



# MAP NEWS

Internal Newsletter of the Multinational Andean Project

<http://www.pma-map.com/newsletter/v1n2.html>

Vancouver, BC, June 1st, 1998

A Monthly Update of Internal Project News

Vol 1 - No. 2

## Upcoming Activities



Mt. St. Helens

### Volcanology Field Course (Activity: B.98/M-3)

This field based course will focus on mass wasting processes (such as massive debris avalanches, lahars and mudflows as well as primary and secondary pyroclastic deposits), ice contact features and structural associations with volcanism. The trip will start from Vancouver, B.C. on August 10 and spend the first week looking at deposits from Mt. St. Helens and Mt. Rainier. Following this, the trip will proceed north into central British Columbia to view ice contact and recent volcanic/tectonic features in the Wells Gray-Clearwater Volcanic field (central British Columbia) and in the Garibaldi Belt (the northern end of the Cascade volcanic arc). The trip will end in Vancouver on the evening of August 21. The course will focus on practical hands-on field work and review of deposit types and processes. Participants must have entry visas for both the United States and Canada and arrive in Vancouver no later than the evening of August 9. Departure from Canada can be no sooner than the morning of August 22. Participants must be prepared for rugged field work in remote areas. A suggested equipment list will be sent to all participants. Participants are responsible for airfare to Canada. Once in Canada accommodation and other expenses (with the exception of items of a personal nature) will be covered by the project.

#### Itinerary:

**Aug. 10:** - Drive to Mt. St. Helens

**Aug. 11:** - Mt. St. Helens - debris Ava-

lanche, lahar deposits, surge deposits

**Aug. 12:** - Mt. St. Helens to Mt. Rainier - ice contact deposits, flows.

**Aug. 13:** - Mt. Rainier - Ocoela mud flow deposit, return to Vancouver by late PM.

**Aug. 14:** - Drive to Wells Gray area.

**Aug. 15:** - Wells Gray - ice contact volcanism, subaqueous processes.

**Aug. 16:** - Wells Gray - ice contact volcanism, subaqueous processes. Drive to Lillooet.

**Aug. 17:** - Drive to Meager - Coast Plutonic Belt, volcanically triggered catastrophic flood deposits, welded "Merapi" style breccia.

**Aug. 18:** - Drive to Squamish - Coast Plutonic belt, volcanically triggered catastrophic flood deposits, welded "Merapi" style breccia. Drive to Squamish.

**Aug. 19:** - Fly from Squamish to Mt. Cayley (dacitic complex) - overview of Garibaldi Belt, sample collection, stratigraphy, ice contact features and evidence of recent tectonism.

**Aug. 20:** - Fly from Whistler to Mt. Cayley (work as Aug. 19).

**Aug. 21:** - Fly from Whistler to Mt. Cayley (work as Aug. 19).

Please send names of participants from your country to the MAP office: Fax (604) 666-7507.

### Mineral Deposits Field Trip Update (Activity: B.97/M-1)

The Mineral Deposits Field Trip of Argentina and Bolivia is tentatively scheduled to start on Nov. 21st. 98 in La Paz, Bolivia and end on Dec. 6th 98 in Tucuman, Argentina. At present project management in Vancouver requires the names of the participants from each country in order to organize transportation and to help the host countries organize accommodation during the trip. Dr. Al Sangster of GSC Ottawa is presently negotiating the final itinerary for the trip with the project managers in Bolivia and Argentina. Dr. Andre Panteleyev and Dr. Al Sangster will give an introductory lecture during the tour on "Ore Deposit Models and their Applications" and each of the two host countries will provide a lecture giving a metallogenic overview as well as guide books on the tour region. If you have any questions, comments or suggestions please forward them to Mike Ellerbeck: [mellerbeck@gsc.nrcan.gc.ca](mailto:mellerbeck@gsc.nrcan.gc.ca)

## Other Joint Activities

<u>Country</u>	<u>Activity N°</u>
<b>Argentina</b>	A.96/A-2, A.98/A-1, A.98/A-2, D.96/A-1, D.96/A-2
<b>Bolivia</b>	A.96/B-3, A.98/B-1, D.96/B-7, D.96/B-9, C.98/M-1
<b>Chile</b>	A.97/C-3, A.96/C-13, D.96/C-14, D.97/C-4
<b>Peru</b>	A.96/P-4, A.98/P-1
<b>Multi</b>	B.97/M-1, B.98/M-2, B.98/M-3

Please check the activity numbers corresponding to your country (Report #7B). Each of these activities involves travel of either Canadian scientists to a member country or of a South American scientist to Canada. *Now is the time to start planning the activities, so please forward suggestions of dates for the activities to Mike Ellerbeck.*

## Project Information and Profile Enhancement (Activity: C.98/M-2)

On June 2, 1998 Project Manager Dr. Catherine Hickson will be flying to Mendoza, Argentina to represent the project at the "International Symposium on the Andean Cordillera". After the conference she will be meeting SERNAGEOMIN scientist and Project Leader Dr. Moyra Gardeweg and they will travel to Arica, Chile to do field work. Dr. Hickson will be returning to Vancouver on June 14.

## Airborne Survey in Argentina (Activity: D.96/A-2)

Due to poor weather conditions brought about by the "El Niño" phenomenon the completion of this activity has been delayed. We are hopeful it can be completed within the next few months. Dr. Teskey will commence work on interpretation of the data collected to date.

