

# ALBERTA ROCKHOUND NEWS

Publication of the Alberta Federation of Rock Clubs

Volume 50 No. 1



April, 2020



Brett Jensen

## PRESIDENT'S MESSAGE

Greetings Everyone!

On behalf of the AFRC executive and board I hope you are all home safe and staying healthy. The average age of rock hounds in Alberta places us in a high risk group. So I hope you are all following the public health guidelines regarding staying at home, social distancing and hand washing. The world wide COVID-19 pandemic is a truly frightening event. But we are fairing better than many other locations in the world. I believe that we do have the ability to weather this catastrophe and come out better prepared for the next one. The pandemic has definitely had an impact on our activities. The CRLC annual show has had to be cancelled this year. Our annual May Daze gathering has at least been postponed and perhaps also cancelled for the year. We want to wait and see what the conditions are

like in Alberta in August or September. I assume that club meetings, work nights and field trips in all the clubs have had to be put on hold until we can gather safely together. The stay at home orders have increased internet use and limited communication to phone calls, text messages, emails and facebook messages. However, the increased internet use has used up the available bandwidth and degraded the internet speed. After experiencing a rather poor "Zoom" online meeting I decided that our April board meeting should be held via email rather than via one of the newer online conferencing apps.

After spending November, January and February in Quartzsite, Arizona I was looking forward to offering classes in flint knapping, opal triplet making and copper wire weaving to share my newfound skills. But that will have to wait until we can meet together safely again. I was looking forward to also sharing some of my newly acquired rocks from the shows and auctions in Arizona. I have grassy green aventurine, pink thulite, green opal, pink opal, different sheens of obsidian (gold, silver, rainbow, purple, etc.), new porcelain jasper and chrysocolla varieties, banded iron, red white and blue jasper and the list goes on. After resisting trying flint knapping for many years, I finally took a class and surprised myself in how much I enjoyed it. I brought some materials with me from Arizona to make my own tools and am presently trying to acquire enough materials to make tools for a small group class at my club. I just took a class in pressure flaking of a roughed out slab of obsidian and was surprised in how good my first arrowheads and knife blades turned out. I still need to learn the percussion flaking methods to round out my skill set.

Although the shelter in place orders have restricted our travel and opportunities to meet, they have also afforded us opportunities to be involved in our hobby in other ways. We can finally read that book or watch that video that we have never found the time to do in the past. In spite of the reduced internet speed we can finally find time to avail ourselves of the myriad of internet resources. There are thousands of instructional YouTube videos to watch, such as the copper wire weaving videos by Christina Larsen found at <https://www.youtube.com/user/CSLdesigns> or by Yvonne Williams at <https://www.youtube.com/user/yvonne007bgu>. There are many free downloadable books on the internet, for example, the 342 page compilation of online articles on flint knapping by Michael Lynn at [https://www.flintknappingtools.com/ebook\\_flintknapping.html](https://www.flintknappingtools.com/ebook_flintknapping.html). If you have your own equipment at home you can finally have time to tackle some of the projects that you always wanted to do.

Be of good cheer. This too will pass. Find the silver lining to this cloud and enjoy your time at home.

Till we meet again.

## **ALBERTA FEDERATION OF ROCK CLUB MEMBERS**

*Calgary Facetors Guild  
Calgary Rock & Lapidary Club  
Edmonton Tumblewood Lapidary Club  
Lacombe Handicraft & Lapidary Guild  
Medicine Hat Rock & Gem Club  
Southern Alberta Rock Hounds Association*

### **OBJECTIVES OF THE ALBERTA FEDERATION OF ROCK CLUBS**

1. To promote and encourage the study, cutting, polishing and engraving of gemstones and rocks and other geological materials and lapidary work as a hobby other than for the purpose of trade, industry or business.
2. To encourage the exploration of Alberta for lapidary materials, and to promote and create a greater interest in Alberta finished and unfinished rocks and minerals.
3. To encourage and promote the close association with, and exchange of information between rock hobbyists and lapidary groups to stimulate interest in and disseminate knowledge about mineralogy and earth sciences.
4. The Alberta Federation sponsors a website which its members may use to promote the activities and events of their club.
5. The operations of the Alberta Federation are to be mainly carried out in the Province of Alberta, under the Canadian Rockhound Code of Ethics.

