

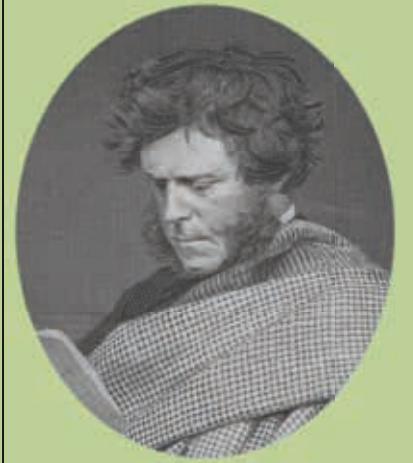
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# Hugh's News

Newsletter of  
The Friends of Hugh Miller



## THE HUGH MILLER WRITING COMPETITION 2015-2016



### INSIDE:

Our Success stories	p	3
Why Miller Still Matters	ps	5 ~ 9
Make a Right Use of Your Eyes	ps	10 ~ 11
Stunning fossil find	p	12
Romer's Gap	ps	14 ~ 17
Gorgeous quilt	p	18
Geology of Eigg	p	19

## OUR FINEST DAY

It had it all, the most successful get-together the Friends has enjoyed in its 10-year history. Saturday, 14<sup>th</sup> May 2016 will be celebrated as long as those who were there can remember it. Remembered for its writing competition winners, and their previously unknown, really exciting nature-writing talents; for Lara Reid's inspirational public talk, and for the most astonishing fossil find on the very shore Hugh Miller made famous so long ago. Follow the narratives of all that took place on our inside pages, and those who were present can relive the experience, while readers who were not there will also feel Hugh by their side, spurring them on, long before they've finished.

*Competition winners and judges: Left to right: Simon Cuthbert (judge); Mackie Robbie; Jane Verburg; Michael Davenport (in glasses); Lara Reid (judges' chair); Jim Gilchrist; Justin Sales; Elizabeth Pickett; Kenny Taylor (judge); Jim Mackintosh.*

*No wonder Jim Gilchrist has the broadest grin, holding his other prize of the day, a sensationally good Devonian fossil fish.*



## 10th AGM SUMMARIES

# OUR TOP SUCCESS STORIES

Secretary Martin Gostwick reported the Friends' outstanding achievements of 2015/16 were completing the restoration of Eliza Miller's headstone, a talk on the 2014 Betsey voyage to Cromarty History Society, and the Hugh Miller writing competition initiated by the Scottish Geodiversity Forum. We also co-sponsored the second "Betsey voyage" in 2015 off the coast of Argyll. He reported that we had 117 paid-up members, and a balance of £5,600 plus, nearly £1,000 up on the previous year, due to increased subscriptions and reduced outgoings.

### New Old Red imminent

The imminent publication of the long-awaited new edition of *The Old Red Sandstone* was noted with enthusiasm, and author Dr Mike Taylor's contributions of fascinating historical documents much appreciated. The donations of Lillemor Jernqvist, Derek Lancaster-Gaye, and Henry McKenzie Johnston to the headstone restoration, and the conservation work of Mary Markos and Karolina Allen were warmly applauded.

Another reorganisation of the National Trust for Scotland's administration was reported by the Chairman, Bob Davidson, who attended a meeting on the subject given by the Trust's CEO, Mr Simon Skinner. The Chairman commented that the Museum's future appeared to be safe, as demonstrated by recent considerable expenditure on its upkeep.

The present office-bearers and management committee were all re-elected nem con. Lara Reid was nominated to the committee by Martin Gostwick, seconded by Bob Davidson, and elected to applause. The committee now has a full complement of eight members.

A Financial Statement from the treasurer was approved, which showed a closing balance at 31<sup>st</sup> March 2016 of £5,681. Income was reported of £3,608.76, principally from membership subscriptions and Gift Aid tax rebate. Expenditure was recorded of £2,625.83, of which the principal items were the £700 honararium for the newsletter editor, £640 for the Eliza Miller headstone repair, £500 donation to the Museum for costumes, and £204 auditors fees.

### Minutes of the Mgt Cttee meeting, 14<sup>th</sup> May 2016.

Attending: Bob Davidson (Chairman); Martin Gostwick (Secretary), Sue Busby (Treasurer), Nigel Trewin, Lillemor Jernqvist.

The meeting agreed to take further the possibility of a major geology conference in the late summer/early autumn of 2017, to mark the publication of a new edition of *The Old Red Sandstone*.

The Secretary was authorised to look into the possibility of producing a folklore map, as had been suggested by Gavin Berkenheger.

It was also agreed to examine the feasibility of conserving the graves of Miller's ancestors, immediately adjacent to Eliza's headstone.

Lara Reid's election to the committee approved to acclaim.



*The Friends has a new presence in the Museum. In the temporary exhibition are artefacts donated by members Nigel Trewin and Henry McKenzie Johnston.*



PROPERTY MANAGER'S REPORT

# MAJOR CONSERVATION WORKS COMPLETED

A TOTAL of £38,000 was spent by the National Trust for Scotland over the winter of 2015-16 to render Miller House wind and watertight again and renew some of its essential fittings, property manager Dr Alix Powers-Jones told the meeting. Works included removing and roofing over two skylights which had been hidden behind displays and threatened to allow water ingress, and replacing a third skylight with a modern, conservation quality Velux. Seven of the large sash and casement windows were replaced in whole or in part, and the rest of the windows repaired as required. Alix said this had been a "superb job," which had retained the integrity of the original building.

The former oak-grained front doors which had become chipped and damaged in places were replaced with doors made of Accoya, a type of chemically treated wood which renders it salt and water resistant. It is non-toxic and an ecologically sustainable alternative to using rare hardwoods such as mahogany. The doors were primed and painted off site in "Carriage Green," with a final matt topcoat applied in situ. The contractors, Alder Timbers and subcontractors Ness Joinery spent three months on site effecting repairs and installing the bespoke windows and doors manufactured by local company Treecraft. Miller House was closed to the public during this period, and again for two weeks at the end of April during the quiet period after the Easter holiday.

