

Saskatchewan Geological Society Lecture

Thursday, May 9th, 2019

A GEOLOGICAL TOUR OF CONNEMARA, JOYCES COUNTRY & SOUTH MAYO, IRELAND

David MacDougall

(abstract & bio below)

**Bushwacker Brewing Company,
2206 Dewdney Avenue, Regina**

Lunch: 11:45 am

Meeting Talk: 12:15 to ~1:00 pm

For lunch, the cost is:

S.G.S Members: \$15.00

Student Members: \$5.00

Non-members: \$20.00

For those members not having lunch, the talk is free.

Please contact **Kim Kreis** at alexander.pollard@gov.sk.ca or 306-787-6116

by 10:00 am, **Monday 6th April** if you plan on having lunch.

A GEOLOGICAL TOUR OF CONNEMARA, JOYCES COUNTRY & SOUTH MAYO, IRELAND

Abstract

After a brief look at the geology and major mineral resources of the island of Ireland, the talk will focus on the area of Connemara, Joyces Country and South Mayo, which occupy a broad peninsula at the central western extremity of Ireland. The tour starts with a look at the oldest exposed rocks of the Neoproterozoic Dalradian Supergroup (c.750 – 600 Ma), which were deposited in an ocean basin formed by crustal stretching that announced the break-up of Rodinia with the opening of the Iapetus Ocean. Following deposition, and mountain building during the Brazilide Orogeny (c.600 Ma). The Iapetus Ocean continued to develop into a wide basin floored by true oceanic crust separating Laurentia where the Ordovician

rocks seen in Joyces Country and South Mayo were deposited, from Proto-Gondwana. By Silurian times, the ocean had all but closed, leaving remnant basins in which the Silurian rocks were deposited. Following the Caledonian Orogeny, Ireland formed a continental block on which were deposited the desert sands and other sediments of the Old Red Sandstone. Submergence during the early Carboniferous allowed deposition of coastal and deltaic sands followed by great thicknesses of marine limestones. The opening of the present Atlantic which commenced in early Jurassic times left part of the former Laurentian continental block behind – the present west of Ireland.

Neoproterozoic, Ordovician and Silurian sedimentary rocks are all well exposed in the area, as are deeper crustal remnants of Ordovician island arcs and related granite batholiths. These rocks give rise to a spectacular, varied and rugged scenery, enhanced by severe glacial erosion during the Quaternary Ice Age.

David MacDougall, P.Geo:

- Born in Regina and moved with his parents to England at the age of one year
- Was educated in England and then Wales, where he earned a Bachelor of Science Honours degree in Geology at University College Cardiff, then part of the federal University of Wales.
- Worked for ten years after graduation in the west of Ireland for Canadian Johns-Manville, Maugh Ltd., and finally Irish Base Metals
- Married and started a family in Ireland
- Returned to Saskatchewan in 1981 to take up a job with the Geological Survey of Saskatchewan, a career that lasted until 2007, when he retired
- Currently involved with various volunteer clubs including the Regina Philatelic Club, Coin Club and Prairie Rock & Gem.