THE ALBERTA FEDERATION OF ROCK CLUBS is a member of THE GEM AND MINERAL FEDERATION OF CANADA. Each club pays their members dues to the AFRC Treasurer by February 1<sup>st</sup> and each paid up member is entitled to 3<sup>rd</sup> Party Liability Insurance which covers events such as field trips, rock and gem shows, and other organized events.

## **Rockhound “Evolution”**

by Holgar Hartmaier  
Vice-President, AFRC

Ed Zeschuk, Alberta Rockhound News editor is always looking for articles, so I thought I would open the following in response to President Brett Jensen’s “President’s Message” in the November 2019 newsletter (Volume 40, No. 4).

Brett described his rockhound “evolutionary” journey from beginning “simply as collectors” to lapidary arts to teacher to dealer, not unlike many others in the hobby. I wanted to explore further the perception, noted by Brett, that being “...simply a collector” and not “progressing to lapidary artist”, was the cause for some criticism by some club members.

I consider myself one of those “simple collectors”. I started collecting at a very young age. At age 5, my father and I collected petrified wood in the Leduc-Edmonton area and panned for gold in the North Saskatchewan River. Some of those specimens are still in my collection. My life-long interest in earth sciences led to a career as a geological/geotechnical engineering consultant. Throughout that time, my collecting activities included field collecting, buying, selling and trading.

There is no evolutionary hierarchy in the rockhound hobby. A lapidary artist is not evolutionarily superior to a “simple collector”. Conversely, a lapidary artist does not regress by starting to collect minerals. The journey that Brett described was his journey and I’m sure many readers have followed different paths in their rockhound-related hobbies. Individuals are free to start off as a collector, lapidary artist or dealer, regardless of prior knowledge or experience. In fact, many new club members are complete “newbies” with no idea where to begin. Their own unique “evolutionary” path in the hobby (if it is to be called as such) will be based on their personal interests and life opportunities. Some will stay within a narrow range of interests and some will expand into other areas.

Regardless of how one starts in the rockhound hobby, the evolutionary pathways develop differently for each individual. A lapidary artist can obtain a range of skills through hands-on learning and practice. Likewise, a collector can gain more experience and knowledge from other collectors, self-study, seeing other collections, not to mention on-line resources. It is not as if “lapidary artist” is an evolutionary progression from “simple collector”. Quite the opposite is often the case. For example, someone may have received a rock tumbler at a young age, which started their journey within the lapidary arts, then realizing they needed more information about the rocks and minerals they were cutting and polishing, began learning about mineralogy, thus starting to collect minerals.

A lay person starting on the collection pathway needs to learn all about the related subjects of geology, mineralogy, crystallography, paleontology, petrography, chemistry and other related physical and natural sciences on their own. Each of these subjects are sciences in their own right, taught at a university level, so it is a daunting, self-study endeavor for any lay person to take on. Nevertheless, it is possible for a lay person to become an acknowledged expert in various specialties. In some cases their expertise can exceed that of academically trained professionals within their own specialty niche. Their evolution requires a devotion of time to study and learn. They may never become interested in lapidary arts, nor should they be expected to by the rockhound community at large. In contrast, I was fortunate to be professionally trained at a university level on these subjects. I would equally have to start from scratch to learn the basics of lapidary cutting and polishing. I choose not to do so now, as I have many aspects of the collecting hobby yet to explore. That is my evolutionary path.

(Continued next page)

In my own case, I moved around quite a bit, so the collection focus shifted based on the locally available materials which I could personally collect in the field. It wasn't until later, when I was in university, that I first began purchasing specimens from dealers and, for a while was a part-time mineral dealer myself. At some point in the evolution of a collection, it becomes necessary to find a focus. Typically, we are all limited to varying degrees by our budget and storage space. Now, in my retirement years, I look forward to curating my collection and perhaps starting to downsize. I have no plans to become a lapidary artist, but admit to owning rock saws, grinders and polishers, which I use to cut and polish rock and ore slabs for study and specimens. Who knows what lies ahead?!

