



VMSG Fieldtrip – ‘Inside Scafell and Langdale Calderas, English Lake District’ Led by Dr Mike Branney and Prof Peter Kokelaar 22nd-25th May

The 2011 VMSG fieldtrip to the Lake District, led by Mike Branney and Pete Kokelaar, was a great success, with 24 participants ready for fieldwork despite ominous warnings from the weather report!



Left: Pete Kokelaar explaining lacustrine phreatoplinitic fallout deposits (in glorious sunshine on Day 3. Right: Mike Branney piecing together the geometry and timing of caldera subsidence.

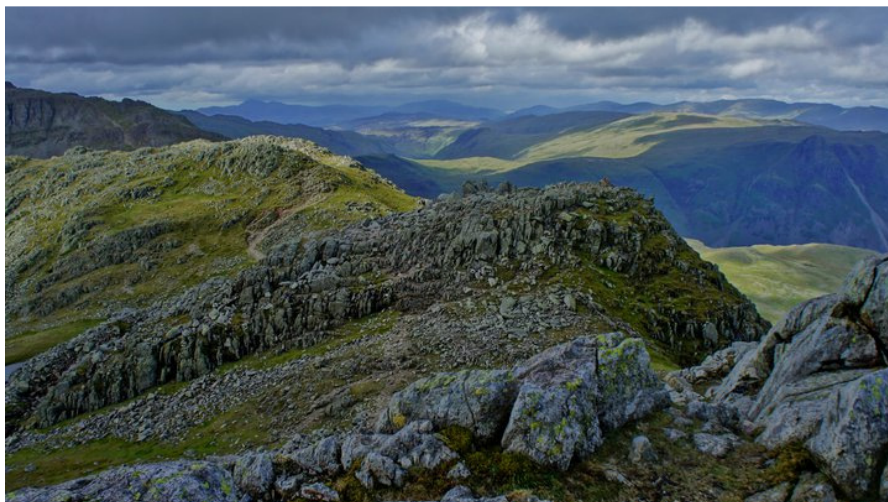
The fieldtrip began at Langdale Youth Hostel on Sunday with an evening lecture introducing the caldera volcanoes in the Borrowdale Volcanic Group. We started day 1 in the field with persistent rain, but were rewarded with a complete section above Wrynose Pass: we worked our way through the pre-caldera andesitic lavas to the Whorneyside ignimbrite, to look at the change from effusive, pre-

caldera activity to the onset of major explosive eruptions that led to the Scafell caldera collapse. The afternoon brought the sun out for a trip over Side Pike and Lingmoor Fell, on the margin of the recently discovered Langdale Caldera, to look at the Side Pike Ignimbrite and its variations across volcanotectonic faults, with a field commentary on the accretionary lapilli-bearing Glaramara and Lingmoor Tuffs by Richy Brown. Following the evening meal back at the YHA, a group excursion to the Wainwrights Inn resulted in the appreciation and sampling of many of the local ales.

Day 2 was an ascent of Crinkle Crags from Wrynose Pass over to Great Langdale through a zone of outer-arc extension caused by divergent block-fault rotation



Amidst the horizontal hail showers, storm warnings, and high winds, resilient geoscientists persist in the quest to understand the explosive history of Scafell and Langdale calderas (Photo: Neil Madden).



View to the North along Crinkle Crags – a cross section through the margins of the Scafell caldera (Photo: Neil Madden).

(downsag) with intense volcanotectonic faulting illustrating the piecemeal collapse of the Scafell Caldera, led by Mike Branney. A few blustery squalls of hail threatened the day but the sunny interludes and fabulous field exposures through the caldera fill succession from the Whorneyside and Long Top Tuffs (with spectacular deformation structures and soft-state shear), to the Crinkle Tuffs (climactic phases of the caldera-forming eruption episode) and the overlying caldera lake sediments kept us in the field until early evening.



Soft-state deformation (Photo: Neil Madden).

A descent from the hills to Old Dungeon Ghyll Hotel to partake in a well-earned beer (or two) was a perfect end to the day.



Explanation of debris-flow deposits with andesitic blocks in the Whorneyside Bedded Tuff at Sour Milk Gill.