Alix announced that the £500 donated by the Friends in 2015 has been spent on creating sets of costumes for visitors of all ages. Manufactured by local company "All Sewn Up," who have a qualified costume designer, we now have one adult male and female set of costumes, and two sets each for boys and girls. In addition, the volunteer textile conservators at Hill of Tarvit sewed mob caps to complete our female costume sets. Supported by staff and volunteers also in costume, these visitors' costumes will enable them to re-enact life as lived by the Miller family in the 18<sup>th</sup> and 19<sup>th</sup> Centuries.

She announced that The Friends of Hugh Miller were being offered a permanent presence in the Museum, via temporary exhibitions.

She said that Timemasters' director Duncan Cook would be present in the Birthplace Cottage on two afternoons a week to dramatise events which Miller related took place there. He would also lead "ghost walks" on Saturday evenings, recounting tales from Miller's epic book of folklore, Scenes and Legends of the North of Scotland, and other classics of the genre.

NTS Conservation Volunteers of the Trust's Highland region are to undertake a clean-up mission of the Cottage courtyard at the end of June, mainly removing weeds and moss. They will also remove the very unsightly garden shed at the rear of Paye House. This clearance will have the additional great benefit of putting back in view the remains of the single-room cottage Hugh built for his Aunt Jenny, itself a key element in the Miller story.

The Trust's London Members Centre had donated £4,000 towards surrounding the oil tank to the left of this area with a wrought-iron screen. A supplier had been found who could decorate the screen with fauna typical of the area for modest additional cost. In front of the Jenny's cottage area is a learning and recreational space which is awaiting further development.

Alix also outlined her plans for taking forward lifelong learning opportunities in the first exhibition room on the ground floor of Miller House. This could involve removing the display case there, which had been offered to other Trust properties.



Ghost walks round Cromarty are an attraction.  
Staffer Pat Hay admires the new front door.  
Lillemor Jernqvist at Eliza's restored headstone.

# MILLER'S EXAMPLE SPARKS SOME REMARKABLE NEW NATURE-WRITING

WE began the most memorable meeting The Friends has ever held by presenting prizes to winners of the "Testimony of the Rocks : Hugh Miller Writing Competition."

Seven of the twelve winners were present to receive books by and about Miller, from judges Lara Reid, Kenny Taylor and Simon Cuthbert. And they showed their utter delight with the rewards for their achievements. Many travelled considerable distances to be present, and it was especially pleasing to see so many children there.

Lara Reid said the competition's organisers, the Scottish Geodiversity Forum, were "bowled over by the range and quality" of the 37 entries from all over the country.

The book prizes were contributed by the Forum, the Friends and other sponsors, such as Edinburgh Geological Society, Our Dynamic Earth, Lochaber Geopark, Geobus and the Scottish Centre for Geopoetics.

We were proud indeed that the first prize for prose was awarded to Cromarty's own Jane Verburg, who lives in the very house where Miller once toiled as a bank accountant, and happens to be a keen member. Her essay, *Learn to Make a Right Use of Your Eyes*, brought an acute sense of Hugh's living presence among us.

Poetry first prize went to Justin Sales, who brought his family with him from Edinburgh, to help celebrate his remarkable poem, *Romer's Gap*, envisaging that time when fishes first came ashore. His piece is exceptionally imaginative. We understand that when he wrote it, he had not yet seen the current exhibition about precisely this period in the National Museum of Scotland! (see story *Fossil Hunters*, p20)

Both these entries are featured on pages 14 and 20 of this issue, and we plan to publish all the winners, and possibly some of the others too in later editions.

Here is the list of winners. Their entries are all on the Scottish Geology Forum website at:

<http://www.scottishgeology.com/hughmiller/>

You can download them from there in PDF format.

Copyright rests with them, and permission to copy or reproduce them should be sought from the Forum.

1 <sup>st</sup> place in prose:	Jane Verburg
2 <sup>nd</sup> place in prose:	Antonia Thomas
3 <sup>rd</sup> place in prose:	Jim Gilchrist
Highly commended in prose:	Paula Hunter
Highly commended in prose:	Màiri Anna NicUalraig (Mary Ann Kennedy)
1 <sup>st</sup> place in poetry:	Justin Sales
2 <sup>nd</sup> place in poetry:	Kenneth Steven
Joint 3 <sup>rd</sup> place in poetry:	Jim Mackintosh
Joint 3 <sup>rd</sup> place in poetry:	Michael Davenport
Highly commended in poetry:	Elizabeth Pickett
Under 16 Prose winner:	Mackenzie Robbie
Under 16 Poetry winner:	Annabelle Fuller

Page 5:

*Lara grips the audience, with family in the front row, left to right, Tim Reid and daughters Daisy and Megan.*

# "WHY MILLER STILL MATTERS"

Talk for The Friends of Hugh Miller, Cromarty, 14th May 2016

given by Lara Reid

## Introduction

My talk today explores Miller's appeal across generations, his mastery of language, his potential as a champion of geodiversity, education and citizen science, and quite simply his presence, which to my mind resonates as much today as it did in his own lifetime.

*"The place where the natural world meets the arts is a fruitful, fertile place for both."*

Ali Smith (2015)

This quote actually relates to an art gallery and space dedicated to those who explore natural sciences through the medium of visual art and sculpture. To my mind, this quote could be equally attributed to the writings, and indeed the life, of Hugh Miller. His love of the outdoors, his fascination with geology and landscape, and his passion for literature, story-telling, folklore and poetry appear to feed off each other, resulting in 'fruitful, fertile' prose that still speaks volumes to us today.

