



THE HIGHLAND GEOLOGICAL SOCIETY

Scottish Charity No. SC004427

NOVEMBER 2016

Dear Members,

RESPONSES REQUIRED!

POSSIBLE FIELD TRIP TO ISLAY 6 – 13 MAY 2017 – self led

Following the success of our week-long excursions to Mull, it is proposed to hold a further self-led field trip to Islay 6 – 13 May next year. More details are given below but **expressions of interest are required by email to Ann Reynolds at: annandpeterfarr@hotmail.com by Sunday 27th November.**

Islay has been chosen on the basis that a very good field guide to the geology of the island has just been published, full of detailed descriptions and excellent colour photographs (see below). Outcrops of interest include the Rhinns Complex (an ancient island arc dated ~1800 Ma) and the Dalradian Port Askaig Tillites (evidence of a global glacial event). The Dalradian rocks on the island are not as intensely metamorphosed as elsewhere in Scotland, allowing many original sedimentary features to be determined, and excellent examples of stromatolites can also be found. Large dykes on the northern shore, dated ~ 55 Ma, are linked to the opening of the North Atlantic and the island's Quaternary deposits show a variety of geomorphological features. The trip may include a day trip to Jura if there is sufficient interest.

The plan is for the group to be based in the Port Charlotte area, where there are various accommodation options available. If you wish to share self-catered accommodation with other members, the estimated cost for the accommodation is ~ £100 per person. There is also a youth hostel and a campsite for both tents and campervans on the edge of the village. This location will mean that most exposures can be reached within a 30 minute drive and that shared transport can be arranged.

If you wish to stay in the self-catering accommodation, payment will be due as soon as the booking is made. If you wish to join at a later date you will be responsible for arranging your own accommodation but it will help the planning process if you register your interest now.

A GUIDE TO THE GEOLOGY OF ISLAY by David Webster, Roger Anderton & Alasdair Skelton
Ringwood Publishing, Glasgow 2015 ISBN 978-1-901514-16-2

MEMBERS BOOK AUCTION

If you are a member of the society you will shortly receive information about the HGS book auction. Recent bequests and donations of books relating to geology have resulted in duplication of books already in the HGS collection held by Inverness library. Given that there is a shortage of shelf space, the committee has sought and been given permission to distribute these books to members who would like them and a fair and reasonably efficient way of achieving this has been devised. Once you are in receipt of the list of books to be auctioned, **returns are required by 16 December.**

WINTER PROGRAMME 2016 – 2017

7 December – *The real mineral resources of the UK*, Professor Peter Scott, Peter W. Scott Ltd. and Camborne School of Mines, University of Exeter

Rocks and minerals mined or quarried in the UK provide many of the raw materials for our basic industries. Those currently extracted include sand and gravel, limestone, dolomite, sandstone, igneous rocks, silica sand, gypsum, potash, salt, china clay, ball clay, common clay, building and dimension stone, slate, fluorite, barite, and talc. They are worth about £2.5 billion to the UK economy and provide around 20,000 jobs at about 2,000 sites of extraction. Processing and manufacture into mineral-based and other products that contain one or more of these minerals add considerably more value and gives even more employment. By contrast, metal ore extraction in the UK in recent years was worth about £1 million, although this will increase with a new tungsten mine now on-stream in Devon. The lecture will describe the geological features of some of the minerals that were once extracted in the UK and discuss the geological problems in extracting some of the present ones.

11 January – *WWII mica mines – Knoydart*, Andy Moffat, HGS

During WWII mica was extracted for military purposes from a remote Knoydart pegmatite in the Moine 6 km SSE from Inverie and 550 m above the north shore of Loch Nevis. The non-commercial operation ceased with the end of the war. Beryl was later investigated as a potential resource for the nuclear industry. Andy Moffat has made several visits to this fascinating locality. The presentation includes the geology and location details, the extraction, processing and uses of the mica, recent and historical photographs, geological maps and reports plus a number of specimens.

22 February – **AGM**

Following the successful format of previous AGMs, the important business part of the society's activities will be followed by a short talk:

Looking for life on Mars? Dr Alison Wright, HGS

The question of where life originated is one that has puzzled scientists for decades. Some authors have suggested that life was carried to Earth from Mars via meteorites, a theory supported by the announcement that bacteria-like fossils had been found in a Martian meteorite, ALH84001, in 1996. This claim was not supported by the wider scientific community, but, due to the presence of water, life may still have evolved on Mars. Alison shares the results of work that she did investigating why fluid inclusions in evaporites might be the best place to look for evidence of life on Mars.

22 March – *The Shaping of the Highlands: Deep-time origins and evolution of an orogenic landscape* – David Jarman, HGS

Is it possible to trace the origins of the present-day Highlands as a mountain range all the way back to the Caledonian orogeny? David will explore a geomorphological version of the Highland Controversy including issues which are apparent in the modern Highland landscape: why do all the main rivers flow east, from a main watershed close to the west coast; why are the mountain summits consistently at Munro level, yet spiky west and smooth east; does the Caledonian Unconformity tell us whether the Highlands were once as high as the Himalayas? As a geomorphologist, David applies the principles of landscape evolution to examine whether the long gap between tectonic history and correlatable deposits can be bridged by reconstructing palaeodivides. This promises to be an engaging and thought-provoking discussion, particularly as this will be its very first outing.....

12 April – **Public lecture** – **details to be confirmed but please keep this date free!**

Contact information:

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