In conclusion, fellow rockhounds, start somewhere that interests you and follow your interests, abilities and enjoy yourself! There are no pre-conceived expectations and there should be no criticisms or judgements rendered by the broader rockhound community on your chosen path and interests. The hobby is vast and there are lots of knowledgeable club members out there to learn from and willing to help you on your own personal journeys.

Good luck!

---

---

### **ARN Editor's Job Description**

There are no specific guidelines stated or written in the AFRC by-laws regarding the Alberta Rockhound News (ARN) newsletter. As such the production of the ARN is not bound to strict guidelines but is open to the Editor's creativity and imagination.

However over the years since the inception of the ARN a set of five objectives have evolved and have been maintained. The overall objective of the ARN is to provide to the Alberta lapidary club members information on what transpired at the AFRC directors meetings and the activities of the individual provincial lapidary clubs and their individual members.

Objective one: the newsletter usually starts on page one with the President's Report. This report is supplied by the President or the acting President after each meeting of the ARFC directors meeting.

Objective two: the minutes of the AFRC directors meeting is placed in any convenient location in the paper. This inclusion provides the Alberta club members information as to what was discussed at the directors meeting.

Objective three: of the six existing clubs in Alberta on occasion one or more clubs/members will submit an activities report about their club. Also some clubs will submit an event brochure. Both would be placed in any convenient location of the ARN.

Objective four: Articles that are lapidary oriented and which would be of interest to many club members are included in the newsletter. These articles are occasionally provided by club members or they can be obtained from the internet or other sources.

Objective five: If room allows or at the discretion of the Editor, comic relief is added to the newsletter in the form of funny stories, or cartoons.

It must be stressed that the design or appearance of the ARN has a great deal of leeway and is at the discretion of the Editor's choosing. The ARN is usually published about two weeks after the AFRC directors meeting.

## **MINUTES: ALBERTA FEDERATION OF ROCK CLUBS, DIRECTORS MEETING**

Held via e-mail correspondence due to COVID-19

Agenda distributed April 5, 2020 with e-mail responses due by April 19, 2020

Note: E-mail replies were compiled by Karen-Anne C., MHRLC as the AFRC is still seeking a Secretary. Please submit your name to Brett J., SARHA, if interested in the Secretary role.

1. **Consideration of Agenda:** There was no opportunity to add items to the agenda once distributed, however all comments forwarded have been included in the minutes.

2. **Roll Call:** E-mail submissions were received from Directors of the following clubs that have been bolded:

Calgary Faceters Guild

**Calgary Rock & Lapidary Club**

**Edmonton Tumblewood Lapidary Club**

**Lacombe Handicraft & Lapidary Guild**

**Medicine Hat Rock & Lapidary Club**

**Southern Alberta Rock Hounds Assoc.**

3. **In Memorium:** None

4. **President's Message:** Brett J., SARHA, provided the same President's Message that will appear in the April 2020 Alberta Rockhound News.

5. **Minutes of the November 24, 2019 meeting:**

The minutes were adopted with the following correction made to the minutes of November 24, 2019: #7.1 a) re Plates – should have read ...they were given the memento... rather than moment.

6. **Business Arising from the Minutes:**

6.1 Update re distribution of badges and tags (John C., MHRLC).

- John C. noted: "Badges and tags were distributed to most of the Delegates/Directors at the Nov. 24, 2019 meeting. Those that were absent were given their badges and/or tags by mail. It was asked that I do this for Life Members (Novlans, Robaks) and I had both of theirs done and sent in the mail."

- Tony C noted: "Have received the name tag with thanks."

