

# Mineralogical Society of Western Australia

October 2001

Volume 2, Issue 5

Forward Diary  
2001.

## President's Report

It has given me great pleasure to preside over the first full year of our societies operation, and my sincere thanks go to all members in particular the committee whose support was much appreciated. The A.G.M. in August was very well attended, which bodes well for the future, the President and committee were unanimously re-elected and on behalf of the committee I would like to thank those in attendance for their support. We also welcome a new member, Ted Fowler, to the committee.

The societies finances are in a sound position, which is very pleasing considering our limited fund raising base

and short history. The kind donations by the other societies certainly bolstered our coffers.

Our thanks go to our new venue hosts the W.A. Lapidary & Rockhunting Club, judging by the member's response and obvious benefits of the premises the move was a worthwhile one. I would also like to extend a warm welcome to the new faces we saw at the A.G.M.

The logo competition was a success with a considerable number of entries, my personal thanks to the participants and to Roger for donating the prize. The result was that there were two winners Ted Fowler and myself. The committee will decide the best use for each entry.

I will submit an article on the Riverina Emerald deposit to the Hon Ed for the next newsletter. I would remind members that participation and contribution to ensure the continued health of the newsletter are requested. Please contact Jeff or myself.

The committee will shortly be formulating a programme for the coming year taking onboard the past suggestions of members.

Finally I would like to welcome our first interstate member, Professor Peter Williams of the University of Western Sydney. Peter is a notable geochemist and keen mineral collector and past president of the Mineralogical Society of N.S.W. He has kindly offered to be a guest speaker at one of our meetings next year.

**October 3<sup>rd</sup>**  
Guest Speaker  
**Peter Bridge.**

**December 5<sup>th</sup>**  
**Quiz Nite Social Evening.**  
**Hosted by John Reeve.**

**2002**  
**February 6<sup>th</sup>**  
Club Meeting

**April 3<sup>th</sup>**  
Club Meeting

## Newsletter Contents.

**Presidents Report**  
**Inward Correspondence**  
**Ubini Pegmatite**  
**Forrest Fogg**  
**Comet Vale Crocoite**

# Inward Correspondence

## Editors Corner.

### **The Mineralogical Society of N.S.W.**

#### **August Newsletter**

The August meeting was the A.G.M. and the guest speaker was Professor Ian Plimer who lecture was entitled "Broken Hill Yet Again Revisited". The July meeting was held at the National Opal Collection and Museum.

### **The Mineralogical Society of N.S.W.**

#### **September Newsletter**

The programme included a lecture on Unusual Cave Minerals by Ross Pogson and The Geology and Mineralogy of the Yeranderie Silver and Lead Mines, N.S.W. by Professor Laurie Lawrence. A fieldtrip to Albion Park quarry resulted in the collection of a number of Zeolites and associated minerals another trip was planned to Yeranderie. The annual financial statement was tabled and the re-election of the previous years committee was noted.

### **The Mineralogical Society of Victoria**

#### **August Newsletter**

The newsletter includes the President's report, financials, new committee, excursions and an outline of the Hobart seminar.

The Australian Mineral Collector website is a good place to get all the upcoming Australian events. It is just a pity that we are so far away from the east coast and that air travel is so expensive.

I personally enjoyed the few years, when we had some dealers come in from the east coast to offer a new selection of minerals to buy or just to look at. What do you think ?

Comments relating to this or any other mineralogical matter are welcome in this newsletter, it is your forum and we welcome your input.

## **March 2002**

- **29 MAR - 1 APRIL 2002**  
**NATIONAL GEMBOREE 2002**  
Rockhampton, Qld.
- 

## **June 2002**

- **June Queen's Birthday Weekend 2002**  
25th Joint Mineralogical Society Seminar : Queensland will host the 2002 Joint Mineralogical Society Seminar. The theme is 'Speakers Choice', to give the authors (and attendees!) a smorgasbord of mineral subjects. Queensland Museum, Southbank, Brisbane for the Queens's Birthday weekend of June 2002  
For More information contact • Tony Forsyth via email or watch this space for more information as it comes to hand

The Ubini amblygonite pegmatite and other pegmatites,  
Ubini (Bullabulling), west of Coolgardie

Mark Jacobson  
Nimal Perera

The first of only two occurrences of amblygonite-montebrazite in Western Australia was discovered in 1910 while prospecting for tin. The location of this occurrence, from a pegmatite north of the former Ubini railway siding has not been particularly well documented. Adjacent pegmatites also contain lepidolite, manganotantalite and spodumene-petalite pseudomorphs.

