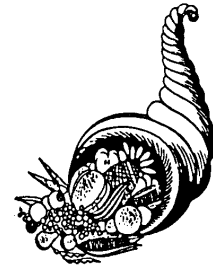


# CALGARY LAPIDARY JOURNAL

Vol. 47 No. 6

OCTOBER 2011



## The Calgary Rock & Lapidary Club

<http://www.crlc.ca>

Mailing Address

110 Lissington Drive SW

Calgary AB T3E 5E3

MEMBER OF

**Alberta Federation of Rock Clubs**  
**Gem and Mineral Federation of Canada**

CLUB MEETINGS

The **SECOND FRIDAY** of the month (except July & August)

HELD AT

**BOW CLIFF SENIORS**  
(Spruce Cliff Community Centre)  
608 Poplar Road SW. Calgary, AB

**PROSPECTIVE NEW MEMBERS WELCOME**



**THE CALGARY LAPIDARY JOURNAL  
OCTOBER 2011**

**2011 - 2012 EXECUTIVE**

<b>President</b>	Mike O'Toole	945-1874
<b>Vice Pres</b>	Cal Luchuck	289-7574
<b>Secretary</b>	Sarah King-D'Sousa	246-5606
<b>Treasurer</b>	Lorne Alcock	239-4981
<b>Past Pres</b>	Kelly Jackson	240-0586

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<b>Phoners</b>	Pearl Broad Pat Hausberg	Toni Duh Trudy Martin
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<b>Historian</b>	Les Adler	289-9972
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<b>Pebble Pups</b>	Lorraine Edwards	981-6432
<b>Librarian</b>	Lori Wichink	828-3479
<b>Field Trips</b>	Lorna Hightower	254-2716
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<b>Fund Raising</b>	Lori Wichink	828-3479
<b>Study Groups</b>	Sandy Bessey	922-9094
<b>2012 Show</b>	Bob Hightower	254-2716
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<b>Parliamentarian</b>	Trudy Martin	287-1570
<b>AFRC Directors</b>		
	Mike O'Toole	945-1874
	Lavern Novlan	281-1260
	Irene Novlan	281-1260
	Ehren Rebmann	240-2262

[ = ] [ = ] [ = ]

**Wit & Wisdom**

If you didn't start out the day with a smile, it's not too late to start practicing for tomorrow.

If you want to kill time, why not try working it to death.

If you would like to leave footprints in the sand of time, you had better wear work boots.

If a thing will go without saying - let it.

If there is a smile in your heart, your face will show it.

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The **Calgary Lapidary Journal** is the "official" publication of, and is published by The Calgary Rock and Lapidary Club, a non-profit organization dedicated to the sphere of the Earth Sciences pertinent to the lapidary hobby in Canada.

Members are requested to submit articles or reports for publication. All articles should be submitted to The Editor not later than the 15th of the month. Items from this Journal may be reprinted, **unless otherwise stated**, providing proper credit is given to both the original author and this publication.

The Journal is published 8 times per year and mailed to member families as part of their yearly membership dues. Non members may receive the Journal on Subscription. Nominal charge for advertisements - Items for Sale or Items Wanted or Shop & Swap.

Subscription requests and renewals as well as advertising submissions should be directed to:

**THE EDITOR**

**Trudy Martin 287-1570  
110 Lissington Drive SW  
Calgary AB T3E 5E3**

**martintm@shaw.ca**

**Subscription Rate - \$ 10.00 per year.**

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**MEMBERSHIP**

Membership is open to all interested persons. Dues are for the **CALENDAR YEAR**, payable annually, prior to December 31st each year.

Adult	\$ 25.00
Adult Couple	\$ 30.00
Senior Citizen	\$ 23.00
Senior Couple	\$ 26.00

**\* With Adult Membership**

* Pebble Pup (up to 14)	\$ 5.00
* Junior (14 to 17)	\$ 5.00
* Full Time Student (18+)	\$ 5.00
* Sponsored P.Pup or Jr.	
Without Journal	\$ 5.00
With Journal	\$ 10.00
Junior or Student Individual	\$ 10.00

**Name Tags \$ 3.00**

**DUES ARE SUBJECT TO CHANGE  
MEMBERSHIP CHAIRMAN**

**Holger Hartmaier 938-5941  
151 Woodhaven Drive  
OKOTOKS AB T1S 1L8**

**<hhart@telusplanet.net>**

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**OCTOBER MEETING**

Friday                    14 October 2011                    7:30 pm

**BOW CLIFF SENIORS  
SPRUCE CLIFF COMMUNITY CENTRE  
608 Poplar Road SW. Calgary, AB**

- PROGRAM** - Fluorescent Rocks with Bruce Fine
- PEBBLE PUPS** - Opal Formations from BC  
Halloween Craft
- REFRESHMENTS** - Coffee, Tea, Juice



**NOVEMBER MEETING**

Friday                    11 November 2011                    7:30 pm

**PROGRAM                    Live & In Colour  
Our Annual Auction Night**

Rough Rock, Slices, Minerals, Faceting Material,  
Equipment.  
You name it and we'll have it!

- PEBBLE PUPS** - Ammonite Fossils
- REFRESHMENTS** - Coffee, Tea, Juice



**DECEMBER MEETING**

Friday                    9 December 2011                    7:30 PM

- PROGRAM** - Video - Splendid Stones
- PEBBLE PUPS** - All That Glitters - Christmas Craft
- REFRESHMENTS** Coffee, Tea, Juice, Sweets

**Our Annual Collection of items for  
the Mustard Street Ministry**



**MEETING PROGRAMS**

**Murray Nicholson**

Welcome back. I hope you had a good summer and brought back many experiences and materials to share with the rest of us. We do rely on your contributions to club meetings and would like to take this opportunity to invite you to help out with the program committee. Perhaps you could present your special interest or skill at one of our meetings. Think about it and give me a call at 403-240-2575.

This fall (except November) we will continue to provide activity centers for Show & Tell and Trading material. If this interest you, please set up and take down the tables needed.

**LAST MONTH**

Members gathered again after the summer break, The program was **Tectonic Europe**, the first of five videos in the new **Geologic Journey II DVD** produced by The Nature of Things with David Suzzuki. Hopefully (once we figure out the sound system) we will be able to show the other videos at future meetings.

**THIS MONTH - OCTOBER**

Bruce Fine will be presenting **Fluorescent Rocks**, a look at the colourful display of various specimens under ultraviolet light. Bruce will be bringing UV lamps and samples. Have you ever wondered if some of your collection is fluorescent? Bring your calcite, fluorites, etc. and check it out.