6.2 Update re vests (Karen-Anne C., MHRLC)

- Karen-Anne C. noted: " On February 24, 2020, I sent an e-mail to the AFRC Executive and Directors to report on research I conducted on available vests as discussed at the November 24, 2019 Director's Meeting. I also noted that I may be able to obtain for free, some used vests that may be useful at events like May Daze to distinguish those helping with the event and/or the auction. Although at that meeting the overall consensus was that the idea of vests was liked, further feedback suggests that most Directors did not feel that the ongoing expense or vests was needed. It was noted that the Calgary club has gotten rid of their vests, and with fewer pins at shows vests were not needed. Others just said they were not keen on wearing them or they already had their own club vest so and AFRC badge was

sufficient to distinguish them. Others said no to vests but were okay with them if the majority wanted them. There was agreement that if the free vests were obtained, they would be useful for events like the May Daze Auction to distinguish who was helping with the auction. Karen-Anne has expressed interest in obtaining the free vests but due to the COVID-19 outbreak, a response is on hold.“

### 6.3 Updating website (Tony C., LH&LC)

- Tony C. noted: “The web site has been updated with the Rockhound News. I worked with Ed Z. to ensure that all were listed on the site. I am still waiting for information from the Faceters Guild to update their portion of the web site. I will also need information on the status of this year's May Daze. I have indicated on the site that it will not go ahead this May. More information on rock hounding sites and collection information could be forwarded to me to be added to the web site. As I am not a native Albertan I need to rely on those that have more knowledge in this area.”

### 6.4 Update re Rejuvenation: Alberta Paleontology Society (Holger H., CRLC)

Holger H. Noted: “Contacted Cory Gross, President of the Alberta Palaeontological Society (APS) with the invitation to join AFRC/GMFC. APS had considered this previously in 2002 and it was voted down by their Board and membership. They reconsidered our current invitation and declined again for more or less the same reasons:

Additional fees to be added to cover AFRC/GMFC fees.

Getting members to volunteer for another set of board obligations, on top of those already involved with APS duties for longer terms.

APS secured their own 3<sup>rd</sup> party liability insurance for field trips etc. so there was no advantage to seeking GMFC membership.

AFRC affiliated clubs have a strong focus on lapidary arts with no real scientific focus on paleontology related subjects.”

### 6.5 Update re contacting Military Bases re AFRC Website (John C., MHRLC)

- John C. noted: “At the November 24, 2019 meeting, John asked about approaching military bases, that had lapidary and arts clubs, for AFRC memberships. It was suggested at the meeting that rather than memberships, perhaps they would be more interested in the AFRC website and newsletter. John did not get around to doing this and then COVID-19 has caused many bases to shutdown. Perhaps in 6 months when the illness has resolved, he will try corresponding with them.

As an aside, perhaps colleges such as SAIT and NAIT should also be contacted for interest in the AFRC website and newsletter.”

### 6.6 Follow-up with individual from Ontario interested in rock hounding & collecting in Alberta and research on where able to rock hound in Alberta and accuracy of the AFRC website (Karen-Anne C., MHRLC & et al.)

Karen-Anne C. noted: “A follow-up e-mail was forwarded to the individual from Ontario who had inquired about rockhounding in Alberta. In addition to giving her the link to the AFRC website so to be aware of the rules, as suggested at the November 24, 2019 meeting, I suggested to her that she contact the Calgary Club for some ideas on where she may rockhound when visiting Alberta.

I also did some research to help determine if the information posted on our website is still correct and what resources are available to help know where one can legally rock hound in Alberta. Although most of the rules were outlined in our November 24, 2019 minutes, after some searching on-line and calling various government departments, and Chris Robak, I learned the following thus far. I am still waiting for a reply from a second government department to know if the current information on our website is all accurate. After contacting a staff person with the Coal and Mineral Development Department of Alberta Energy, it was suggested I contact Alberta Culture, Multiculturalism and the Status of Women department. I will share their reply once received. I was told however from an employee with the Lands Office that it is okay to surface collect rocks on crown land, but if leased crown land you need permission to access. To determine if leased or vacant crown land, and if leased, the contact information for the lease holder, check the following link by searching the map. Instruction on how to utilize are provided at the following link as well.

<https://www.alberta.ca/accessing-provincial-grazing-reserves.aspx>

If collecting along a river, I was told you need to be conscious of disturbing fish eggs, frogs and endangered shore birds and sensitive species, but this would not likely be an issue if picking up an odd rock. Watch for signs. Was also reminded no collecting is allowed in provincial or federal parks.

