

# **MAP NEWS**

#### Internal Newsletter of the Multinational Andean Project

http://www.pma-map.com/newsletter/v1n11.html

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A Monthly Update of Internal Project News

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#### 1998/99 Year in Review



Signing of Minutes - Executive Council Meeting, Parksville, BC, Feb/1998

### First Quarter (April 1st- June 30th,1998)

On May 15, 1998 the first issue of MAP News appeared in English and in August the first Spanish version was produced as well. The initial mandate of the Newsletter was to inform MAP participants of project activities, however, it soon became apparent that interest in the Newsletter was far reaching and distribution has now reached several hundred. Each issue is also available on the MAP Web Page.

A Cartographic Standards Committee comprised of two members from each of the five countries was set up and initial planning began for future conferences on this important part of producing useful maps.

From June 2 to 14, 1998, MAP Manager Dr. Catherine Hickson represented the project at the "International Symposium on the Andean Cordillera" in Mendoza, Argentina, after which she and Dr. Moyra Gardeweg, SERNAGEOMIN scientist and MAP Project Leader for Chile, travelled to the Arica area of northern Chile to do fieldwork together.



MAP Executive Council at Myra Falls Mine, Campbell River, BC, Feb/1998

## Second Quarter (July 1st - Sept. 30th, 1998)

Volcanology Field Course. Participants from Argentina, Chile, Peru, Canada, and the United States had a wonderful opportunity to observe and learn about Quaternary volcanism in northwestern North America on the MAP-sponsored Volcanology Field Course, August 9-22, 1998. Led by MAP Manager Dr. Catherine Hickson, with additional specialists Dr. Murray Journeay of the Geological Survey of Canada (GSC), Dr. Patrick Pringle of the Washington State Geological Survey, and Dr. Kelly Russell of the University of British Columbia, field course participants visited Cascade volcanoes Mt. Rainier and Mt. St. Helens (erupted 1980) in the United States. They also observed young volcanic and ice contact features in the interior of the British Columbia Cordillera, as well as pyroclastic deposits and a geothermal area in the Coast Plutonic Complex of western Canada.

On September 25, 1998, the flying portion of the Airborne Geophysical Survey in the Puna Austral area of Argentina was completed.

Contributing to the Hydrogeology development project in Chile, SERNAGEOMIN geologist Sergio Iriarte visited University of Waterloo (Ontario, Canada) scientists Dr. Ramon Aravena and Dr. David Rudolf, who had already started fieldwork in Chile in January 1998 with SERNAGEOMIN.

SERNAGEOMIN geologist Carlos Perez de Arce visited scientist Mike Villeneuve at the GSC's geochronological laboratory in Ottawa, Canada, in July 1998. The objective was to gather information to aid in setting up a similar geochronological program in Santiago, Chile. The main focus was on the Ar<sup>40</sup>-Ar<sup>39</sup> radiometric dating facilities.

### **Third Quarter** (Oct. 1<sup>st</sup> - Dec. 31<sup>st</sup>, 1998)

Part II of the Volcanology Field Course successfully took place in Chile from November 23-29, 1998. Led by Dr. Moyra Gardeweg MAP project leader for Chile and coordinated by Geologist Jorge Clavero, both of SERNAGEOMIN, the course started in Santiago and then proceeded to the Antofagasta area of Chile. Participants from several countries visited important volcanoes, a geothermal field, and associated deposits. Both parts of the Volcanology Field Course (Part 1 in Canada and the USA) were successful in expanding the participants' geological knowledge and giving them invaluable new field experience by exposing them to a tremendous variety of volcanic rocks.



Volcanology Field Course, Chile - Nov/98

Dr. Andre Panteleyev of XDM Geological Consultants, Canada, visited Peru in October and November. At the offices of INGEMMET he demonstrated the use of the PIMA II (Portable Infrared Mineral Analyzer) equipment for identifying alteration minerals. He also lectured on Metallogeny and Geology of Mineral Deposits, and with INGEMMET staff conducted fieldwork in various mining districts of Peru. Future visits from Dr. Panteleyev will include more Short Course work in Metallogeny planned for March 1999.