**NEXT MONTH - NOVEMBER**

Don't miss our Annual Auction with Gerry Dilschneider. See the auction rules printed in this Journal, or pick up a copy, along with your Lot Slips, at our next meeting. Remember to fill out your lot slips prior to auction night. Read Lori's report farther along - she needs some people to help with the auction chores. Can you help ? It's more fun if you participate.

**AND IN DECEMBER**

We plan to continue with our annual collection of non-perishable food items as well as scarves, mitts, toques and toiletry items for the Mustard Street Ministry. A list of suggested items will be printed next month.

The Mustard Seed Newsletter is set out on the side table with the other exchange newsletters. It is interesting to read the success stories of some of their clients.

**X X X X X**

**DID YOU KNOW**

According to a geologist, the earth is made of six layers, like a cake, and the similarity is carried even further with all the nuts sprinkled on top.

**X O X**

**SOCIAL COMMITTEE**

**Carol Westley**

Coffee, Tea and Juice are served at all meetings. Food (crackers and cheese or sweets) will be served at the December, February and June meetings. I'm looking for some help in the kitchen on meeting nights. If you can help, call me or come talk to me in October.



**ANNUAL POT LUCK SUPPER**

**Saturday, 29 October 2011**

**BOW CLIFF SENIORS HALL**

This is our **BIG EVENT** of the fall season. I encourage all new members to come and join us. Not only do you get to eat **great food** and even **GREATER DESSERTS**, you get to meet and enjoy the friendly company of other members.

We will continue with last year's program of **hobby related material for sale** from 4:30 - 5:30 (and maybe after supper) There is space in the side room for **six ( 6 ) tables**. Members are encourage to call me **686-7135** or e-mail me **carolawestley@gmail.com** if they wish to book a table. Vendors are requested to give an item for the evening door prize draw.

Supper will start at **6:00 PM** - so be there by 5:30.

The coffee will be on and you can visit with your friends. We will need a few volunteers to help with the set up of tables and chairs as well as help in the kitchen.

Members are asked to supply their own plates, cups, utensils. We will have some paper plates and plastic utensils in case you forget. Be sure to mark your name on bowls, platters and serving utensils. Bring your favorite food - meat, salad, casserole or dessert. Don't forget we also need pickles, buns, butter and bought desserts to make the meal complete.



IT'S HALLOWEEN ! --- Come dressed as your favorite witch or pumpkin. It should be fun !

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**PUBLIC RELATIONS**

**Trudy Martin**

**Meet & Greet**

Please remember to sign in so that we can keep track of our attendance numbers at the meetings and so that you have a chance to win one of the door prizes. **Pebble Pups** - you need to put PP beside your name so we can separate those numbers from the adult numbers.

If anyone has any rock related donations suitable for door prizes, please leave them with me at the Meet & Greet Table. Thanks!

**Door Prize Winners**

**Pebble Pups:**

Pippa D'Sousa - Calcite Specimen  
Zane Domke - Pyrite Specimen

**Adults:**

Pamella Stewart - Necklace  
Bruce Deeks - Rock Slices

New **PR Pamphlets** will be printed with the new contact names. Also, **Club Business Cards** will be available to pass along to any interested friends and prospective members.

**NAME TAGS**

Please remember to wear your Name Tag. It makes it so much easier for everybody and it helps us to match names to people. **Stick On Name Tags** are available for guests and for those who forgot. Name tags can be ordered from Holger Hartmaier Membership Chairman. They are only **\$3.00**.

**COLLECTIBLES:**

We are still saving Canceled Stamps, Campbell Soup Labels and Pop Can Pull Tabs. Please drop them off at the Sign In Table. Many thanks to those members who remember to save these items.

Please use a little care and caution when peeling the soup labels off the cans. **The UPS symbol needs to be intact**. Alice says THANKS.

The same for the stamps. **Don't just rip them off with a jagged edge - CUT THEM OFF with ¼ inch of the envelope around them**. Saves us trimming them before sending them to Hermina.



Where there is a **Will**, there is a **Way**, but it is usually **Under Construction**.

Three simple steps to success.  
**Do it. Do it right. Do it right now**

Enthusiasm is contagious. Start an epidemic.

It's nice to be important,  
but it's more important to be nice.

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**MEMBERSHIP****Holger Hartmaier**

Welcome back! I hope everyone had a great summer of rockhounding activities. Perhaps you moved over the summer or otherwise changed your contact information details. Please see me at the membership table and fill out a renewal form or send me any change in your contact details by e-mail or regular mail.

Remember it's time to start thinking of renewing your membership for the 2012 calendar year. **Dues are due by December 31, 2011.** If you are a new member who was thinking of joining before the summer, now is the time to sign up and get the full benefit of the club membership. A big THANK YOU to the members who already started the renewal process at the September meeting.

Don't forget to order **name tags- only \$3.00 ea.** The Club name tags are a wonderful fashion accessory, to be worn at club meetings so we all know who you are (some people's memory isn't what it used to be). Also, during the Annual Show, you will have to have a club name tag to get past security during the set time before the doors open and it will identify you as club member to the general members of the public visiting the Show. Some club members order extra name tags for use in their show display cases. If I place your order right after a club meeting, I usually get the name tags back by the next month's meeting.

I hope to see you all come by the Membership table soon!

**Just remember**

When you pay your dues to CRLC you are getting **three** for the one price. Membership in **CRLC** automatically gives you membership in the **AFRC** (provincial) and the **GMFC** (national). You can't do better than that!

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**Friendship Week**

A ball is a circle  
No beginning, no end  
It keeps us together  
Like our circle of friends  
But the treasure inside  
for you to see  
is the treasure of friendship  
You've granted to me.

**VOLUNTEERS**

are not paid because they are Worthless  
but because they are **PRICELESS**

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**THE JOURNAL****Trudy Martin**

The Rent and the Journal are two expensive items on the club operating budget. We can't do much about the Rent but we can reduce the Journal costs if more members who have computers would access the Journal from the web site rather than receiving a printed copy.

**81** members currently access the Journal from the web site. It would be nice if a few of the remaining members on the printed list would switched over to the electronic version. **Try it and see if you like it.** If you have an older computer or if you don't have a printer - then it's understandable - you need the printed copy and that's OK.