If collecting on grazing leases, be aware that high grass in dry conditions can be prone to fires so they can ban vehicles on leases.

I was told some of the Acts that come into play are the following: Public Lands Act that falls under the Public Lands Division and the Historical Resources Act which is revised as of March 31, 2020.”

6.7 Follow-up re Fossil/Gem/Rock gathering use and regulations & suggested amendments to the fossil regulations (Ron B., LH&LC; Holger H., CRLC; Karen- Anne C.,MHRLC, et al.)

- Holger H. noted he contacted Dan Spivak at the Tyrrell Museum regarding this matter and received the following response on February 24, 2020:

Hi Holger

Thank you for your email. There does seem to be some confusion over this matter and I am not sure where the confusion has originated but I am glad that you have reached out to me. As of right now, there is no legislation review under way. We are planning to conduct a review of the Control List of the Dispositions (Ministerial) Regulation but we are still waiting to receive approval of our proposed methods and timelines. Assuming that we receive approval, the AFRC, CRLC and APS are all on my list of stakeholder groups to be contacted as part of the review process.

I hope that answers your questions and alleviates your confusion on this matter. Please feel free to contact me if you have any other questions.

Dan

Dan Spivak  
Head, Resource Management Program  
Royal Tyrrell Museum of Palaeontology

T: 403-823-7707 | F: 403-823-7131  
Box 7500, Drumheller, Alberta T0J 0Y0 Canada  
[www.tyrrellmuseum.com](http://www.tyrrellmuseum.com)

“Based on this response, I recommend that AFRC first formulate a joint response that reflects input from rock club members across the province. The submissions by Chris Robak need to be reviewed and discussed by AFRC along with other input. I have the following comments for further discussion:

I agree with the basic argument that lots of fossil material is lost as a result of ongoing weathering and erosion. Fossil resources are finite- they are not making T-Rexes anymore and all the remains that exist are all there is. Therefore, the objective of any fossil collecting regulation should be collection and preservation of any finds that are exposed. Material should be collected and preserved in either public or private collections/museums. Limiting collection only to academic research alone cannot keep up with the volume of fossil material continuously being exposed by weathering and erosion. A spectacular or important find can easily be lost or missed. Another important objective should be protection of fossil resources from illegal digging and removal from the Province. Robak’s recommendation to allow the use of small hand tools goes significantly beyond the current “surface collecting” rules and opens up a potential Pandora’s Box for enforcement. We know this firsthand in the rock collecting world where there are numerous examples of rock cuts and road beds being excavated by rockhounds using hand tools. I agree in general with Robak’s suggestions for improving the disposition and ownership process and opening it up to all fossil material (including ammonites) However, we must be careful not to open up Alberta’s fossil resources to permitted individuals working for commercial purposes. The fossil resources need to be accessible to individual amateur avocational collectors. Another suggestion is to allow collectors to modify any material once ownership rights have been obtained. At the moment, lapidary use of fossil material is not permitted, although many lapidaries are working with dinosaur bone, petrified wood and ammonite material.

**6.8 May Daze 2020 Update (Pauline Z., ETLC) - On hold until further notice.**

6.9 May Daze 2021 Update (Ron B., LH&LC) – No update at this time.

7. **Correspondence:** None

8. **Committee Reports:**

8.1 **Treasurer's Report:** (John C., Treasurer, MHRLC) As there were no concerns regarding the report as circulated, it is assumed that it was approved as circulated.

8.2 **GMFC Report:** (Brett J., SARHA) – Nothing to report, no meetings held,. Still no support from BCLS for National Show and meeting this year.

8.3 **Alberta Rockhound Newsletter:** Pauline and Ed Z.,ETWLC)

Ed and Pauline submitted the following report:

“After 19 years as ARN editors, Pauline and I will be resigning at the end of June, 2020. We have immensely enjoyed producing the newsletter but now it is time for new ideas and a livelier format. We want to thank all of the club members who have contributed articles and pictures for the newsletters. This made our job so much easier and pleasant. Without this support and help from you we would have likely not carried on for this long.

We thank, especially, the various AFRC Presidents who contributed for every publication of the ARN the president’s report. This has always been a very important portion of the newsletter.

