

## QRA EXCURSION TO ICELAND, SEPTEMBER 2012

### HOLOCENE TEPHROCHRONOLOGY AND ITS APPLICATIONS IN SOUTHWEST ICELAND

It is proposed to run a five-day field excursion to SW Iceland in September 2012. The overall theme of the meeting will be Holocene tephrochronology and its applications. The meeting will visit sites illustrating the fundamental tephrochronology and others that demonstrate how this can be used to provide insights into chronologies/rates in glacial, archaeological, pedogenic, palaeolimnological and other contexts. Other relevant and interesting Quaternary, archaeological and geomorphological sites will be visited en route. The excursion benefits significantly from the involvement of major Quaternary workers within Iceland; these include Jón Eiríksson, one of the foremost Quaternary geologists in Iceland with special interests in the marine geology of the north Icelandic shelf, and Guðrún Larsen, a key figure in Icelandic tephra studies. It has been proposed to combine the excursion with a QRA TIQS workshop meeting either immediately before or immediately after the fieldtrip. Details of TIQS can be found at:

<http://www.swan.ac.uk/geography/research/environmentaldynamics/tephrainquaternarysciencetiqs/>

**The details for the field excursion are provided below, including costings. We need to assess quickly how many QRA members are potentially interested in attending this excursion because of the requirement to inform the accommodation of numbers by mid-January. Therefore, PLEASE NOTE: if you are interested in participating in this excursion, please complete the attached registration form and send this with your deposit payment to James Scourse by JANUARY 10<sup>th</sup> 2012. If there is insufficient interest, all deposit cheques received will be returned uncashed.**

#### DATES:

15<sup>th</sup> September: outward travel  
16<sup>th</sup>-20<sup>th</sup> September: excursion  
21<sup>st</sup> September: return travel

#### ORGANISERS:

UK: In the UK James Scourse (Bangor) will act as the overall co-ordinator for the excursion and, with Chris Caseldine (Exeter), co-edit the proposed field guide.

Iceland: The lead organizer in Iceland is Professor Jón Eiríksson, assisted by Dr Guðrún Larsen and Dr Esther Guðmundsdóttir, all of the University of Iceland.

#### ITINERARY (see map below):

Generally there will be one long stop each day and 3-5 shorter stops to look at tephra deposits. Long stops are underlined, stops that have yellow marking may change - depending on accessibility. Photostops are dependent on weather.

#### **Theme of day 1: Hekla tephra**

Geysir - dated by Hekla tephra (wc)

Gullfoss (lunch - photostop - wc)

Section between Brúarhlöd and Foss farm: Hekla tephra 40 km from source

Trjávidarläkur section: Hekla-3,-4,-5 tephra, 15 km from source. Remobilized Saksunarvatn?

Sögualdarbær farm or Stöng farm ruin (wc) and effects of Hekla 1104 tephra  
*Supper at Hótel Hekla*

**Theme of day 2: Large basaltic tephra deposits, Veidivötn (why can't you find them?)**

Section through basaltic Settlement tephra AD~870 (Vatnaöldur tephra) on road F26

Section in wall of Vatnaöldur tephra ring - source area of Settlement tephra

Veidivötn main crater (lunch - wc) and AD~1477 Veidivötn tephra

Thórisvatn view to the central highlands, Hofsjökull and Vatnajökull (Photostop)

Section at Thóristungur: Hekla-4 units, 40 km from source

Hálendismidstöð (wc)

*Supper at Hótel Hekla*

**Theme of day 3: Intermediate and basaltic tephra, Hekla, Torfajökull, Eldgjá**

Sölvahraun on road F225: Hekla 1980/1991 tephra

Section on Krakatindur track: The Hekla xyz tephra layers

Section at Dómadalur: Regional tephra stratigraphy (permission needed)

Landmannalaugar (lunch-wc)

Ljótípollur (photostop)

Old tephra - roadside of F208

Eldgjá chasm and section through Eldgjá tephra

Skaftáreldahraun (photostop)