Indeed, the place where arts, the natural world and science meet have been explored on behalf of Miller a few times in recent years – the success of the two Betsey voyages in 2014 and 2015, and the writing competition we celebrate here today being examples of such projects.

I now work as a freelance science writer and editor. My main task in this job is summarising academic journal papers into short pieces aimed at non-specialist audiences. I write predominantly for Nature Publishing Group, as well as universities and research institutes around the world. In the case of explaining science to the general public and the media, there needs to be a 'fruitful, fertile' space where science and good writing meet, and where Hugh Miller walks to this day. Perhaps this is another reason why Miller's work appeals so strongly to me – we are, in many ways, trying to do the same job!

To be a great scientist, in any discipline, you need a strong imagination. To be a great science communicator, you need to fire other peoples' imaginations, through painting pictures with words, and selecting the most pertinent points that tell the basics of a science story in an accurate, compelling way. Miller surely fits this description!

Miller's writing is a fairly recent discovery for me. I would argue that he has as much to contribute towards science communication today as he did in his own lifetime. His prose contains some magical elements, carefully and deliberately chosen, to draw in an audience of all ages and from all walks of life – just as the results of the Hugh Miller Writing Competition have shown us in recent weeks.

Walking in other worlds: Miller as explorer and citizen scientist

*"...the best nature writers are those humble pilgrims who, with no particular competence to show off or prepared philosophy to air, wander – or rather saunter – into the world to see what it has to offer..."*

John Burnside (2012)

First and foremost, Miller was an explorer. Someone who yearned to be outdoors, tramping the coastlines, "an explorer of caves and ravines... a climber among rocks," Miller's enthusiasm and excitement for what he could find and learn whilst out walking is palpable. He would do well to be promoted as a spokesperson in the argument for outdoor classrooms, for example, or as a figure to be admired among travel writers.

Let's take a look at the scope of using Miller in the classroom. For a start, his work bridges subject areas – this is something I feel the current Curriculum for Excellence in Scotland at least has within its grasp, the chance to explore interdisciplinary projects should teachers find the time to do so. If teachers from Secondary school level Geography and English departments, for example, came together to create a mini-project on Miller, I can see a lot of elements in his writing that could be explored.





How about these as creative writing, or play-writing, prompts?

*"The dizzy front of black basalt, dark as night... the fantastic peaks and turrets in which the rock terminates atop – the masses of broken ruins, roughened with moss and lichen, that have fallen from above and lie scattered at its base..." (Cruise of the Betsey)*

*"It was a delightful evening – still, breathless, clear – as we swept slowly across the broad breast of Loch Maree; and the red light of the sinking sun... lighted up into a blush the pale, stony faces of the tall pyramidal hills" (My Schools and Schoolmasters)*

How about a lesson exploring his use of metaphor and similes?

How about exploring Miller's strong sense of place, and how landscape can influence the way in which people lead their lives?

## High-heeled shoe

Perhaps as part of a Secondary school science lesson, students could be asked to describe scientific specimens, fossils, flora and fauna using simple metaphorical language as Miller does. I speak from experience when I say that children often come out with surprisingly useful metaphors for what they see! While Miller sees the Sgurr on the Isle of Eigg as a hatchet (among other things), my daughter, Megan, told me when we visited the island that she thought the Sgurr looked like a high-heeled shoe stuck in the mud, viewed heel on at the steep end with the toe at the far end of the ridge in the sea at the other end of the island. She was only 6 at the time!

Back to our school students: they could be given an assignment to investigate a creature or fossil and write a short piece about it for a non-specialist audience. This could teach them a great deal about how to manipulate language and consider the words and phrases used – it could tie into an investigation of how science is presented in the media, too.

It would be wonderful, should our writing competition run again in future, for teachers across Scotland to become involved in order to generate under-16 entries. It is a source of frustration for me, at times, to see how segregated subject areas have become within the education system. Miller is testimony to the importance of self-education, outwith the classroom, another reason why I feel quite an affinity with him.

Activities centred around primary school classroom nature tables or the chance to spend a school day scavenging on the beach or in the woods could be easily framed with a brief study of a passage from Miller. Or, in the case of younger children, some of his ideas could be brought into the outdoor classroom, summed up to say 'if you learn to look carefully it's amazing what you can discover.'

I like Burnside's suggestion that the best nature writers 'wander into the world to see what it has to offer'; after all, this is how many amateur geologists and other citizen scientists make a start, often early in life.

## Diary format

One of Hugh Miller's strengths is in his choice of a 'diary format' for his geological writings – journals that document



Hugh's "dizzy front of black basalt"



Megan's "high heeled shoe" (Sgurr)

Photo © Gordon Brown licensed for reuse CC-BY-SA-20



This model of Miller's Plesiosaur and other fossil creatures is the creation of Eigg Primary schoolchildren and is to be found in the tiny exhibition and archive centre on the way to Cleadaile. Photo, Ro Scott.

how he gradually pieced ideas together, musing the oddities and misfits that he found along the way (I'm talking about both fossils and people here!). If you like, he was a blogger for the Victorian era. Here's an idea: why not turn excerpts from Miller's work into a blog? One could post short, choice extracts from his explorations of Scotland; I wonder how many followers he might get? Charles Darwin's *Beagle Diary* is already up online in blog form, for example.

I do wonder what Miller would have made of the fixation on computers and mobile phones that we have now? Would he see them as a distraction? Or would he find some potential there? Perhaps there is a link to be made for the positivity of carrying small computers with us in our pockets...

Miller actively encourages that people engage in citizen science, as he did. The idea of 'citizen science' has been bouncing around a lot on social media in the past 8 months or so, particularly with Sir David Attenborough calling for more people to actively study their own 'backyards'. For those of you who are unclear as to what 'citizen science' entails, it can be anything from taking part in a garden birdwatch or ground survey, to collecting data via an app on your mobile phone.