We also thank the secretaries who served over the years and submitted concise and accurate AFRC minutes to be included in the newsletter. This is a very important vehicle by which the provincial AFRC club members obtained the information of the meeting’s proceedings.

Again, Pauline and I thank all of you for the support we received.“

9. **New Business:**

Chris Robak has requested support for changes to fossil collecting rules in Alberta. After viewing his proposed changes, Brett J., SARHA, made the following motion:

Motion: It is proposed that the AFRC submit a letter of support to Alberta Provincial Government via Dan Spivak at Royal Tyrrell Museum regarding proposed changes to fossil collecting and disposition in Alberta and ask member clubs and individual members to do same.

**Agree:** Brett J., Karen-Anne C., John C., Tony C., Ron B., Pauline Z. & Ed Z.

**Oppose:** None

**Abstain:** Holger H. (see comments in 6.9)

The following comments were received:

(Karen-Anne C., MHRLC) “I support this motion. In addition to a letter on behalf of the AFRC, it will be important for individuals and clubs to share additional views such as those that are shared by Directors in these minutes. If you want additional information, following are links I found to related Acts. Note the Historical Resources Act was updated as of March 31, 2020.

<https://www.qp.alberta.ca/documents/Acts/h09.pdf> (Historic Resources Act)

[https://www.qp.alberta.ca/documents/Regs/2004\\_152.pdf](https://www.qp.alberta.ca/documents/Regs/2004_152.pdf) (Ammonite Shell Regulation

<https://www.alberta.ca/minerals-ammonite-shell-tool-kit.aspx> (Information related to collecting or acquiring an ammonite shell agreement to develop and mine)”

(John C., MHRLC) “Although I believe his proposed changes do not go far enough, as with most things, one has to take 'baby steps' otherwise there is a rejection of any suggestions and hence no progress.

a) 'Expand disposition process to all Alberta fossils not of scientific importance.' Comments:

- So who determines what is not of scientific importance, and do they not do this anyway?

The decision maker should be identified (only Tyrell Museum? What of University Departments?

Would there be fights between different authorities for merits of decisions or for dominion?)

- There are problems with disposition. There is a great deal of variation and differences depending on who is doing the review. What is the point of a disposition if the item cannot be touched. No, disposition should grant the owner freedom to buy, cut, polish and sell (both within and outside the province).

- Instead of waiting forever until the item is forgotten, there should be a time limit for disposition - say within 2 weeks of receipt of item or documents for decision. If nothing is given with 2 weeks, then the item was obviously not viewed as important and so disposition should be given by default.

b) 'Allow for surface collecting to be done with basic hand tools'.

Excellent. The more there is prospecting and field trips, and the more things are collected then sent for disposition, the more things will be discovered.

Surface collecting implies rescuing an item that will be destroyed by erosion.

If something is larger than what one can collect with hand tools, then it is a find that either needs to be reported to the museum or minerals that the discoverer should stake a claim.

c) 'Encourage government and academia to work with private industry..world...and other scientists ...can see and study what has been released to the public.'

Regretfully, I don't understand what this means or what it will accomplish.

d) Although not one of Kris Robak's recommendation, I would like to have clarification.

I heard a few years ago that once an item has been removed from a creek bed (in which case it could have come from anywhere and there is no information on its original site or environment), or once an item has been cut, polished and made into jewelry, then dispensation is automatic.

Is that so?

If not, should it be so?"

- (Tony C., LH&LC) “I agree with this motion. I support Chris Robak in the direction that he is suggesting for changes in the fossil collecting rules. We all want to see significant fossils preserved, but I would like to be able to collect and work on other fossil remains.”

(Holger H, CRLC) – See comments shared above in 6.7.

(Ron B., LH&LC) “I would like to support the motion to send a letter of support to Chris Robak regarding the proposed changes to the fossil disposition in Alberta. Dan Spivak told me a full review of the regulation regarding the control list will be done this year, I assume that is on hold now.