*Supper at Efri Vík*

**Theme of day 4: Volcanogenic flood deposits, subglacial silicic & basaltic tephra**

Skeidarársandur: Flood deposits, view to Skeidarárjökull, Grímsvötn 2011 tephra

Skaftafell (photostop - wc)

Section at Hnappavellir Quarry: Öraefajökull 1362 tephra deposits

Lómagnúpur rock fall: Grímsvötn 2011 on the ground (lunch)

Section at Eldvatn: Regional stratigraphy of the Katla area

Pseudocraters and Mýrdalssandur flood plain (view & photostop)

Vík (wc)

*Supper at Hvolsvöllur*

**Theme of day 5: Eyjafjallajökull 2010 tephra fall and flood deposits**

Markarfljót or Svadbælisá rivers: - flood deposits

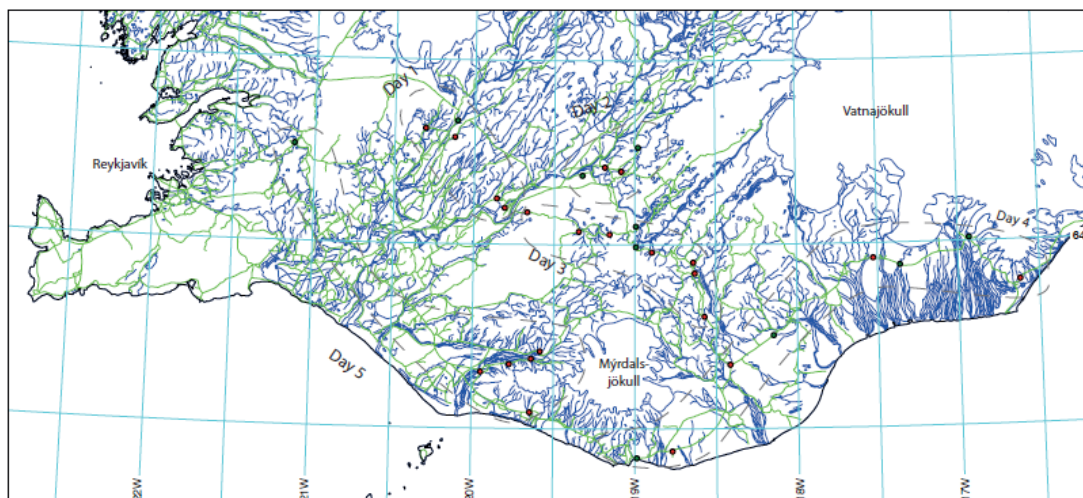
Ey 2010 tephra on the surface W of Gígjökull

Gígjökullslón: Filled in by 2010 flood deposits

Section MBH at Langanes: Katla and Eyjafjallajökull tephra

Section at Lausalda: Katla tephra and dating of Katla flood deposits

Pingvellir or Raudhólar pseudo craters - pseudotephra (photostops)



Cost to cover ACCOMMODATION, TRAVEL, MEALS, FIELD GUIDE:

£685 per person sharing double/twin room  
£89 per person single room supplement

Includes:

2 nights hotel with breakfast in Reykjavik  
4 nights accommodation with breakfast outside Reykjavik  
5 x lunch  
5 x afternoon packed refreshments  
4 x dinner outside Reykjavik  
1000 km bus (on average 200 km/day)

Please note that this cost does NOT include travel to and from Iceland, but covers all major expenses once in Iceland.

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**REGISTRATION FORM**

**QRA EXCURSION, ICELAND**

**SEPTEMBER 2012**

**I confirm that I would like to participate in the QRA September 2012 Excursion**

Name and title:.....

Address:.....

.....

.....

..... Postcode:.....

Tel:.....

e-mail:.....

Signed.....

Date.....

Please include a deposit cheque payable to “Bangor University” of £172 (double room occupancy) or £194 (single room)

Please return this form with your deposit payment to:

Professor James Scourse  
School of Ocean Sciences  
College of Natural Sciences  
Bangor University  
MENAI BRIDGE  
Anglesey  
LL59 5AB