Those involved in science communication and engaging people in citizen science could do far worse than choose Hugh Miller as one of their pioneers of the concept. I love the passage in *Rambles of a Geologist* where Miller yearns for a local to study the Loch of Stenness on Orkney, which ends; "...set himself carefully to examine its productions, and that then, after registering his observations for a few years, he would favour the world with its natural history." There is great value, as Miller clearly understands, in encouraging those with inclination and curiosity to explore and record their 'local patch'.

## A sense of perspective

From a young age, Miller appears to actively seek out different ways of looking at the world – quite literally – 'learn to make a right use of your eyes,' as he so keenly tells us. His sense of perspective is always changing – from the obvious – setting rocks and fossils into a wider landscape as well as poring over their intricate details and eye-catching coloration through a microscope – to the less obvious. He describes the view out from the back of a cave as looking at the world through the eyepiece of a telescope, where the scenes "formed a series of sun-gilt vignettes, framed in jet." As the tide rises, and he and his friend realise they are trapped at the back of the cave, through his 'cave-telescope' the distant horizon and waves rolling inland become distinct and otherworldly, and we are there, trapped with him, wondering whether or not to be frightened.

There are elements of surprise in Miller's writing – he seeks the unexpected, the chance to surprise his readers and also make them smile or laugh. The result is clever, memorable prose that the reader is more likely to recall long after (s)he has finished reading. Take this description of the shoreline near Cromarty in *My Schools and Schoolmasters*. Here he describes the way in which the sea enters caves which have small holes in the roof:

*"when, during the storms from the sea, the huge waves come rolling ashore like green moving walls... they shut up the mouth of the cave, and so compress the air within, that it rushes upwards through the openings, roaring in its escape as if ten whales were blowing at once..."*



The Cromarty monument  
Photo Nigel Trewin

It may be true that, in terms of today's pared-down writing styles, Miller's prose could be considered dense at times, and difficult to bear with in places. In reality, however, compared with contemporary Victorian prose, I believe Miller wrote clearly, succinctly and above all, with humour.

Younger still, Miller describes his early scavenger hunts on the shoreline. Something I can really relate to – I still do it to this day! At one point, Miller describes finding a piece of rock which breaks apart along the bedding lines into wafer thin sheets. He delights in holding two of the thin sheets of mica up to his eyes;

*"I found, in a large-grained granite, a few sheets of beautiful black mica that, when split exceedingly thin ... made admirably-coloured eye-glasses, that converted the landscape around into richly-toned drawings in sepia ... "* *My Schools and Schoolmasters*, 1854



Transforming his surroundings into an etching; a different way of seeing. He later, as an adult, describes diving down under the sea at Gairloch; in part to determine what the bedrocks look like under a thick haze of water.

The fact that he actively seeks out different ways of seeing the geological wonders of his world to me implies not just a natural, childlike curiosity and enthusiasm – which of course Miller has in spades – but also a deliberate attempt to reach out to as many people of all different ages and backgrounds. Miller sees, and therefore describes, the world through colour and texture. His fascination with these sharpens his perception of the rocks and landscapes around him from a very young age – and I believe he targets colour and texture for his metaphors with the very specific purpose of trying to appeal to as wide an audience as possible. His use of language is often very tactile, using touch and feel to describe his fossil finds, likening their markings to everyday objects.

The metaphors he uses are often linked to the trades akin to his own early career as a stonemason. Thus he links his fossils to patterns found on wallpaper, fish scales to roofing tiles pinned on with flooring tacks. He speaks the language of the working men and women of the time, he deliberately refers to his own childhood memories of wonder, playing at soldiers with different coloured shell armies on the beach, likening fossils found in rock to currants in a Christmas cake; he is pulling people in and helping them relate to his writing. Many people would not know what a basaltic column looks like, but likening the Sgurr on Eigg to ribs of a shipwreck would be instantly recognisable to many. 'I can learn about this and so can you' is a mantra that runs through his work.



*"An explorer of rock and caves"*

To encourage others to grasp deep time, in the Cruise of the Betsey Miller likens Scotland's geological history and its study to travelling across an ocean, occasionally stumbling across islands of different rocks, each made at different times and in different ways. Making the links between them is the challenge, he muses; understanding the vastness of time between each piece of evidence is even more challenging.

In *My Schools and Schoolmasters*, he describes how he taught himself to comprehend the vast height and density of the Carboniferous forests that created our country's coal by imagining he was *"some wondering traveller of Lilliput lost amid their entanglements."*

Sometimes all it takes to help someone understand a complex concept is a carefully placed analogy, and Miller was fully aware of this in his work.

## Miller's rock trails

There's something magical about geology that perhaps is forgotten in its current guise, at least maintained by the media, as being 'just about boring old rocks'. Geology takes you off the beaten track. As you walk faultlines, dykes, ridgeways and rock lines, ancient plate boundaries and the remnants of volcanoes, you're literally tracking deep time over the landscape. This, for me, is the pull of geology.

Miller's ability to map out Scotland according to the 'rock trails' by which he walked is something I find altogether extraordinary. His mind appears full of layers of complex boundary-lines and borders where different rocks meet and are displaced, and he is forever thinking in three-dimensions (at times near-on four!) and seeing beyond what was immediately in front of him. He didn't always have a geological map to hand, and he certainly didn't have a mobile phone in his pocket to consult!

I feel truly privileged to live at a time when a lot of the landscapes and geology in Scotland are well-understood, so that I have full access to it as a near-complete story. The richness of its details, its continuing geological puzzles, and its diversity is inspiring – it is perhaps now one of my little goals, through my blog, to help others find their own moments of inspiration and understanding based on exploration of the landscape.