Because more editors are sending their newsletters via computer, we have access to a wider variety of exchange newsletter. You'll find them on the side table on meeting nights. Be sure to browse through them. You will find some excellent articles, hints, tips and new ideas. Many of the articles are too long to re-print in the Journal - so read them in the exchanges.

# # #

**FUND RAISING****Lori Wichink**

Welcome back to the Rock Club and another season of excitement, adventure, and challenge. I hope you all found lots of pretty rocks this summer and are ready to start playing with them at the Weekend Workshops. My score for this summer were small black garnets from the Crowsnest Pass.

Thanks to **Murray Nicholson** for the donation of over 50 really beautiful rock specimens to satisfy every collector. They are in labeled plastic bags, so watch for them at the Raffle Table over the coming year. These rocks, as well as other items donated to the Raffle Table have been shared with the **Meet and Greet** people for door-prizes, and some lovely slices went to the **Weekend Workshop** crew for door prizes and the Introductory Lapidary class with Cal.

Thanks to **Trudy Martin** for the donation of five VHS movies to the Library and Raffle Table. Murray got them all copied onto DVDs, and it was decided that that the VHS version of the movie could be raffled off, so look for those at the Raffle Table as well.

Thanks to **Alice King** for the donation of a Club vest, which you can find for sale at the Raffle Table. Still available at the Raffle Table are a variety of vests, sun visors, and club crests of various sizes. There are only two sizes of vests available, large and medium. So far I only have one name on the list for ordering more, so if you want a vest in a size we don't have, please sign the sheet at the next meeting so we can find if there is enough interest in vests to make it worth ordering more, as we have to order them in bulk.

We have a wide variety of items to be raffled off this year, from books and magazines, movies, to all kinds of rock

specimens, rough and finished items, but we are always happy to accept donations.

There are also items available for silent auction at the Raffle Table. If you have any items that you wish to sell at the silent auction, just bring them to the Raffle Table and we will be happy to offer them to club members for you, you keep whatever they sell for. We are also continuing with tailgating, if you have more than one or two items you wish to sell you can set up your items at another table, the fee is a donation to the Raffle Table.

### CRLC ANNUAL AUCTION !!!

#### GREAT DEALS ON GREAT STUFF!!!

Friday November 11 is our Annual Auction. Doors open at 6:15 p.m. for lot registration so bring in your goodies for sale and get set for a fun evening. For new and returning members, the rules of the Auction and lot registration forms will be available at the Raffle Table at October's meeting, so if you have any questions just ask there. If you pick up a lot registration form at the October meeting and have it filled in when you bring your item in for registration, this would help that process move along faster. Mel Martin and friends have offered to run the side room where the lot items will be on display and where you can pick up your goodies at the end of the auction, but this is the last year he wants to do this and is looking for someone to train how to do this job in coming years, so please volunteer with this in mind. We are looking for volunteers to help run the auction, the positions still open that we need volunteers for include 2 people to register lots in, record the sales during the auction, and collect the money afterwards, 1 person to sign out the bidding paddles and collect them afterwards, and 1 or 2 people to run the items from the side room to the auction block during the auction. There will be sign up sheet for volunteers at the Raffle Table.

Thanks to Gerry Dilschneider for offering to be our auctioneer at the annual auction in November, he does an excellent job and thanks to Murray Nicholson for asking him to help us out again.

#### Rocks In Books

Lori Wichink

This summer I was busier than I'd expected working two jobs and going camping every chance I got, and did not get a chance to finish updating the library and get the new library list online as I had planned to, so I apologize for this. I have more time now and will have this done in time for October's meeting. For new members, the Club offers an extensive library, with hundreds of books and audio-visual materials on every aspect of rock collecting and what to do with your treasures. I bring a small selection of books and videos to the monthly meetings at the Raffle Table, if you wish to borrow them, just sign the card and give it to me, the borrowing period is one month and you can return it at the next meeting. I'll also bring books to the Weekend Workshops, when I go there, that relate to the classes being offered, so they are usually available there as well. Or if there is a book or video on

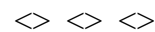
the online Library List, just call me or email me and I can bring it to the next meeting. You can borrow them for one month and return it at the next meeting.

One member asked me what the process is for obtaining books for the Library. If there is a particular book or video that is not in the Club's library that you would like to see there for all members, please let me know what it is, what the price is and where I can get it, either online, or at a store in Calgary. Then at the next Board of Director's meeting I can obtain approval for funds, which are available, to order it, or go and get it, so it can be added to our collection.

Thanks to Trudy Martin for the donation of five VHS movies to the Library and Raffle Table. These movies are: "Gemstones of America," "Best Places To Find Cash And Treasures Collection 1," "Ammonite," "Gemstones," and "Gros Morne National Park."

Trudy also donated a boxful of magazines, some "Rock & Gem," and "Lapidary Journal," which will go to the Raffle Table, as well as 11 hand-bound books that will go into the library. These hand-bound books contain a large variety of fascinating articles that were clipped out of rock magazines and bound together into one book, each with a Table of Contents of all of the articles.

So, if you wish to borrow a book or audio-visual material from the library, the list is available on the website under Library. Email me, use Rock Club Books as a subject so if it goes to my junkmail box I'll still see it, at [lwichink@hotmail.com](mailto:lwichink@hotmail.com) or call me at 403-828-3479 and if I don't answer – I work graveyard shifts and sleep funny hours sometimes, so the best time to call is after three in the afternoon – leave a message (sometimes it rings about ten times before voicemail kicks in). Let me know which book or movie you'd like to borrow and I'll bring it to the next meeting. If you have books you want to return, bring them to the next meeting. You can find me at the Raffle Table.



#### ANNUAL SHOW

Bob Hightower

Last year's show was a **TREMENDOUS** success thanks to all the great people who helped out by taking the time to volunteer at the show.

This year's show will need all the energy and enthusiasm you can spare so we can recapture our previous successes.

As of the publishing of this journal, the Show Committee has yet to meet. I look forward to our committee meetings and will keep everyone informed as to the planning of the upcoming show.

If you have any questions or suggestions about the show, feel free to contact me, or any of the committee members as we would be more than happy to hear from you.