Mid-year Executive Council Meetings for MAP took place in Buenos

Aires and Lobos, Argentina from November 13 to 15, 1998. The meetings were attended by representatives from all participating countries except Peru. Highlights included:

- Decision to list all publications from project activities on the MAP WEB page.
- Updating the Cartographic Standards Committee, and naming Mr. Robert Cocking of GSC Vancouver as leader of the group.
- Planning the presentation of a 1:1,000,000 Geological and Metallogenic Map of lat. 10°S to 30°S to be coordinated by Dr. Zappettini of SEGEMAR, and a MAP Symposium, at the IX Chilean Geological Conference July 31 to August 4, 2000 in Puerto Varas.
- Rescheduling the Mineral Deposits field trip for May 1999.
- Proposal by Argentina to set up a MAP Multicountry Fellowship Fund for scientific travel and exchange.
- Agreement that each country would send in Work Plans for the 1999/2000 fiscal year by February 1999.



Executive Council Meeting and MAP Presentation at the X Latino American Geological Congress - Buenos Aires, Nov/98

In Buenos Aires presentations were given about MAP activities during the X Latin American Geology Conference (November 8-13, 1998).

A short course on Geophysical Modelling was given in early November by Dr. Carmel Lowe of the GSC to SERNAGEOMIN geologists in Santiago, Chile.

GSC Technical Advisor to MAP, Dr. Art Soregaroli, visited

SERGEOMIN participants in La Paz, Bolivia in November 1998, and then INGEMMET in Lima, Peru, in December 1998, to review MAP objectives and planning for future activities.

MAP thanks Dr. Orlando Sanjines of SERGEOMIN, and former project leader for Bolivia for his contribution to MAP. Dr. Sanjines finished his work with the project in October 1998. The new Project Leader in Bolivia is Ing. Humberto Mallo Gonzales.

The MAP Web page has received significant attention since its inception in fall 1998. All member countries have been encouraged to send regular updates to Mr. Otto Krauth (MAP Webmaster).

### Fourth Quarter (Jan. 1st - March 31st, 1999)



INGEMMET Post-2000 Workplan discussions- Jan/99

Final airborne Geophysical Survey data from the Puna Austral area, Northwest Argentina, were distributed on January 8, 1999. Thanks to everyone who contributed to the success of this challenging and significant project.

In January 1999, Cartographic Standards Committee Coordinator Mr. Robert Cocking, GSC Vancouver and Mr. Otto Krauth travelled to Peru and Bolivia to meet with cartographic representatives and geologists at INGEMMET in Lima and SERGEOMIN in La Paz for educational meetings. They compared standards in cartography, databases, equipment, and map production techniques in preparation for the first meeting of the cartographic standards committee tentatively planned for August 1999. Similar meetings are to follow with SERNAGEOMIN and SEGEMAR, either in person or online.

In January 1999, Dr. Ramon Aravena and Dr. David Rudolph of the

University of Waterloo in Canada visited Chile for a second time to collaborate with SERNAGEOMIN on the Hydrogeology program. A short course included sharing information on groundwater flow and geochemistry, as well as isotope hydrology. This was followed by fieldwork and installation of new instruments at the study site in the Negro Francisco Basin.

In January 1999, a working group consisting of Canadians Dr. Art Soregaroli and Dr. Andre Panteleyev (XDM Geological Consultants) met with INGEMMET management in Peru to initiate a proposal outlining future (post-2000) objectives for INGEMMET. INGEMMET has almost completed its institutional objective of finishing the 1:100,000 scale geological map of Peru.

In March 1999, the GSC added Dr. Jennifer S. Getsinger, P. Geo., to the MAP work team. Educated at Harvard University, University of Washington, and University of British Columbia, Dr. Getsinger has an academic background in anthropology, petrology and structural geology, and she has taught college geology as well as worked in the geothermal and mineral exploration industry. Welcome to the Project!



The Flying portion of the MAP Puna Austral Airborne Survey was completed in September 1998 and distribution of final data to participants happened in January 1999.

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

#### http://www.pma-map.com

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