## Miller as a champion of 'geodiversity'

The fact that Miller is so good at retaining his perspective to involve the bigger picture is another ele-



ment of his writing I feel we can learn from. Miller's expressive language does not detract from the precise and accurate nature of his descriptions, but simply and effectively adds to them. His eagerness to describe not just the landscape, landforms and fossils he finds but the people that inhabit them is also really important. He would understand the more modern-day concept of 'geodiversity' in its true sense – namely an umbrella term that encompasses not just rocks, but landscape and landforms both past, present and ongoing into the future, and the people that live and work in these landscapes.

I have been working voluntarily for the past two years with the Scottish Geodiversity Forum – a non-governmental organisation that provides a network through which diverse bodies involved in preserving and maintaining Scotland's landscapes and geology can communicate.

Geology is 'not just about rocks (or dinosaurs)', yet it appears to have this label attached to it – one which the geological community should perhaps be rallying against more firmly. Perhaps this is even more pertinent to ensure the future of geology for Scotland's younger population, as geology as a qualification-bearing subject is no longer catered for in Scotland's state schools. Could raising awareness of the breadth of geology as a subject through voices such as Miller's be appropriate at this pivotal point?

Demonstrating to the media, and to politicians, that geology and geodiversity are about 'more than just rocks' is of paramount importance if places such as those that Miller loved to roam are to be preserved and looked after long into the future. The Forum led the development and publication of the country's first Geodiversity Charter, to which 60 organizations have since signed up.

The other side to the Forum's coin are our public outreach projects. Back in 2014-15, we ran a poll to find Scotland's top five fossils, as voted for by the public. Imagine my delight when I discovered that the Skye dinosaurs hadn't won?! Instead, the top fossils from Scotland were... Miller's own favourite, the Devonian fish! The Forum would certainly like to see the Hugh Miller Writing Competition go from strength to strength, if indeed it is feasible to run it again. The next project for the Forum is the creation of a new online resource to inform the public about the best places to see Scotland's geology.

## Conclusion

I am no expert on Hugh Miller, nor would I ever claim to be, but I feel a remarkably strong affinity with him and his desire to encourage those around him to learn and understand, to question and dissect the landscapes around him. He spoke (or should I say speaks) to so many different people in so many different ways. The entries we received to the Hugh Miller Writing Competition are testament to the inspiration he still provides. The potential spin-offs and new ideas that the competition has generated are multiple.

Miller still matters as a figure to be admired in science communication – there is much to learn from his use of language and the variety of metaphors he used to describe his intricate scientific discoveries. There is much to learn from his ability to appeal across generations and to people from all different backgrounds.

Miller still matters as someone to be treasured and taught in our schools, and as a testimony of the power of self-education. His philosophy 'to learn to make a right use of your eyes', and to learn from practical investigation of the natural world is one we should be celebrating with our young people firmly in our sights.

Miller still matters because his voice resonates from the past into our present – even though his writing and scientific knowledge is dated in places, his attitude and aptitude as a citizen scientist is still to be admired. His writing reminds us to sit up and take notice, and take pride in, the landscapes and landforms around us.

Reading Hugh Miller has awoken something in me that will stay with me forever. The man himself will accompany me, in some way, shape or form, whenever I am out and about in Scotland's stunning landscapes, and I look forward to absorbing all that I can learn from him.

All this, for me at least, is why Miller still matters.



Scotland's favourite fossil - Miller's Devonian fish  
(Fossil 5 certificate)

# "LEARN TO MAKE A RIGHT USE OF YOUR EYES"

We proudly present the remarkable sense of Hugh Miller's living presence achieved by the winner of the Writing Competition's first prize for prose

by Jane Verburg

Fossils are ghosts. Ghosts that I can hold in my hand. Turn in my pocket. Ghosts that last beyond a moment. Fossils stay. They are solid and dependable. Once a nodule is split, it stays split. I can't change the split, can't change the fossil inside. It is. And it will remain.

I have one here. A feathery echo. Filigree tidelines drawn across a sea pebble. Perfect as a hand hold. An anchor to the past. Tonight I use it to weigh open pages. I found it down on the seashore, on the east beach below the midden and the archaeology of medieval Cromarty. I'd like to ask you about it.

Sometimes I sense you about the place. I have walked the Vennels and felt the fringes of your shepherd's plaid brush my arm. I have been at the corner of Church Street at Lammastide and seen you heading off to the Clach Malloch, hammers stuffed into your pockets. Once I saw you and Lydia up in the woods, giggling.

You often saw ghosts threaded through the stairs of time. You said you knew the *tilt* of old John Feddes wandering in the dark in his light-blue greatcoat. The night your father died you saw a *dissevered hand and arm stretch towards* you; five years old. Saw straight through where the body should have been to the objects beyond. A ghost. A fleeting fossil. Nothing left for you to hold. Nothing left for you to see and study. No wonder you became fascinated by stony ghosts that stay where they are; caught in their matrix forever.

A fossil is a petrified thing. Once living, now turned to stone. Did you begin to ossify when your father drowned in the man-stealing sea? A few years later, were you gulping for air, calcifying, under your mother's rejection and the death of both your sisters? You wrote that the Accursed Stone, the Clach Malloch, underwent a *feverish dream of intense molten heat and overpowering pressure*. But how much pressure and sadness can a child contain? How many layers of grief can land on such small shoulders without change? Much later your eldest child died. And more years again, you had a *fearful dream* the very night you lifted your fisherman's jersey and shot into your skin. Stratification comes in many forms. The delicate layers rot,





the scaled harder layers remain and the die is cast.

The earth is a book of geological pages and epochs. You were a book. We all are.

At the low point of a spring tide, I climb in to the marble-producing Doocot Cave. A single rock pigeon stays. Here, where bats, like fossils, are locked for winter torpor in crevices and sharp-edged cracks; I rest on the story of a man searching for his wife amongst the mermaids. You too stayed a night here with gasping sea ghosts. So many tales, so many layers. Each of us: a precariously balanced mould with crushed internal features.