**WEEKEND WORKSHOPS**

**Sandy Bessey**

We're starting an exciting new year with exciting new ideas! To start off with, the new name – which will replace Crafty Saturdays, will now be called **“WEEKEND WORKSHOPS”**. The sign up sheets will be available at each Club meeting and also available at the Weekend Workshops. When you sign up, you will then receive a Confirmation Sheet which will include all the information you need for your workshop. This will help students to remember what is required, including attending. ☺

Right now workshops are available for September, October and November. The following workshops are offered for October and November:

**October 22**

- Free Form Hammered Pendant
- Choker Necklace
- Introduction to Faceting
- Silversmithing: Handmade Iron Steel Tools

**November 19**

- Wig Jig Wire Wrapping
- Silversmith Class (**2 Days: November 19 & 26**)

**November 26**

- Free Form Wire Wrap Pendant
- Choker Necklace
- Silversmith Class
- Introduction to Faceting

Vera Seeton will offer her kitchen services for lunch and beverages at our Weekend Workshops - Oct. 22, Nov. 19, Nov. 26 and are very well priced. This helps support the Fceters Guild.

In November, the sign up sheets will be available for the new year for January, February and March.

Your participation as a student or instructor is what keeps our workshops in this club alive! I hope to see you there participating.

If you have any questions, please e-mail me.

**slbessey@telus.net**

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It would be helpful to Sandy if members would contact her with

- ❖ The type of classes they would like to take
- ❖ The type of classes they are willing to teach.

You don't have to be an EXPERT to teach a class. The student / members are smart and can think for themselves.

After watching KIDS making attractive pendants at the Chehalis show, I sat down with the instructor and tried my hand at it. I made a Hammered Pendant. It's not perfect - but it's a start. Be sure to sign up for the class and see what you can create.

[ TM ]

**The Finishing Touches to Stringing Beads**

**What you need:**

- 1 Barrel clasp
- 2 Crimps
- Pliers
- String of beads

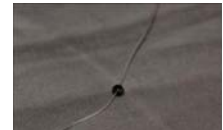
You can string beads for a necklace using a variety of materials such as thread, cord, or even fishing line. Depending on the length that you want your necklace to be, there are a few ways to finish it. If your necklace is long enough to go over your head, you can simply string your beads, and knot it; each time you put the necklace on, it just slides over your head. However, if you want something shorter you can use crimps.



You can buy crimps in a variety of styles and colours, but they are essentially metal beads that you pinch together. Once you have your beads strung, make sure you leave the ends long and then

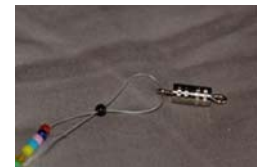
finish each side individually.

Take one end of the necklace and thread it through a crimp. Then, loop it through one end of the barrel clasp. You then want to thread the end back through the crimp creating a loop.



You want to take the end of the string and knot it to itself, between the beads and the crimp. You will need to make several knots until you can see the lump below the crimp. Make sure that the knot is close to the crimp, which should be close to the barrel end.

Use pliers to flatten the crimp, which will then keep the string pinched. Here is a picture of the finished work with both crimps flattened.



Do the same to the other side. This will be harder as you need to keep the beads, crimp, and barrel close together.

Once you have this down, you can tie multiple strings of beads together-- just make sure that you keep all of the ends together when knotting.

**By: Shelley Gibbins**

The picture quality is not as good as the original ones Shelley sent with her article - for this I apologize. Some daze the computer wins - no matter how hard you try to adjust the text and pictures from the original article the computer always wins. Maybe it is time for someone with more computer knowledge to take over the job of Editor.

[ TM ]



## ALBERTA FEDERATION OF ROCK CLUBS

### Alberta Rockhound News

Members are reminded subscriptions to **ARN**, the official publication of the AFRC - are up for renewal. Irene Novlan will be happy to accept your subscriptions at the October meeting or you can mail your cheque, payable to AFRC, to Irene at -

**415 Cedarille Cresc. SW Calgary AB T2W 2H5**

Subscription rate is **\$7.50**.

You have the option of receiving a black and white, printed copy in the mail or an electronic copy, which will sometimes have colour pictures. Let Irene know which you prefer and, if you want the electronic copy, your e-mail address.

### AFRC DUES

Alberta clubs pay dues of \$5.00 family, \$4.50 Adult and \$4.00 Student each year to the AFRC. From this, AFRC remits a portion to the GMFC. As you can see, that doesn't leave too much for the AFRC to work with. The one **fund raising event** the AFRC has is the Auction on the Saturday night of May Daze - the May long weekend.

The 2012 May Daze (May 18-19-20) will be hosted by the Medicine Hat Club. More details as plans are finalized. In the meantime - start setting aside a few rocks and items for the **BIG AUCTION!**

Next AFRC Directors meeting and Pot Luck Lunch will be Sunday, November 20 at the Bow Cliff Hall.



## GMFC HONOURARY SCHOLARSHIP ----- PAT HAUSBERG

Pat is one of the behind the scene workers that quietly carries out tasks. Without people like her volunteer organizations could not function. Let us tell you her story.

Pat and husband John joined the Richmond Gem & Mineral Club in 1966. When John chaired the annual show Pat did all the mundane tasks. When he became president Pat became the secretary. In 1976 they joined the Calgary Rock & Lapidary Club.

Pat became the Show committee secretary for the 1978 show. She also volunteered with ticket sales. At every Calgary show since 78 including the 2011 show she has worked on ticket sales and the information booth. She did miss the 2009 show when her and John went on a cruise to celebrate their 50th anniversary.

She was an AFRC Director for over 10 years. During that time the AFRC almost went into bankruptcy due to the cancellation of Government funding. Pat organized a lottery to help fill the coffers. It took 3 years before the AFRC was in the black.

Pat also spent 9 years as a Director of the CRLC where she handled the membership role. Pat will now select the University for the 2011 Graduate Scholarship.

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**Congratulations, Pat** - a well deserved honour.

Members are reminded that they can nominate a member of their choice for this award. There is a form to fill out listing the accomplishments of the person you have chosen. CRLC has had several members previously honoured: John Saunders, Trudy Martin, John Hausberg, Vi & Don Merkley. Who can we add to the list for 2012 ? [ TM ]



## GEM & MINERAL FEDERATION OF CANADA

Elections for the 2012 Executive and appointment of committee chairmen was held during the Annual General Meeting that was held last June in Castlegar, BC.

