

Tim Stokes (right) with a student at Quadra Island karst field site



## NOTES FROM BRITISH COLUMBIA

- Carol Ramsey



Manager Leonard Munt (right) and Stewardship Officer Mark Salzl (left) of the Queen Charlotte Islands Forest District.

2006 has been a very busy year for ACKMA members in British Columbia, Canada, with lots of exciting developments related to karst management. Some of the highlights are:

### NEW LEGISLATION

The first Government Actions Regulation (GAR) order identifying surface and subsurface elements of a karst system and subjecting them to the practice requirement of "not damaging them or rendering them ineffective" took effect in British Columbia, Canada on September 15, 2006.

The karst resource features identified are a.) karst caves; b.) significant surface karst features; c.) high and very high vulnerability karst landscapes. The landmark order was drafted and signed by Queen Charlotte Islands Forest District (QCIFD), which encompasses the Queen Charlotte Islands /Haida Gwaii archipelago. At present, QCIFD has the distinction of being the only forest district in BC with legally supported requirements for karst, but it is anticipated that other BC forest districts will follow their bold lead.

### NEW DISTANCE EDUCATION COURSE

January marked the start of Tim Stokes' new geology online course, *Karst Landscapes, Systems and Processes*, at Malaspina University College in Nanaimo.

Eighteen undergraduates completed the course, which included a two-day field exercise on Quadra Island in April and a one-day field trip to Horne Lake Caves Provincial Park on Vancouver Island. This third year level science course is set to run again from January to April 2007.

## PROJECTS AND RESEARCH

Tim Stokes received funding through Malaspina University College for a research project characterizing the microclimates of forested sinkholes. Arrays of temperature loggers were deployed in the field in late June. A subsequent visit in August (with Kevin Kiernan in tow) has collected initial temperature data, carried out a detailed measurement of sinkhole morphometry as well as an inventory of flora. The ongoing project builds on some preliminary sinkhole microclimate measurements obtained by Paul Griffiths in 1982, and from some work on Quadra Island by Paul and myself earlier this year.



Carol Ramsey and Tim Stokes installing temperature data loggers at a test sinkhole

Paul Griffiths and I were also responsible for the construction of a new 1:250 000 scale digital karst map for the coast of British Columbia (BC). The database consisted of forest cover status as well as ecological zones and provincial-level karst potential mapping, and as well as supplemented by more current field information on the distribution and nature of coastal karst resources. This new map serves as the first step in establishing the status of coastal karst landscapes at a strategic level. The preliminary results of this project were presented in Brisbane in July.

## ACKMA MEMBERS ON THE MOVE

In late June Paul Griffiths and I had the pleasure of attending the 14th International Karstological School in Postojna, Slovenia. This year's theme was Sustainable Management of Natural and Environmental Resources on Karst. During our time in Postojna we had several enjoyable discussions with Elery Hamilton-Smith. Our only regret is the fact that we were obliged to leave early to attend the International Geographical Union Conference in Brisbane, and so could not partake of any of the wonderful field trips in Slovenia. Next time!



Paul Griffiths and Elery Hamilton-Smith in Postojna, Slovenia

An unexpected bonus during our stint in Brisbane was the opportunity to meet and compare karst management notes with Nathan Duhig, a geoscientist with the Forest Practices Authority. Dave Gillieson was also in attendance.

After the conference, Paul Griffiths and I made a brief detour to Tasmania where I received a fascinating introduction to Tasmanian karst and forest practices. Special thanks to hosts Kevin Kiernan, Ann MacDowell and Lindsay Wilson (with Forestry Tasmania) for treating us to a truly delightful and informative time!

Kevin Kiernan turned up in British Columbia in late July and was immediately pressed into service in a variety of karst projects and activities. We managed to thoroughly exhaust him before delivering him into the capable hands of Jim Baichtal in southeast Alaska.

Highlights of our visit to Prince of Wales Island included a field trip to see some current karst catchment monitoring projects, and of course the opportunity to meet and exchange ideas with our karst colleagues to the north!

As well, we were particularly impressed by (and more than a little envious of) the Beaver Falls Karst Trail, a not-to-be-missed attraction in this part of the world. Our warmest appreciation and thanks go out to Jim and Karen and family, as well as to Jim's Forest Service colleagues.

In addition to all this summer activity, we had unconfirmed reports of sightings of a person fitting the description of Jay Ross entering Blak T cave on Vancouver Island. Very sorry to miss you, Jay - please come again!

Paul Griffiths and I hit the road again in October to attend the *All about Karst and Water* conference in Vienna, Austria. The sessions and presentations were fascinating and relevant to forested karst management in British Columbia and we made many valuable new contacts in this field.

Kiernan's Clear Cut Cafe. Chef Kiernan prepares lunch while standing inside a hollow stump in a clear cut on Moresby Island.



After the conference, we circled through Eastern Europe. Our first stop of note was a visit with Dr. Ilona Barany in Szeged, Hungary. Dr. Barany generously took a few hours out of her busy day to bring us up to speed on her forested sinkhole ecology research.

From there we swung down to Croatia where we took in the sights at Plitvicka Jezera National Park, a superb chain of lakes surrounded by forests and connected by beautiful tufa dams. Thank you Elyr for bringing this amazing World Heritage Site to our attention!

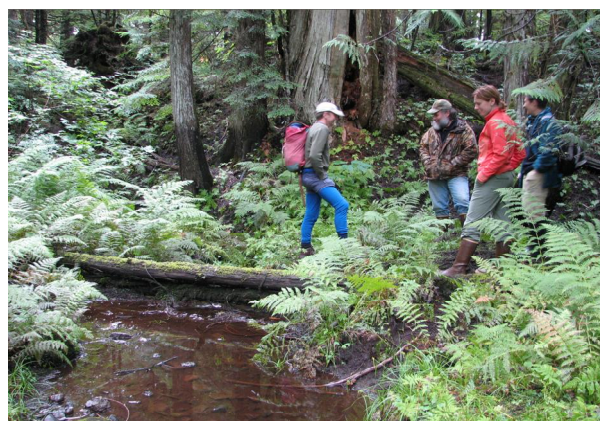
Then on to the Adriatic coastline karst and up to Ljubljana where we gave a presentation on forest karst management issues in British Columbia at the Slovenian Forestry Institute.

On our last day in Slovenia we toured the Classical Karst with Dr. Andrej Kranjc and his wife Maja of the Karst Institute in Postojna. The final leg of our European tour took us to the Dachstein Obertraun karst in Austria.

We wish to express our sincerest gratitude to the members of the international karst fraternity for

their hospitality and willingness to share their knowledge and experience.

Our travels this year have eaten many, many gigabytes worth of digital photographs, some of which we hope to share with fellow members at upcoming ACKMA conferences.



Kevin Kiernan, Jim Baichtal, Johanna Kovarik and Carol Ramsey discuss management issues at a Prince of Wales Island streamsink.