In the gloaming a sun-gilt sea outlines the promontory. Curlews etch the crooked bay. I pace the South Sutor; with fish-bearing Old Red Sandstone and Conglomerate below. Could we be formed in some way by the bedrock below us? Could our natures be influenced by the characteristics of the geology in which we live? Could the red sandstones that have been dug from this hillside and

that have built my home somehow infuse my very being? You gathered fossil fragments - squashed, contorted jigsaw pieces - collectively revealing the scope and shape of some strange creature. You walked these pathways, followed the contours, knew when a nodule might release another ghost into the world. Did you fear that one day your own father and all the lost souls from your life, would walk, arms out-stretched down the Sutor towards you?

You touched the cold enamel scales of *Osteolepis macrolepidotus*, cracked open from its sea-washed nodule. A story opened, a page in an ancient book, a folktale whispered from the rocks. You: part *sennachie*, part religious scientist. May be it is not only the Earth that holds deep time and folded complexities but also ourselves. You call me to observe *even the commonest of things*. And I try. I watch the seasons kiss the seashore. I know the prevailing winds from the lichen on the rowans and the tilt of the downy birches. Once I touched a dying woodcock when the ground froze through December and into January. I know where the woodpecker raised her young last spring and I watch the treecreepers with their downturned bills skirting ivy-ed ash trees. I hear the chaffinches' warning calls, the wrens alarming my approach, the redshanks as they move ahead of me. I know where the ferns grow greenest and which beech will fall in the next gale and even where the yellow shells get swirled and gather. I collect sea-scoured pebbles with grooves like runes, like Darwin's tree of life; keep them in a basket in the hall. But I do not notice the blue tits' nest and the bull-finches' perch nor have I plotted the edges of the buzzards' territory. The exposed Conglomerate by the Target Stone is pointed out to me not observed by me.

I am learning to use my eyes - all my senses - still learning. Your words stay with me as I take another step along the strandline, as I watch an oystercatcher return, over and over, to her drowned partner.



Left: Jane in the winners line-up for the photoshoot.

Page 10 top: MacFarquhar's Bed - one of Miller's favourite haunts

Page 10 middle: "In the gloaming, a sun-gilt sea outlines the promontory."

Page 10 bottom: Jane studying correspondence from Miller's friend Robert Dick in the Miller House parlour.

# "A DIRTY MARK UP ITS CENTRE"

By Martin Gostwick

This "dirty mark" was the rather dull first impression which Edinburgh-based writer Jim Gilchrist gained of what proved to be one of the most unexpected, and extraordinary Cromarty fossil finds in a generation.

It proved on identification by experts to be an almost complete specimen of the extremely rare Devonian era fish *Cheirolepis trailli*, just lying there waiting for the first keen eye to spot it. Other species of Devonian fish have been much more frequently found.

The discovery was an extraordinary coincidence in several aspects. One was the ease with which it came light, another that the finder was very inexperienced, and a third bit of luck was that professional geologists with the most relevant experience were on hand to verify its value at once.

Its completeness stands out, as do its powerful jaws, and scaly coat, and multiple fins, all pointing to it being a fast-swimming top predator in the vast freshwater basin known as Lake Orcadie. Hugh Miller describes the fish in minute detail at the end of Chapter IV in his most famous work, *The Old Red Sandstone*.

Some of the experts said it was about the most perfect specimen they had ever seen, and as good as anything they had uncovered in decades of active fossil hunting in that locality. An exposed specimen is most uncommon, and one of such quality still less so. Far more often, specimens are only revealed when splitting open mudstone nodules with a hammer, and even then, very often containing mere fragments.

Making it the more special was this being the very spot on the Cromarty east beach where Hugh Miller was the first to discover nearly 200 years ago the Devonian fossil fishes which made him an international household name.

The occasion was rendered all the happier in that an hour or so earlier that afternoon, Jim Gilchrist had been a prose prize-winner in the Hugh Miller Writing Competition, with his essay *Crawling Cards from Time out of Mind*. Thus he was among the other winners on Professor Peter Scott's guided tour of the beach, which was another prize.

Jim, now retired, and formerly a distin-



Top:  
A plate illustration from Miller's *Old Red Sandstone*.

Bottom:  
A close-up indicates more clearly its powerful jaws and scaly skin.



guished featurewriter for The Scotsman newspaper, who wrote several pieces celebrating Miller's 2002 Bicentenary, had raised in his essay the strong possibility of a strong connection between Miller and famed Wyoming geologist David Love.

Here is Jim's account of his astonishing find: "I have absolutely no expertise in fossil collecting and had no expectations as to the walk. Peter was explaining to us the various different types of rock littering the beach and I had already picked up a nice piece of pink feldspar encrusted with mica that I thought I'd take home as a souvenir.

"I was keeping an eye out for any flattish, sedimentary-looking rocks in the forlorn hope that if split they might reveal something, although I don't think any of us had a geologist's hammer with us. I suddenly found myself looking down at a flat, grey sample lying exposed amid the jumble of rocks and pebbles that seemed to have a dirty mark up its centre, almost like an old feather. On lifting it up (tearing some kelp strands that were rooting it to the surrounding pebbles) I saw that it was indeed a fossil fish. It caused considerable excitement among the others, and made my day!"

Professor Nigel Trewin, former Friends' chairman, and an authority on Devonian fish, subsequently confirmed that Jim Gilchrist's "excellent" specimen is categorised *Cheirolepis trailli* Agassiz 1835, named after Professor TS Traill of Edinburgh University, who collected fish around that time, particularly in Orkney. *Cheirolepis* is an ancestor of the modern bony fish such as cod.

He wrote: "Fish are normally found by splitting nodules from the fish bed, but in this case nature has done the work of the hammer, and the nodule has split naturally and exposed the fish. The outer surface of the nodule shows modern borings, and seaweed attachments, and thus has been transported up to the strand line from below low tide level.