## Cartographic Standards Committee (Activity: B.98/M-2)

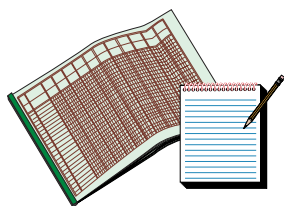
During the recent Executive Council Meetings in Vancouver each country identified two candidates to sit on the Cartographic Standards Committee:

<b>Country</b>	<b>Representatives</b>
<b>Argentina</b>	Graciela Marin Roberto Miro
<b>Bolivia</b>	Oscar Flores Jose Luis Argandoña
<b>Chile</b>	Renate Wall Paulina Gana
<b>Peru</b>	Robert Monge William Martinez
<b>Canada</b>	Robert Cocking Steve Williams

Please forward contact phone numbers of the above representatives to Mike Ellerbeck. They will be contacted and given further instructions.

## Electronic Conference Room

Recently an "Electronic Conference Room" has been added to the project WEB Page, enabling realtime digital conferencing between all project members that have access to the World Wide Web. We plan to initiate the "conference room" with a group discussion on the topic of project cartographic standards.



## Questionnaires

The recently implemented use of pre- and post-activity questionnaires has been successful. Ms. Claire Despina of GSC Vancouver is in charge of sending out the questionnaires and is the designated recipient for the completed ones. The completed questionnaires are proving to be useful indicators of the success of activities carried out and will aid in planning future activities.

Project leaders, trainers and participants of the four countries were asked to complete a short questionnaire on the activity they were involved with. A total of 74 questionnaires were sent out to participants in all five countries involved and so far 39 completed questionnaires have been received back in Vancouver. We are still expecting to receive more questionnaires from the 4 countries in the next month. Thank you all for your collaboration!

A summary table showing statistics will be included in the next quarterly report (Report #8).

Send completed questionnaires to Ms. Claire Despina at:  
 Fax: (604) 666-7507  
 Email: ([cdespins@gsc.nrcan.gc.ca](mailto:cdespins@gsc.nrcan.gc.ca))



## Samples

### Departure of Dr. Ben Edwards from MAP

Dr. Ben Edwards, who has been working with MAP in charge of rock sample analysis (at GSC Vancouver), is leaving the project at the end of June 1998. He has just been hired as an Assistant Professor at Grand Valley State University in Allendale, Michigan, USA. We are sad to see him go but wish him much success in the future. His new Email address at Grand Valley State University will be: [edwardsb@gvsu.edu](mailto:edwardsb@gvsu.edu).

Ms. Rocío Lopez of GSC Vancouver will take over part of Dr. Edwards duties and a new part time student will also be helping over July and August. We will be hiring a replacement for Ben as soon as possible.

## Sample Processing

### Sample Schedule

Please forward a rough schedule of when you will be sending samples for dating or geochemical analysis to Dr. Ben Edwards. With this information we will be able to make projections on when results will be available.

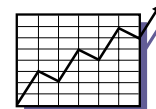
The following is the list (as discussed at the Vancouver 1998 executive council meeting) of critical sample information needed for all samples to be dated radiometrically or analyzed for major, trace, and rare earth elements. This information should also be collected for litho-geochemistry samples if at all possible. Thank you to Dr. M. Gardeweg for her suggestions and for sending the sample information sheet used in Chile for K-Ar samples.

### Critical Sample Information

Sample number:  
 Latitude:  
 Longitude:  
 Country where collected:  
 Province/state where collected:  
 Map sheet where collected:  
 Collected by:  
 Date collected:  
 Location description:  
 Sample Description: (colour, weathering characteristics, rock type, minerals present, rock textures/structures, degree of alteration, inclusions/xenoliths, metamorphic grade)  
 Name of formation from which sample was collected:  
 Geological setting: (local stratigraphy, nearby dykes intrusions/faults, major structures)  
 Estimated age:  
 Work already completed:  
 Work to be performed: (thin sections, dating (indicate K-Ar, Ar-Ar, U-Pb), geochemistry, hand samples, mineral chemistry, isotopes (indicate Sr, Nd, Pb, O)).

Complete descriptions of the sample and the surrounding geology is particularly important for interpreting the results of Ar-Ar dating.

## Verifiable Indicators



- At the Geological Association of Canada, Pacific Section luncheon meeting October 08, 1997 Dr. Andre Panteleyev of XDM Geological Consultants gave a short talk. The title was: "Transferring Canadian Geological Survey Practices to Developing Countries - A Learning Experience: The Multinational Andean Project as a Working Example".

- Simon Fraser University, undergraduate Mr. James Wigmore wrote a paper on MAP for the LAS 309 "Mining in Latin America" course, dated December 15, 1997. The paper includes a general project overview and history of the project.

- On February 12, 1998 Dr. Catherine Hickson and Dr. Steve Gordey gave a talk at the BC-Yukon Chamber of Mines. Dr. Hickson gave a project description and overview and then Steve Gordey related his particular experiences in Peru.

- The Northern Miner newspaper of April 6, 1998 printed a project announcement. It introduced the project and gave contact numbers.

- On May 13, 1998 during the Best Management Practice Forum in Ottawa, Dr. Catherine Hickson spoke on MAP in a seminar entitled "ESS International: Some Lessons Learned". Others covered experiences in Riyadh and Sri Lanka.

For further MAP information please consult the project Web page at:

<http://www.pma-map.com>

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and supervised by MAP Project Manager Dr. Catherine Hickson

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