to and approved by the *Ministry of Fair Trading*