Past Pres - Dave Barclay - Winfield, BC  
 President - VACANT  
 1st Vice - Peter Hagar - Regina, SK  
 2nd Vice - Rob Whiskin - Lumby, BC  
 3rd Vice - Fiona Jakielaszek - Edmonton, AB  
 Secretary - Linda Zepick - Lumby, BC  
 Treasurer - Mal Mc Murdo - Calgary, AB  
 Insurance - David Hunter - Ashcroft, BC  
 Membership Directory - Heather Hunter - Ashcroft, BC  
 Editor - Doug Murray - Vancouver Island, BC  
 <spmurray@telus.net>

### Some highlights from the meeting

- A location is needed for the 2012 Show & Convention.
- To improve communication between the GMFC and the Clubs, a condensed version of the Minutes will be sent to every Club President and Club Contact Person.
- Since only the interest on the Scholarship Fund can be used for scholarships, a motion was passed to transfer \$10,000.00 from the GMFC account to the Scholarship Fund.

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**Golden Rock & Fossil Club Celebrates Its  
GOLDEN ANNIVERSARY**

On a very warm Sat night at the beginning of September we had a potluck to celebrate our **50th Anniversary**, acknowledgment of our lifetime members and to wish happy birthday to Ilsa Salt (as she turned 80 this year).

The sun was warm, the food and friendship terrific, the mosquitoes only snacked on us a small amount. We had the youngest who was under a year, the twins who are almost 2 1/2, and lots in between. The birthday girl and 3 of our life members there together.

Our life members are **Ken and Rena Piggot, Ilsa Salt, and Basil Parker**, who has moved to Nelson, B.C. He wasn't there but we thanked him as well.

We celebrated and remembered where we have been, what has been given to us and what we all have . We also thanked the members for sharing all of their knowledge. The Birthday girl was taken on a fast rock trip by the twins Liam and Rowan Ward, up, down and around the driveway and then they had a chance to check out the rocks in the rockery. Linda Kane/Perzinger made two beautiful decorated cakes, a huge anniversary cake and a birthday cake. Everyone enjoyed the evening and the 3 boys had a blast with a double dip shot of chocolate cake. It was a lovely celebration with wonderful friends.

By - Becky Kamstra

**SILVERSMITHING CLASS**

**Beginner - November 5 & 6, 2011.**

**Workshop November 19 & 20 9 AM until 4:30 PM**

Cost \$60.00 for the class plus your kit cost ( depends on the price of silver)

Class is in Golden at the College of the Rockies,  
Address--- 1305 - 9th St South, Golden, B.C.

Call 1-250-344-2010 to register  
Thanks --- Becky

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Cal Luchuck, Bob & Lorna Hightower attended the class last year. They were very pleased with the quality of the instruction and with their final projects.

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**IMPORTANT ANNOUNCEMENT**

**FIELD TRIP TO CANMORE  
POSTPONED**

Due to an unexpected family emergency, Doug and Glennie of **Gorgeous Glass** could not be sure they would be back home to host the **October 1 st** tour of their studio workshop.

It didn't seem practical to drive that far just for the **Ammonite Factory tour.**  
SO  
Both events are being rescheduled to **Saturday, 5 November 2011**  
**Weather Permitting**

New Sign-Up Sheets will be available at the next meeting.

Information on **The Rock & Fossil Clinic** being held **Saturday, 15 October** is posted on the back page of this Journal. We hope some of you will be able to attend. However, you will have to make your own arrangements for transportation.

Lorna Hightower  
Field Trip Chairman  
<lhightower@shaw.ca>

**14 inch Overhead Lapidary Saw**

c/w Blade & Motor

**PRICE REDUCED**

**\$ 400.00**

**All reasonable offers will be considered.**

**CONTACT**

**Ted & Alice Jaquish**

**403-243-3144**

**I AM THE MESSENGER**

As Journal Editor, I have a complete club e-mail address list. Therefore, if a Message or Announcement has to be sent to the members - I am the one who sends it. **HOWEVER** - if you have a question regarding any message - Field Trip, Weekend Workshop, Pot Luck Supper, Auction or whatever - you should contact that Club Chairman. **It has nothing to do with me** and it will save me having to forward the messages to the person they should have gone to in the first place. I'm sorry if this sounds "bitchy" but I already spend enough time on Club Stuff - Journal, Show, Parliamentarian. I don't need stuff that belongs to someone else.

- Trudy Martin -

**CRLC AUCTION OUTLINE / RULES****October General Meeting:**

Pick up **Lot Slips** (3 lots/page) at general meeting. Each member allowed a **maximum** of 3 lot items or 6 lots per family.

**November General Meeting / Auction Night:****RULES FOR CONSIGNEES AND BIDDERS**

1. The maximum number of items or boxed lots is limited to three (3) per member - six (6) per family
2. The cost to register an item or boxed lot will be a **non-refundable \$1.00 per item or boxed lot.**
3. The member will keep all money received from the auction of the item or boxed lot.
4. The Auction Committee reserves the right to limit the overall number of auction items.
5. Lot items will be accepted from **6:15 PM until 7:00 PM.**
6. Bring lot items to **Desk** to register with the lot slip(s) filled out: - - - - -  
description of lot item, consignee (your) name, yes or no to donate to CRLC if item doesn't sell, and minimum bid, if any. Stay at desk until worker has all required information registered.
7. **Minimum Bids will be posted.**
8. Lot item(s) will then be given to another worker and put into the viewing room.
9. Move down the row and pick up your buyer paddle number.  
**\*\*\* Buyer paddles must be returned following the auction. \*\*\***
10. Sit down and wait until the viewing room opens. **No access to viewing room until all lots have been registered and placed into viewing room.** Viewing will commence @ 7:00 and continue until the meeting starts at 7:30. It will resume again at the coffee break
11. During the auction, when bidding on a lot item, hold paddle number up so auctioneer can clearly see your number.
12. **NO PERSON WILL CASH OUT BEFORE THE END OF THE MEETING.**
13. After the auction is over, and the **meeting adjourned**, you then line up at the desk to pay for items you bought **You will be given a stub to claim your purchased lots.** If possible, please have smaller change as we won't be able to change large bills. If you are paying by cheque, make it payable to **Calgary Rock and Lapidary Club.**
14. You will give your stub to the worker in the viewing room who will give you your purchased lots. The worker will keep the stub.
15. Consignees, may now collect money from the Registration Desk for your sold items.
16. If you consigned a lot which did not sell, and you are taking it back, please mention this to the worker in the viewing room who will get those item (s) for you.