All fossils should be allowed to be owned if the museums or scientists don't want or need them. I have fossils that I have been refused disposition, they are destined to be thrown away along with my other fossils because I can't sell them, cut them or give them to my kids, they don't want them. With disposition of these unwanted fossils, they could get a second life as a piece of jewellery, that's what I told the Minister of Culture, she agreed.

That's some of my comments, Thanks, Ron B.”

## 10. Announcements:

10.1 **Update re CRLC May Show:** (Dale N., CRLC) – Has been cancelled this year.

11. **Next Meeting:** To be determined

## ALTERNATE MEANINGS TO WORDS *For a bit of dis-isolation stress relief*

You may be good at the English words you use daily but did you know they also have second meanings.

1. **Counterfeiter** – a craftsman who installs fake kitchen cabinets.
2. **Derange** – where de buffalo roam.
3. **Heroes** – how a man moves a boat through water.
4. **Subdued** – a guy who works on a submarine.
5. **Baloney** – where your shin is located.
6. **Car battery** – auto abuse.
7. **Abalone** – shellfish nonsense.
8. **Bernadette** – the act of torching a mortgage.
9. **Relief** – what trees do in the spring.
10. **Discovery** – a fancy CD case.
11. **Parasites** – what tourists see from the top of the Eiffel Tower.
12. **Pharmacist** – to help out on the farm.
13. **Dilate** – to die at an old age.
14. **Barium** – what we do to our loved ones when they die.
15. **Dogmatic** – a pooch that walks and feeds itself.
16. **Avoidable** – what a bullfighter tries to do.
17. **Burglarize** – what a robber sees with.
18. **Polarize** – what a polar bear sees with.
19. **Ostracize** – what an ostrich .... Oh, you get the idea.
20. **Chinese Checkers** – security guards at the Beijing super market.

### **MEXICAN FIRE AGATE**

by Ed Zeschuk

In 2002 Pauline and I had the pleasure of visiting Quartzite, Arizona for the annual monster lapidary event. Some lapidary vendors operate their booths for only a few weeks and then proceed to Tucson while others remain in Quartzite year round. We have been there a number of times and each year is more exciting than the previous! There are many locations right around the town where vendors set up their booths. An educated guess would estimate that at the peak of the event there are likely between 800 and 1000 vendors. You would not be able to visit all of the vendors in one week. Vendors come from all over the world to sell their items.

It was during the 2002 visit that a Mexican vendor was selling Mexican Fire Agate. **Mexican Fire agate**, a variety of chalcedony, is a semi-precious natural gemstone discovered so far only in certain areas of central and northern Mexico and the southwestern United States (New Mexico, Arizona and California). Because this kind of agate was first discovered in Mexico, even though it is now found in southern USA, the name in lapidary circles is Mexican Fire Agate. Google: "Mexican Fire Agate images" and you will see hundreds of pictures of this agate. You should be warned that people that submit pictures to the internet do not always know the names so you must be wary of the pictures shown which are not Mexican Fire Agate yet are found in this images folder!

This Mexican vendor had many jars, about ½ quart size, of Mexican Fire Agate. The Canadian dollar at that time was 62 cents USD and the jars were priced at about \$250 each. Lucky for me majority of the vendors were now preparing to go to Tucson so my bargaining for the two jars that I bought was in my favor. The value of this agate varies depending on the size, color, the settings it is in and availability of the agate.

Generally speaking Mexican Fire Agate is somewhat rare and of unusual beauty. It is a brown agate, due to iron oxide, that reflects bright flashes of iridescent yellow, red, orange and green from hemispherical surfaces within the stone. The hardness of this agate is between 5 and 7 which makes a fairly scratch resistant semi precious stone for jewelry.

When buying Mexican Fire Agate the rough material can be totally rough and you take a chance on getting a colorful finished cab. Some vendors provide the rough material with a “window” as part of the rough polished to see the potential of the finished stone and some vendors sell the finished cabs. See “*Rough*” sample and “*Window*” sample below.