"It probably came ashore only a few days before it was found, since the fish fossil has not been badly abraded by rolling on the beach. Attached seaweed acts as a 'sail' allowing waves to move the attached rock up the beach. The other half of the nodule may still be in place below tide level, or another lucky collector may have found it on the beach."

Prof Trewin's last comment adds an intriguing footnote, pointing to the possibility of the nodule's "other half" either still existing somewhere on the beach, or having been taken away by someone else. Either way, nothing detracts from Jim Gilchrist's wondrous find, which formed such a fitting climax to a memorable day.



The outline of Jim's *Cheirolepis trailli*

He very kindly presented it to The Friends, and we anticipate passing it on to the Museum, if an opportunity for a suitably impressive display space becomes available. It will certainly feature in our ongoing promotional activities for Miller's living legacy.



# ROMER'S GAP

by Justin Sales

Here is the poetry first prize winner. Romer's Gap refers to the period when fish first came ashore, about which a fossil record has long been lacking, hence the "gap." See Fossil Hunters exhibition details on page 20.

Locked in lochans the cold winter long  
 Warped by forces of freeze and thaw  
 Silent amorphities of trapped air  
 Shivering beneath the ice  
 Assemble themselves  
 Bestir and quicken  
 Gain definition  
 Coalesce  
 Melt  
  
 Sep  
 arate  
  
 As the bubbles  
  
 burst!  
  
 Water  
 Flings  
 Itself  
 Down  
 Hillsides  
  
 while  
 gases and  
 trace elements  
 are flung  
 to the four winds  
 molecules fizzing  
 glittering and glinting  
 like microscopic strands of gossamer  
 caught between the peaks  
 at dawn  
 wheeling over the  
 low waves  
 at dusk  
  
 exulting in the entropy of it all



Air is free, water never  
From the first tentative  
Drip, drip, drip  
To the churning  
Of the tides  
Water accumulates  
First pooling along the stems of the new grass  
Then tripping  
In rivulets  
And down ravines  
Smashed apart  
By every rock  
Then brought together again  
By gravity or God's will or merely fate  
To cycle round ever again  
For another go

From the infinite possibilities  
Of bound and rebound  
Comes one outcome  
Only one  
Only  
Ever  
One  
This one

Beneath the bubble of the atmosphere  
The rocks move, shift, settle and seethe  
Fossils swim upwards again  
Surfacing together in ancient shoals  
Exposed by wind and wave and hammer

Evidence of life fixed in place aeons ago is uncovered  
Creatures somewhere between fish and fowl  
Teeth skittering across the rocks  
Bones shadowy to non-existent  
Hands with too many fingers  
Grasp at the air of an unfriendly sky

There's a gap

Where fins become legs  
When fish became lizards  
(Or, at least, semi-terrestrial limbed vertebrates)

Between the Devonian and the Carboniferous  
After the armoured fishes  
And before the coal-bequeathing trees

Not much oxygen then  
Not many species  
Not many fossils now

But they are emerging, slowly  
Along the shores and the riverbanks  
The shingles and the strands  
Near Bass Rock and along the Whiteadder  
Lungfish and other tetrapods  
Crawling out of history  
With questions

And here they come in turn  
The fossil hunters  
Keeping their own time  
Backpacks and bubble-wrap  
And a look in their single-lensed eyes  
That speaks  
Of weeks  
Spent scrabbling on beaches like this one

Washing up along the shore each morning  
Swept back at nightfall  
To warm pubs and cold tents  
Lingering over a sunset  
Or returning later to see the moon  
A silver highway across the sea  
Ponderous

How big was the moon back then?  
About the same size, less a few asteroids  
How big did it *appear*?

About the same size, allowing for a slightly smaller orbit  
 But I saw this programme where the sky was a different colour...  
 Because of the methane?  
 What?  
 Never mind

Busy busy busy  
 Trying to understand everything  
 While there's still time

Another gap looms

Meanwhile information continues to accrue  
 Multiply  
 Inform  
 Transform  
 Take on a life of its own

Words scribbled in a notebook  
 Twenty years ago on Skye  
 Are unearthed to appear  
 Blinking  
 On the screen  
 Adapting and evolving  
 Adopting new configurations  
 And diverging

In order to live  
 Thrive  
 And survive

Trying to fit new conditions

Lines upon lines  
 Strata  
 Errata  
 Encoded data  
 Revealing just enough  
 To have a chance  
 Of living forever



*Justin receiving his prize*



# A THING OF BEAUTY TO BE LOVED AND LEARNED FROM

A gorgeous quilt celebrating Moray Firth folklore, with a special emphasis on some of Hugh Miller's best tales, is to be publicly unveiled in Cromarty soon.

It is the work of artist and storyteller Lizzie McDougall of Conon Brae, who gathers volunteers around her of all ages to help her cut out and sew on her designs to individual panels in a variety of materials, so they are engaged with and "own" the stories.

Lizzie invited The Friends of Hugh Miller to be involved in creating a panel round some favourite Cromarty themes, and so a small group of us joined her with other locals for a delightful afternoon at The Old Brewery with scissors, pins, ribbons, thread and cloth.

The key figure is the mermaid with her lyre, who tried to lure Captain Reid away from his beloved Helen Stuart. Sir Thomas Urquhart is seen engaged in a duel, and in one corner nestles a rough outline of *Pterichthyodes milleri*. A boot evokes the story of the two shoemakers (Sutors). A historic three-masted ship sails beneath a dazzling sunrise.

Among those involved were members Alison Seller, Frieda and Martin Gostwick; other contributors included Lindy Cameron, Vanessa Halhead, Kenny Taylor, and Gillian Newman.

Lizzie plans to tour the quilt round local schools, arts venues, and various public events. Her aim is to encourage people to keep traditional stories alive, by appealing to their imaginations, so they will remember the tales and re-tell them to the next generation.