**If you need more information, contact the Auction Chairman**

**Lori Wichink 828-3479**

**<lwichink@hotmail.com>**

**COMING EVENTS**

Tues. Oct. 11	CRLC Board of Directors	<b>7:00 pm</b>
Fri. Oct. 14	CRLC General Meeting	<b>7:30 pm</b>
Sat. Oct. 22	<b>Weekend Workshop</b>	<b>9 am - 4 pm</b>
Sat. Oct. 29	<b>Annual Pot Luck Supper</b>	<b>4 -10 pm</b>
Tues. Oct. 25	Show Committee Meeting	<b>7:30 pm</b>
Tues. Nov. 8	CRLC Board of Directors	<b>7:00 pm</b>
Fri. Nov. 11	CRLC General Meeting	<b>7:30 pm</b>
	<b>Annual Auction Night</b>	

Come early **6:30** if you are bringing items for the auction.  
Viewing of items to be auctioned **7- 7:30** & at coffee break.

Sat. Nov. 19	Weekend Workshop	<b>9 am - 4 pm</b>
<b>Sat. Nov. 26</b>	<b>Weekend Workshop</b>	<b>9 am - 4 pm</b>
Tues. Nov. 29	Show Committee meeting	<b>7:30 pm</b>
Tues. Dec.. 6	CRLC Board of Directors	<b>7:00 pm</b>
Fri. Dec. 9	CRLC General Meeting	<b>7:30 pm</b>

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**BOW CLIFF SENIORS**

The Bow Cliff Seniors offer a wide variety of activities and classes - morning, afternoon and evening - something to suit everyone's time and talents. There is exercise, sing-a-longs, bridge, cribbage, harmonicas, paper tole and oil painting.

Wednesdays at noon there is a luncheon - soup and sandwich at a nominal price. This is followed on alternate weeks by bingo or a slide show / movie.

**Calgary Dollars Market @ Bow Cliff Seniors**

2 nd Monday of each month 6 - 8 pm  
4 th Saturday of each month Noon - 4 pm

Check out their activity sheet on the bulletin board next time you are at the hall.

**Second Annual Gem & Mineral Show**

in

**Calgary Chinese Cultural Centre**

**OCTOBER 14-15-16, 2011**

Friday 4 pm - 9 pm Saturday 10 am - 7 pm  
Sunday 10 am - 5 pm

Gems, Collection Minerals & Fossils,  
Handmade Jewellery, Beads, Carvings & More

Looking for Lapidary & Jewellery related demonstrators

**contact ALEX - nexikan@gmail.com**

For more Show Information & Discount Coupon

**www.CalgaryGemShow.com**

**ALBERTA PALAEOONTOLOGICAL SOCIETY**

The APS holds monthly meetings and seminars in Room B108, Mt. Royal University at 7:30 PM in Calgary, Alberta. Business meeting is followed by a lecture.

**PUBLIC IS WELCOME.**

Next meeting - Friday, 21 October 2011

**Speaker: Philip Benham**

**Topic: Living with Fire: Cultural Adaptations in the South Pacific to Geological Processes**

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**PALEO 2012 - APS SYMPOSIUM 2012**

**Saturday, March 17, 2012**, from 9:00AM to 5:00PM  
Alberta Palaeontological Society 16th Annual Symposium and workshops on **Sunday March 18, 2012**, 9:00AM - 4:00PM (in conjunction with the Mount Royal University Earth Sciences and CSPG Palaeontological Division)

**ARCHAEOLOGICAL SOCIETY OF ALBERTA  
Calgary Centre**

The Calgary Centre meets the **3 rd Wednesday** from September through April. Meetings consist of lectures by archaeologists and scholars from the local community, as well as further afield.

Meetings are held at The **UNIVERSITY OF CALGARY, Tom Oliver Room (Earth Sciences 162)**

Field Trips are planned to sites throughout Alberta, during the summer months.

As well as receiving monthly newsletters, members will also receive the Spring and Fall issues of the Alberta Archaeological Review

**For more information-e-mail <asacalgary@yahoo.ca>  
Web Site www.arkyalberta.com**

**Rocktober Gem Show**

**OCTOBER 6 - 16, 2011**

5230 - 45 St Lacombe Centre Mall, Lacombe, AB

With over 10,000 lbs of new goodies on the way; including gemstones, minerals, fossils, beads, findings, books, Sterling silver, tumbled stones, crystals & rough stones, there is something for everyone. We are even returning to the Green River Formation in Wyoming, to pull some more amazing fossils direct from the mine !

**Melissa & Chris Robak**

**Silver Cove: From Rock 2 Gem**

Tel: (403)789-1308 Cell:(403)598-5724

**thelonangers@hotmail.com**

**www.silvercove.biz**

### Digital Antique Metalsmithing Books

**Charles Lewton-Brain** and the **Ganoksin Project** ([www.ganoksin.com](http://www.ganoksin.com)) have announced their plan to digitize more than 40 complete rare antique metalsmithing books and make them available to the public. There will be a minimal charge for each download - currently \$1.35 per volume.

The books being digitized cover special techniques including chasing, repousse, engraving, soldering, construction, patination, silversmithing and more. Included in the books are a variety of "recipes" for alloys and metal surface treatments. Some are handwritten, others typeset.

Plans are to release volumes gradually over the next few months. The books will be available as pdf files and the reader will be able to search for specific text and images with easy access through an interactive table of contents.

The \$1.35 fee per eBook will allow you to install, read and print the material on a single computer.

The website for accessing these books is [www.ganoksin.com/listing/ecom-catschow/dab.html](http://www.ganoksin.com/listing/ecom-catschow/dab.html). Proceeds from the downloads will be used for the Ganoksin Project.

Thus far, the following volumes are available.

- Educational Metalcraft by P. Wylie Davidson, 1913
- Metal-Work, Chasing and Repousse for Home Art Workers by Frank G Jackson, 1903
- Decoration of Metals - Chasing, Repousse and Saw Piercing by John Harrison, 1894
- Watchmakers' and Jewelers' Practical Receipt Book, 1892
- The Private Book of Useful Alloys and Memoranda for Goldsmiths, Jewellers by James Collins, 1871
- Repousse Work for Amateurs by L. L. Haslop
- Electro-Plating (with numerous engravings and diagrams), Paul Hasluck, Editor, 1905
- Art Metal Work and Jewelry by Louis J. Haas, 1916
- The Jewelry Repairer's Handbook by John Keplinger, 1902 H
- How to Enamel: Practical Enameling of Jewelry with Hard Enamels by Howard M. Chapin, 1911
- The Art of Enamelling Upon Metal by Alexander Fisher, 1905

From Gem Cutters News  
June-July & September 2011  
Carolyn Weinberger, Editor

Thank You, Charles. This is a wonderful project you and Ganoksin have undertaken. Please keep us updated on future developments and / or other projects you might decide to take on.