Directions

The Ubini amblygonite pegmatite can be reached starting from the Bullabulling Hotel-Tavern on the Great Eastern Highway, located approximately 20 kilometers west of Coolgardie. From the Bullabulling Hotel travel 5 km towards Coolgardie. At the signpost on the south side of the Great Eastern Highway, which faces east, announcing the availability of petrol and food at Bullabulling turn left (north) onto the abandoned and partially rehabilitated mine road. Set your odometer at 0.0 at the bitumen turnoff. There are signs prohibiting entry and proclaiming the road as private (neither of which are correct). Travel north and go past the powerline towers. At 1.8 km from the bitumen road, where the mine road bends left (west), proceed straight (meaning turn off) onto a due-north oriented, narrow dirt track. Continue due-north on this dirt track for an additional 5.4 km. At 7.2 km referenced to the Great Eastern Highway, turn right (east) onto another dirt track. This east-west track will pass a earthen mound/"dam" on the south side approximately 200 meters after the turn. Travel easterly on this track for 2.45 km (9.65 km cumulative) to a 4-way dirt track junction (not a cross road intersection). At this intersection, take the first right road for 0.55 km (10.2 km cumulative) to pits #1 and #2. Pit #2 is literally at the right track edge. Continue traveling to pit #5 on the left. Park your vehicle at pit #5 and walk southward (left) to pit #6, the amblygonite pegmatite.

Location

The Ubini pegmatites are all located on the Dunnsville 1:100,000 scale map sheet number 3036. All UTM coordinates are referenced to zone 51J, Australian Geodetic Datum 1966. An abandoned pegmatite pit with amblygonite was located in February 2001 and determined by a single GPS receiver to be at 301,800 E and 6,574,940 N, AGD 1966. This location is 5.34 km or 3.3 miles north of the former Ubini railway station. The abandoned Ubini railroad station/siding is labeled on the Dunnsville map sheet along the Great Eastern Highway at 6,570,300 North, 304,450 East. The Ubini amblygonite pegmatite is located on the abandoned Bullabulling station, just south of the former M.L. 67.

Pegmatite locations:

Six separate pegmatite workings were observed in February 2001. Five of these can be seen along an NE to SW trending dirt track. The 6th pegmatite, the amblygonite workings can not be seen from the track but is south of pit #5. In February 2001, all these locations were on crown land, with no mineral or prospecting lease as confirmed in the Coolgardie office.

lepidolite pegmatite, pit #1 (302,100 E and 6,575,150 N, just south of track)  
lepidolite pegmatite, pit #2 (302,050 E and 6,575,170 N, along the north side of track)  
microcline pegmatite, pit #3 (not GPS measured, along north side of track)  
lepidolite pegmatite, pit #4 (301,860 E and 6,575,259 N, just north of track)  
microcline pegmatite, pit #5 (not GPS measured, south side of track)  
amblygonite pegmatite, pit #6 (301,800 E and 6,574,940 N, south of track but not visible from track)

Figure 1. Location map of the Ubini pegmatite area. No. 6 is the Ubini amblygonite pegmatite. The other numbers also identify described pegmatites.

The amblygonite pegmatite (pit #6) exposures in February 2001 consisted of a surface outcrop of massive white quartz which trends northwest. A more recent costean that post-dates McMath's (1953) report reveals a strongly weathered albite-quartz-muscovite pegmatite. Four adjacent shallow pits just north of the costean contain weathered quartz-albite-muscovite pegmatite. Off to one side of a half metre pit is a level area containing the remains of the original amblygonite pile. It still contains amblygonite lumps up to fist-size. Mixed in with the amblygonite are rare 1 to 2 centimetre pegmatite masses containing lepidolite and zinnwaldite. Adjacent to this pile is a larger mound of neatly stacked quartz masses.