Day 3 was led by Pete Kokelaar and focused on volcanotectonic and sedimentary evolution of a proximal sedimentary basin at the time of phreatomagmatic and subsequent magmatic eruptions through the stratigraphy at Sour Milk Gill. The day started with the Whorneyside Formation, working through the Long Top Tuffs (synchronous with caldera collapse), to the columnar jointed Crinkle Tuffs. Following a great day in glorious sunshine the group went their separate ways to return home.



When high winds strike....take cover....and seek out some accretionary lapilli whilst you're there.

Our sincere thanks are extended to Mike and Pete for leading this trip and for providing a brilliantly detailed field guide, to Richy Brown for field demonstrations, to Simon Drake for willingly driving the minibus, and to Kate Dobson for helping with the organisation.



Borrowdale (Photo: Neil Madden).

Student reports

Biannually VMSG invites applications for travel funding from postgraduate researchers registered at UK universities who wish to present their work at an international or national meeting. Reports from recent recipients of funding will be published in the newsletter.

Chris Wilcox, University of Leicester

I wish to thank VMSG for supporting me with a travel bursary of £300. This contribution made it

possible for me to attend the Fall 2010 A.G.U. meeting in San Francisco. The meeting was one of the largest so far with over 18,400 attendees, and was held in the impressive Moscone Convention Center. The conference took place at the start of the fourth year of my PhD and was perfectly timed for me to present my results (including a new geological map of my field area) as well as preliminary interpretations on a poster entitled "Can the structure of an explosive caldera affect eruptive behaviour?" My PhD research focuses on trying to establish the present-day

structure and structural history of a modern caldera volcano, and to see whether changes in the structure have affected the style and periodicity of eruptions. I had several useful discussions with constructive



Chris Wilcox

feedback on my work, which I have taken onboard. Many of the talks and posters were also useful, but especially the talks in the sessions on magma differentiation and ‘supervolcanoes’, which have given me several important ideas that have proven extremely valuable in my further developing my interpretations. Attending and presenting at such a major international conference was a fantastic and rewarding experience and I am extremely grateful to VMSG for making this experience possible.

Deadlines

Applications for STUDENT TRAVEL BURSARIES close on 15th June

The conference and workshop travel bursary application forms have been updated. Please see the attachments to the May Newsletter email. The deadline for receipt of applications is on the 15th June. If you have any queries, please get in contact with the VMSG secretary kate.dobson@ges.gla.ac.uk.

Forthcoming Events

The next VMSG annual meeting will be held in Durham, 3-5th January 2012.

Further details on the meeting will be announced in the future on the VMSG website and within newsletters.

Future VMSG fieldtrips

Forthcoming fieldtrips (2012 and 2013) are currently being arranged. Details of these will be announced in newsletters and by email. Registration for all VMSG fieldtrips is on a first come first served basis.

VMSG listserv

We have reached 1100 contacts and the VMSG email distribution list has been migrated to a listserv. In the near future we will have links to self subscribe / unsubscribe to the list from the VMSG webpage.

New VMSG committee member

Kate Saunders, Bristol University

Hi, I'm a NERC postdoctoral fellow at the University of Bristol and I am one of the new VMSG committee members. My research focuses on the petrogenesis of magmas in the crust and the timescales over which these processes occur through the application of in-situ micro analytical techniques. My work has mainly been based in New Zealand, where I completed my PhD in 2009, but current ongoing projects feature Mount St. Helens, East Africa and Iceland as well as New Zealand. The VMSG community provided an excellent support network for me during my PhD. I wish to see this continue for early career researchers as well as experience researchers and I hope to help facilitate this and the promotion of volcanic related sciences during my time as part of the VMSG committee.



Kate Saunders

Editorial

The VMSG distribution list continues to grow and we would like to welcome all new members. The current distribution list has been migrated to a listserv to be updated / amended by individuals. If your email address changes and you wish to continue to receive the newsletter, please re-subscribe to the list with your new details. Links to subscribe will shortly be added to the VMSG website. All members of the VMSG community can contribute to the newsletter. Next deadline is 30th August '11. Please forward any articles, comments or notices of events, workshops and conferences to me before the deadline.

Charlotte Vye (cvye@bgs.ac.uk)

VMSG Committee Member, Editor and List Manager