- TM -

### MORE SILVERSMITHING NEWS

From time to time we have BORROWED silversmithing hints & tips from other newsletters. We now have our own contributor ! Brad Smith <[brad@greenheart.com](mailto:brad@greenheart.com)> from Santa Monica, CA.

**More BenchTips by Brad Smith** are at  
[Yahogroups.com/group/BenchTips/](http://Yahogroups.com/group/BenchTips/) or  
[Facebook.com/BenchTips/](http://Facebook.com/BenchTips/)  
and now, on a regular basis, in our Journal !

Brad says: *I'm glad to supply these free to fellow rockhounds. The understanding is that the material is for non-profit use, to be given away, and not to be sold. The only thing I ask is an acknowledgment with each publication.*

Thank You, Brad. I'm sure our members will get a lot of help from your articles. Here is the first of them. - TM -

### PICKLE PROBLEMS

Dropping a hot item into the pickle after soldering causes a hiss that sends small droplets of the acid pickle into the air. This will rust your nearby tools and can't be all that good to breathe either. My solution is to use a coffee cup of water next to my solder block to quench the piece before dropping it in the pickle.

Also, a hot pickle pot gives off fumes that bother me in my home workshop. I get around that by using my pickle cold. I mix it a little stronger than with a hot pot so that it works about as quickly. I keep it in a large-mouth peanut butter bottle and cap it off whenever I'm done using it.

### MODIFY TOOLS FOR PRONG SETTING

When setting stones in a prong mount avoid slipping by grinding a groove in the face of your prong pusher or one jaw of your flat-nose pliers.

Easiest way to cut the slot on the pusher is with a file., and the easiest way to cut the slot on your pliers is with a cutoff wheel in the Freedom.

### SOLDERING PRONGS

I often use prongs to hold an irregular cab or other object on rings and pendants. But they're a little tricky to solder. You have to find some way to hold them all upright while soldering, and what looks like a strong joint sometimes turns out to be a fake. There's nothing worse than having a prong break off when you're setting the stone \*#~\*!

I solved both problems with one little trick. Locate and center punch the location for each prong. Then drill holes just a little smaller than your prong wire. Sand a small taper on the ends of your prong wires and insert them in the holes. The wires support themselves, soldering is easy, and the joint is stronger because of the increased soldering area.

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Mineral of the MonthRock Forming Minerals: The Pyroxene Group

By - Holger Hartmaier

As a brief review, so far we have covered the following rock forming minerals in this series of Journal articles:

- ❖ October 2010- Introduction to Rock Forming Minerals.
- ❖ December 2010- Quartz
- ❖ February 2011- Feldspar Group
- ❖ April-2011- Mica Group
- ❖ June 2011- Amphibole Group

If you are interested in referring back to these articles, they are still posted on the CRLC website [www.crlc.ca](http://www.crlc.ca) under "Journal" or contact Trudy 403-287-1570 <martintm@shaw.ca> and she will print a copy for you.

This month's rock forming minerals come from the Pyroxene Group and are closely related to the minerals of the amphibole group, previously described in the June 2011 Journal. Both are silicate minerals belonging to the sub-class called inosilicates. Inosilicates are composed of SiO<sub>4</sub> tetrahedra linked to form chains of indefinite extent. There are two types of chain structures- single and double. Basically, the Pyroxene group of minerals have single chain structures and the Amphibole group has double chain structures. Both groups of minerals have similarities in structure and in physical and chemical properties. In each group, the silica chains are bonded by calcium (Ca), magnesium (Mg) and iron (Fe) ions. Because the bonding between the chains is weaker than within the chain itself, both pyroxenes and amphiboles have good prismatic cleavage and occur in crystals in which prism faces are prominent.

The crystal form and cleavage of pyroxenes and amphiboles are often the only way to distinguish these minerals in hand specimens. In amphiboles, the cleavage planes intersect at 56° and in pyroxenes about 93°. As a result, cross-sections of amphibole crystals are approximately diamond-shaped, whereas in pyroxenes it is square.

The pyroxenes and the amphiboles contain the same elements, so it is not possible to distinguish them on the basis of chemical tests alone. Also, physical properties such as colour, luster, hardness and density are very similar. Correct determination of rock type however requires that amphiboles and pyroxene minerals be properly identified. Crystal form is sometimes significant. Pyroxene crystals tend to form short, stubby, prismatic crystals. Amphibole minerals tend to be long prismatic, sometimes acicular or fibrous crystals.

The pyroxenes and amphibole minerals are the darker coloured (dark green-black, brownish) components of igneous rocks. Pyroxenes are characteristic of basic and ultrabasic igneous rocks (i.e. gabbro, basalt, pyroxenite). Hornblende (an amphibole) is common in intermediate igneous rocks (i.e. diorite). Amphiboles are very common in medium grade metamorphic rocks, whereas pyroxenes are largely confined to higher grade metamorphic rock types.

The chemical composition of pyroxenes can be expressed by the general formula (W,X,Y)<sub>2</sub>Z<sub>2</sub>O<sub>6</sub> in which W, X, Y, Z represent elements having similar ionic radii and are capable of replacing one-another. For the pyroxene minerals, these elements may be:

- W= Ca, Na
- X= Mg, Fe<sup>2</sup>, Mn<sup>2</sup>, Li
- Y= Al, Fe<sup>3</sup>, Ti
- Z= Si, Al

The pyroxene minerals crystallize in two different systems, orthorhombic and monoclinic. The following is a list of the principal pyroxene mineral species:

**Orthorhombic:**

- Enstatite, MgSiO<sub>3</sub>
- Hypersthene, (Mg,Fe)SiO<sub>3</sub>

**•Monoclinic:**

- Clinoenstatite, MgSiO<sub>3</sub>
- Clinohypersthene, (Mg,Fe)SiO<sub>3</sub>
- Diopside, CaMgSi<sub>2</sub>O<sub>6</sub>
- Hedenbergite, CaFeSi<sub>2</sub> Augite,
- Ca(Mg,Fe,Al)(Al,Si)<sub>2</sub>O<sub>6</sub>

- Pigeonite,  $(\text{Mg}, \text{Fe}^{2+}, \text{Ca})(\text{Mg}, \text{Fe}^{2+})[\text{Si}_2\text{O}_6]$
- Aegirine,  $\text{NaFeSi}_2\text{O}_6$
- Jadeite,  $\text{NaAlSi}_2\text{O}_6$
- Spodumene,  $\text{LiAlSi}_2\text{O}_6$
- Johannsenite,  $\text{CaMnSi}_2\text{O}_6$