Details of the public unveiling will be posted on our website when they are confirmed.



*Top:  
The group discussing how to take it forward.*

*Middle:  
Lizzie brought along a previous, finished quilt to inspire us.*

*Bottom:  
The mermaid panel*

BOOK REVIEW

# THE GEOLOGY OF EIGG

by John D Hudson, Angus D Miller and Ann Allwright.

*Edinburgh Geological Society and Isle of Eigg Heritage Trust.*

*2nd Edition, 2016. ISBN: 978-0-904440-15-7.*

Memories are still delightfully fresh of landing on Eigg in September 2014 to explore the island and meet the community who own it. We were the passengers and crew of the traditional ketch *Leader*, sailing in the wake of the voyage Hugh Miller and his friend the Rev John Swanson made in the Free Church yacht *Betsey* 170 years earlier.

Ashore, we followed some of the walks and climbs set out in this superb booklet. We were there for only 24 hours, so had time only for two of its recommended seven excursions. The first took us under the basalt cliffs and stupendous dykes along the southern shore, to the gruesome Massacre Cave, and on to the Cathedral Cave. The second was an ascent of the mighty Sgurr of Eigg, across the trap terraces, via the Recess, and up to the towering peak. Here Miller's justly celebrated description of the panoramic views is given in full.

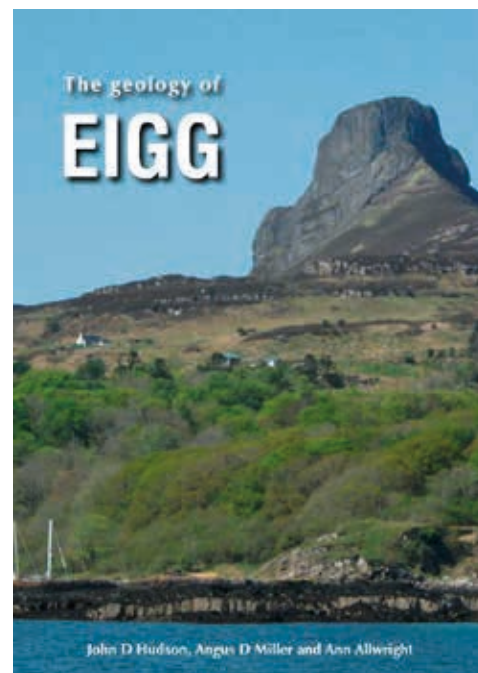
Other splendid walks take you to the Bay of Laig and the Singing Sands, and to the site on the eastern coast where Hugh discovered the Plesiosaur. All the excursions are shown with coloured dots. None are of any great length, but all involve rough walking.

This is a guidebook which assumes you have an interest in natural science, but not necessarily any prior knowledge of geology as a subject, or of Eigg's complexities in particular. That is very well provided here. The island is described as an "interesting and hopeful" place, because of both its geology, and for the warm welcome visitors receive from the community who made it their own in the famous buy-out nearly 20 years ago.

We, the Friends are very proud that the first two named authors are members of ours, and we would warmly recommend our readers to treat themselves to a week or more on Eigg, so they can do all the excursions with the aid of this guidebook. It is much embellished from the first edition, complete with superb colour photographs, and updates of the geological story.

MG

This book can be obtained to order from Edinburgh Geological Society, retail price £7.50, trade £4.90 (plus P & P), either by email to [booksales@edinburghgeolsoc.org](mailto:booksales@edinburghgeolsoc.org), or telephone to Don Cameron, the society's publication sales officer, 0131664 3894.



A printed version of this edition  
can be obtained (price £5 including P & P)  
from the Secretary.

# FOSSIL HUNTERS

## - Unearthing the Mystery of Life on Land

Discover how life on earth moved from water on to land 360-345 million years ago through ground-breaking discoveries made in Scotland. The exhibition at the National Museum of Scotland includes finds made as recently as 2015.

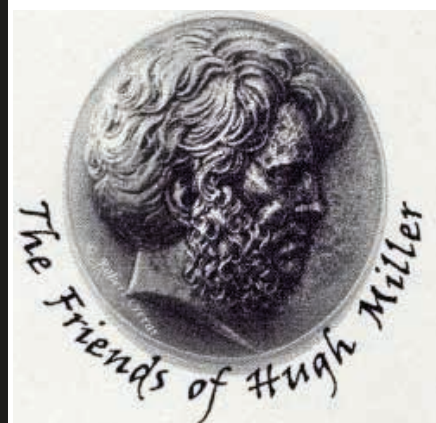
Why is this important?

Until recently no fossil evidence had been found to explain how vertebrate life stepped from water to land, leading to a gap in our scientific knowledge of evolution. In 2008, palaeontologist Stan Wood uncovered a number of fossils which began to reveal this key chapter in the history of evolution, including a notable amphibian specimen nicknamed 'Ribbo'. Spurred on by these finds, researchers from National Museums Scotland and institutions around the country have been working together to uncover more examples in Scotland.

For more details check the NMS's own site at:

<http://www.nms.ac.uk/national-museum-of-scotland/whats-on/fossil-hunters/>

The exhibition is in Gallery 2, Level 3. It is free and runs until 14 August 2016 .



## MEMBERSHIP FORM

I WISH to become a member of the charity, The Friends of Hugh Miller (SC 037351), in order to support its work in making Miller's life and work better known, and in particular to assist in the development of the Hugh Miller Museum and Birthplace Cottage in Church Street, Cromarty.

Name.....

Address.....

.....

.....Postcode.....

Tel No.....

Email address.....

Membership subscription is £15 annually, payable from 1<sup>st</sup> April, by cash/cheque or bank standing order. A standing order is preferred for administrative convenience, and if you wish to take up that option, please contact the Secretary, details below. A Gift Aid declaration form is also available, which would enable us to reclaim 25p in the £ tax on your subscription.

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