Rough Sample



Window Sample

A few years ago I had cut and polished some of the agate but other stones turned my interest so I left the cutting of the Mexican Fire Agate for a few years. Suddenly, recently, I got an interest in cutting some of the agate and I provide photos showing my work. I used the standard diamond wheels, sanding belt wheels and cerium oxide polish. The agate is quite hard so the cutting and sanding is not fast but the polishing is great. The shine is brilliant. Some of the stones have nice color and some are average to poor. The average to poor is caused by a thin layer of cloudy cover which normally if you have the courage can be sanded off. But because the cover layer has to be removed to the colored layer, which is very thin, I have accidentally removed this colored layer and destroyed the stone. I try to decide whether to continue to sand more or to stop and have an average to poor stone. I always felt a poor stone is better than no stone at all.



Finished items ready for setting or wire wrapping. (Colour of photo varies due to lighting.)

Many of the professional Mexican Fire Agate finishers use a dremel tool to work on the stones. Their comments are that the dremel tool diamond bit can have various sizes and shapes to cut around and leave the nodule mounds in a mound shape for added beauty. They also state that the large grinding stones of a regular lapidary grinding unit obscure the vision plus they can't cut fine enough to leave the nodule mounds intact. The dremel units are smaller, hand held and fully movable so the cutter can easily see the status of the colour layers as they sand away. Their objective is to cut away the stone in nodule fashion to leave some colorful nodules in the finished stone. My stones are all smooth cab style because the big grinding wheels are not able to cut small mounds. See "nodule finished" sample.



"Nodule" finished stone



"Nodule" stone wire wrapped

I can set my finished stones either in silversmithed settings, purchased settings or wire wrapped. The choice is often dependant on the shape and size of the stone.



Wire Wrapped



Silversmithed

## "The Story of Victoria Stone"

(Information and details from the Internet.)

Victoria Stone is also known as "Imori Stone", named after its Japanese creator, Dr. Imori. It is not an artificial or fake stone. What Dr. Imori was able to accomplish was to actually blend several different minerals using a special process known only to him to come up with an Imori Stone, commonly called Victoria Stone. This beautiful reconstructed gem is mineralogically similar to Nephrite Jade. It has a harness of six, specific gravity of 3.02 and a refractive index of 1.62. It was laboratory produced from natural raw materials such as quartz, feldspar, magnesite, calcite, fluor spar, etc. for a total of seven different minerals-fused together under high pressure and a high temperature and again mineralized to make this gem by adding special crystallizers and habit regulators. This is not an imitation or synthetic but is a reconstructed natural stone. The boule of Victoria stone was slowly cooled down for 35 to 40 days to make it crystallize into the pretty fan shapes. Victoria Stone is minerlogically similar to nephrite jade, but the arrangement of the actinolite crystals is different. Instead of the crystals interlocking and tying together as they do with jade, they have crystallized in fan shapes to provide the beauty of the stone. As a result of this difference, the rough stone is more likely to crack or splinter if overheated. Victoria Stone could be bought by the boule or in slices when it was produced in 15 different colors from 1960 to the 1980's -green, sky blue, reddish purple, yellow green, blue green, sky indigo, chocolate,

yellow, deep indigo, white, quiet green, quiet yellow, quiet blue, grey and black. To cut Victoria Stone, cut it first lengthwise, then let it set for 24 hours; then you can go ahead and slice it using normal cutting procedures, using plenty of water to keep it cool so it won't shatter. First sand on sharp 220 grit sanding cloth, then sharp 320 cloth, with a final sanding on a worn 320 cloth. A quick and easy polish can then be obtained finishing on a dry leather buff with tin oxide. The transparent Victoria Stone that is used for faceting is composed of di or trisilicates of earth elements and alkali metals. The hardness is 5.5 to 6, specific gravity of 3.02 and a refractive index of 1.12. It was quickly cooled down in one day so that it wouldn't crystallize into patterns. The faceted Victoria Stone came in 8 colors, including sapphire blue, emerald green, amethyst purple, ruby red, topaz, aquamarine, garnet and peridot green. Dr. Imori died without confiding in anyone how the process worked and no one has been able to duplicate it. There is only a limited and non replenishable supply of Victoria Stone in existence, when this material is used up to make jewelry and cabochons, it will become scarcer and about impossible to find.

Shown are some of the various colours of Victoria stone.