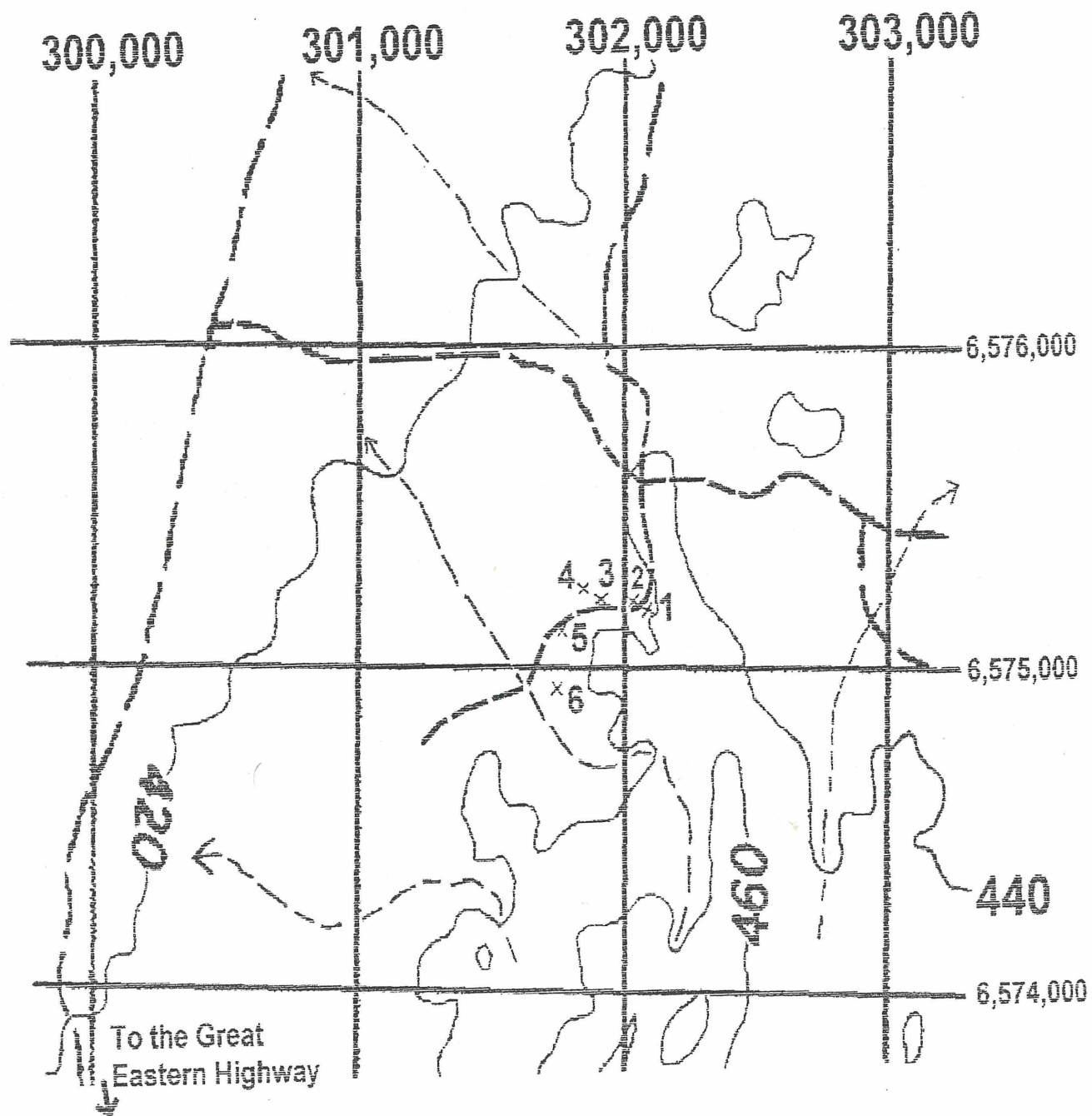
### Mineralogy

Simpson (1948), McMath et. al. (1953) and Blatchford(1913) reported that associated with the amblygonite is quartz, microcline, albite, muscovite, lepidolite, zinnwaldite, manganotantalite, manganocolumbite (SG of 6.8) and cassiterite.

Observations from the amblygonite pegmatite in February 2001 confirmed quartz, lepidolite, zinnwaldite, muscovite, microcline and albite. Three amblygonite masses (of many) collected from the remaining dump above the pegmatite (80.522, 206.220 and 11.823 grams respectively) had specific gravities measured (2.88, 3.01 and 3.014 gm/cc respectively). These values agree favorably with Simpson's published measurements of between 2.88-3.02 for Ubini amblygonite-montebrazite. Blatchford (1913, p. 18) provided a chemical analysis in weight percent of an amblygonite mass from Ubini as  $\text{Al}_2\text{O}_3$  34.71%,  $\text{Na}_2\text{O}$  0.78%,  $\text{P}_2\text{O}_5$  48%, F 6.95% and  $\text{Li}_2\text{O}$  9.31%. An x-ray spectra by Energy Dispersive Spectroscopy of amblygonite from Ubini as done by the Excalibur Mineral Company, (normalized to 100% without determining  $\text{Li}_2\text{O}$  or OH) gave approximate weight percentages of  $\text{Al}_2\text{O}_3$  36.88%,  $\text{Na}_2\text{O}$  1.33%,  $\text{P}_2\text{O}_5$  43.84% and  $\text{F}_2\text{O}$  8.68%. These values are similar enough to confirm the mineral identity. Raman spectra obtained from two samples of amblygonite also matches the amblygonite raman spectra from the Caltech internet collection.