Space does not permit describing each of the above minerals in further detail, so the reader is encouraged to consult one of the many excellent mineralogy texts available. Some interesting notes on these minerals are worth presenting however:

- **Clinoenstatite** and clinohypersthene are practically unknown in terrestrial rocks, but have been reported in some meteorites.
- **Augite** is the most important ferromagnesian mineral of igneous rocks. It is especially abundant in basic and ultrabasic rocks, such as gabbros and basalts and many andesites.
- **Diopside** and hedenbergite occur in medium to high-grade metamorphic rocks, especially those rich in calcium (i.e. metamorphosed limestones). Hedenbergite is often found in association with high temperature ore deposits.
- **Pigeonite** is the dominant pyroxene found in the moon rocks.
- The name **acmite** is sometimes used as a synonym for **aegirine** or for a variety occurring as long slender crystals, often brown in colour. It was originally described as an independent species, and its identity with aegirine was not established until 1871.
- **Jadeite** is intermediate in composition between the common rock forming minerals albite and nepheline, yet it is an exceedingly rare mineral. Jadeite (pyroxene) resembles nephrite (amphibole). It occurs in metamorphic rocks associated with serpentine.
- Spodumene is mined as an important ore of lithium (Li) and for ceramics. Some varieties are transparent and coloured and cut as gemstones- *Kunzite* (pink and violet), *hiddenite* (green).

#### References:

"*Elements of Mineralogy*", by Brian Mason and L.G. Berry, W.H. Freeman and Company, San Francisco, 1968.

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### BIRTHSTONES

If you have an ATTRACTION to a particular gemstone - it may be because it is your BIRTHSTONE!  
Check the list below from the CRLC WEB SITE

My birthstone is AMETHYST. What's your ?

How about everyone wearing OPAL or TOURMALINE to the October meeting.

Month	Official Birthstone	Alternates	Month	Official Birthstone	Alternates
January	Garnet	Chalcedony	July	Ruby	Pearl Turquoise
February	Amethyst	Hyacinth Zircon	August	Peridot, Sardonyx	Carnelian, Alexandrite
March	Aquamarine Bloodstone	Jasper, Ruby	September	Sapphire	Beryl, Lapis Lazuli
April	Diamond	Sapphire, Crystal	October	Opal	Tourmaline
May	Emerald Chrysoprase	Agate,	November	Topaz, Citrine	Pearl, Garnet, Cat's-Eye
June	Pearl, Moonstone, Alexandrite	Emerald	December	Turquoise, Zircon	Blue Zircon, Ruby



**ATTENTION  
ALL EDITORS**

**Annual SCRIBE Meeting & Editors  
Get-To-Gether**

Saturday, 21 January 2012 09:00 am to Noon

Senior Citizen's Centre, Moon Mountain Road

**QUARTZSITE, ARIZONA**

What Every Editor Needs  
Hints, Tips, Handouts, CD's, Prizes

**PLUS**

Coffee, Donuts and Friendly Faces !

What More Could You Ask For ?



**BC GEM SHOW  
APRIL 13, 14, 15, 2012**

**Club & Special Display  
Demonstrations, Dealers  
Children's Creative Workshop,  
Grab Bags, Spin & Win**

Adults - \$6.00 Students 6-17 \$2.00  
Under 6 (accompanied by an adult) Free

AG-REC BLDG. CFV FAIRGROUNDS  
32470 Haida Drive, ABBOTSFORD, BC

For more information, check out their web site

<http://www.lapidary.bc.ca/gemshow.html>

**Show Chairman**

Cam Bacon 604 - 854 -1711  
showchaircam@yahoo.com

**2012  
American Federation Shows**

- |               |   |
|---------------|---|
| May 18 - 20   | Northwest Federation<br>Kennewick, Washington           |
| July 13 - 15  | California Federation<br>Riverside, California          |
| July 26 - 29  | Midwest & American Federations<br>Minnetonka, Minnesota |
| Sept. 15 - 16 | Eastern Federation<br>Harrisburg, Pennsylvania          |

We will print the other federation show dates once the information is received. In the meantime - check out their web sites. Go to <http://www.amfed.org/> and from there to the federation you are interested in.



**CALGARY ROCK &  
LAPIDARY CLUB**

**52 nd ANNUAL**

**GEM, MINERAL &  
FOSSIL SHOW**

Saturday, May 5, 2012 9 AM - 6 PM

Sunday, May 6, 2012 10 AM - 5 PM

**Dealers, Demonstrations, Displays,  
Fish Pond, Silent Auction, Information**

Guest participants will be

**The Alberta Palaeontological Society  
The Archaeological Society of Alberta  
The Calgary Faceters Guild  
Dinosaur Research Institute  
Stone Sculptors Guild of North America**

**If you know of a show - within easy driving distance  
or**

**An ideal place to spend a few days, meet some rockhounds, buy some  
treasures, go on a field trip .....**

**Let me know and, if there is space, I will include it in Show News.**

- TM -

If you are into Rock  
visit the **APEGGA**

# Rock & Fossil Clinic



A celebration of National Science and Technology Week (October 14-23)

**Saturday,  
October 15, 2011  
10 a.m. to 3 p.m.**

**Canmore Museum and  
Geoscience Centre  
Canmore Civic Centre  
902B - 7 Avenue**

Bring in your found rocks and fossils for identification by Professional Geologists

Do fun hands-on science activities

Hear guest speaker Shawn Marshall speak on  
Glaciology from 1:00 to 2:00 p.m.

*Mr. Marshall is Canada Research Chair in Climate Change with the Department of Geography at the University of Calgary*



The Association of Professional Engineers,  
Geologists and Geophysicists of Alberta

### **Festival of Eagles**

SATURDAY, OCTOBER 15  
9:30 A.M. TO 5:00 P.M.  
CANMORE CIVIC CENTRE

- ▶ Colin Weir and the Alberta Birds of Prey Foundation:  
Live Birds of Prey Exhibit
- ▶ Spotting Scopes Eagle Viewing
- ▶ Birding along the Bow with Ben Gadd. Two hour presentation  
starts at 10 a.m. Civic Centre Atrium. Pre-registration required.  
Call 403-678-8938 or email: [spectatorvents@canmore.ca](mailto:spectatorvents@canmore.ca)