### References

- Blatchford, T. 1913. Geological investigations in the area embracing the Burbanks and Londonderry mining centres. Geological Survey of Western Australia Bulletin 53.
- Blockley, J. G. 1980. Tin deposits of Western Australia with special reference to the associated granites. Western Australia Geological Survey Mineral Resources Bulletin 12.
- Ellis, H. A. 1944. Lithium bearing minerals in the Coolgardie- Londonderry districts, W. A. Geological Survey of Western Australia Annual Report of the Department of Mines for 1943. p. 66-69.
- Kriewaldt, M. J. B. 1969. Kalgoorlie, WA 1:250,000 geologic map. Explanatory geological notes. Geological Survey of Western Australia.
- McMath, J. C.; N. M. Gray. and H. J. Ward. 1953. The geology of the country about Coolgardie, Coolgardie goldfield, W. A. Geological Survey of Western Australia Bulletin 107.
- Miles, K. R., Carroll, D. and Rowledge, H. P. 1945. Tantalum and Niobium. Minerals Resources of Western Australia. Department of Mines Bulletin 3. 150 p.
- Simpson. E. S. 1948. Minerals of Western Australia. 3 volumes. Hesperian Press, Victoria Park, Western Australia. 1984 reprint.



## FORREST FOGG (1920 – 2000)

Who was Forrest Franklin Fogg and what connection does he have to Western Australia? In reality Fogg has little connection to Western Australia except for one reason. How many of you have examined a polished slab of Milgun variscite and commented on the attractiveness of the piece? A few of us would have noticed and commented on the white border or halo surrounding much of the variscite. The white halo mineral is usually the mineral foggite.

Fogg was employed by the New Hampshire (U.S.A.) Fish and Game Department as a game biologist, however a course in geology was the catalyst for a life time interest in mineralogy which ultimately lead to having a mineral named after him in 1975.

In May 1974 Fogg and Bob Whitmore were able to purchase the mineral rights to the Palermo Mine in North Groton, New Hampshire. Their aim was to preserve this famous locality for scientific study and as place mineral enthusiasts could collect. At the present time 134 mineral species have been identified from the Palermo No.1 Mine.

The work done by Fogg and Whitmore to collect the rare phosphate minerals from the site resulted in the naming of foggite (1975) and whitmoreite (1974) by Paul Moore, Anthony Irving and Anthony Kampf.

The Type Locality foggite,  $\text{CaAl}(\text{PO}_4)(\text{OH}) \cdot 2\text{H}_2\text{O}$  occurs as spheres of white crystals resembling puff balls often with a yellowish hue. In contrast, the Milgun Station foggite is massive with no visible crystal structure. Nevertheless, a fine specimen of foggite from Milgun is a must for the collector, especially if in close association with the attractive apple green variscite.

### ..... A TREASURED SPECIMEN – COMET VALE CROCOITE

As a teenager, my early collecting years mainly consisted of receiving mineral gifts and some attempts at trading. While in primary school a person living near the school had constructed a drive way

out of discarded lapidary material. I discovered this treasure laden pathway and over a period of time proceeded to cart a considerable amount of it home (much to my mother's annoyance). One afternoon my mining endeavours were discovered, but to my astonishment I was not ticked off but rather invited into a work shed to see the source of the material.

From that day on Jack M<sup>c</sup>Namara became a mentor in the area of minerals. Over the years I would ride my bicycle to his house and gaze longingly at a host of material he collected on his numerous trips throughout Western Australia – opalite from Ora Banda, amethyst from the Antrim Plateau, tourmaline from Ravensthorpe and a small orange crystal sitting on drusy brown quartz.

That small orange crocoite on brown quartz now resides in my collection. Perhaps it isn't the best example of Comet Vale crocoite, however for me it holds a testimony to one man's generosity and willingness to impart the love of minerals.

Perhaps you have a similar story, please share it with us.

John Reeve.

.....

**MINERALOGICAL SOCIETY  
OF  
WESTERN AUSTRALIA (INC)**

**Office Bearers:**

President: Peter Clark  
34 McDonald Street,  
Como, W.A. 6152 Tele. (08) 93681778 (h)

Vice President: Jeffrey Manners  
58 Berkley Road,  
Marangaroo, W.A. 6064 Tele. (08) 93428648 (h)

Secretary Treasurer: John Reeve  
13 Buchan Place,  
Hillarys, W.A., 6025 Tele. (08) 9401 1963 (h)

Field Trip Coordinator: Mark Jacobsen  
11 Robin Street,  
Menora, W.A. 6050 Tele. (08) 92728792 (h)

Committee Member: Ted Fowler  
112 Marine Terrace  
Marmion 6020

**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 February, April, June, August, October and December in the **W.A. Lapidary and Rock Hunting Club rooms 31 Gladstone Street Rivervale**, 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

Material used in this Newsletter is subject to copyright, however unless specifically reserved, material may be used in Australian Mineralogical Society Newsletters with appropriate acknowledgement of the author and source.