Rocks in your

Hands

by Jane Robb

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Introduction

Well, did you have ‘Rocks in your Eyes’
because now you can have
‘Rocks in your Hands’.

‘Rocks in your Eyes’ was the book I wrote which describes how I thought of the idea to make my own museum.

Now this is the story of how the museum has progressed.

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Chapter One—Small Beginnings

Well, yes I was allowed part of the games room with some display cabinets and shelves. I had started to set up a museum with leaflets, tickets and a tour guide. It was small, but at least a start.

At first our games and videos were in charge of most of the room and also my dad's drinks cabinet, so I still had a long way to go to fill the room!

It was run like a small museum. It even had a little shop (well, sort of).

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I knew of course that it just had to grow. I didn't care that it had to take over the whole room although some others might — mainly my mum and dad!

But if I was to expand my museum, I would have to go out and collect more minerals, so I would have to have more room, so my mum and dad would have to agree.

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Chapter Two — Moonzie Farm Charm

By now I was a member of the Scottish Mineral and Lapidary Club, Edinburgh Geological Society and Rockwatch.

All these clubs go on outings and excursions and I have been on most of them. Since I have been on so many I'm only going to tell you about one from each group.

The first one was with the Scottish Mineral and Lapidary Club to Moonzie Farm, which is in Fife.

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The following story was written by me when I was nine years old, shortly after my exciting visit to Moonzie Farm. I thought I should include this story to give you a feel of that wonderful day.

The Runaway Agate

Finally the day I've been looking forward to arrives. On the bus we were told it was Moonzie Farm. This was the Scottish Mineral and Lapidary Club excursion on the 23rd January 2000. My first agate hunt.

Halfway down the first field, I saw little bands shimmering. I took a closer look and yes, there it was, my best agate I've found yet!

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I collected some others but none compared to this one. I showed it off on the bus home and it was admired.

Eagerly I rush into the house, get a basin of water, ready to wash and open my bag to find all my agates except one. It wasn't there! Tears, panic, sadness, we hunted everywhere. My mum phoned the bus company who were a bit surprised when she said her daughter has lost a stone on your bus. Of all the things they are used to having left, I imagine a stone is not very usual. The driver suggested my mum phone back in the morning but we didn't hold out much hope.

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Monday morning I was at school but mum did phone.

‘Yes madam, eh, I do have a stone.’
‘Does it have lines on one side?’ said my mum.
‘Eh, well yes,’ was the reply. Obviously, they could not understand how a stone could mean so much to me. I don’t think I could put a value on this agate. It is now very precious to me.

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Chapter Three – Red Rubies?

The Edinburgh Geological Society has a monthly outing all through April to October each year. I have been on many excursions but the one I have chosen to write about is probably my favourite! (Well, exept for the Scremerston one and Craigie hill Quarry and Petershill Quarry and Stannergate and so on and so on …)

We started a whole new day at St. Monance where we could walk to Ardross and then to end our day at Elie.

At St. Monance there are sedimentary rocks from the Carboniferous period. They are mainly limestones.

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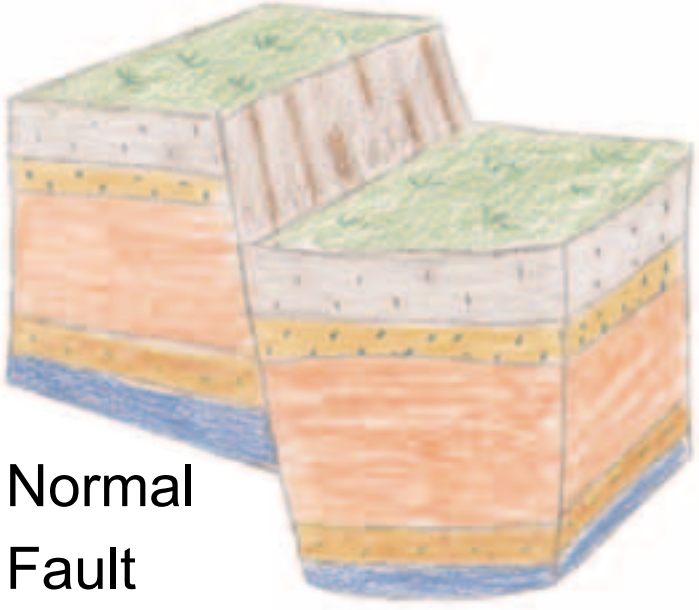
But along the Ardross fault there are many areas where you can see igneous rock break through at the volcanic necks. And at Elie the black pyroxene sand reveals some little treasures!
A fault is when the rock breaks and the two parts move away from each other.
You can get different types of fault depending on how the rock is displaced.



Normal Fault

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Volcano cone erodes away to leave the hard plug or neck.

Volcanic necks are basically the same as volcanic plugs. They are the left over igneous material which filled the vents of a volcano. They are usually not eroded away as they are harder than the rocks surrounding them.

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Walking along the beach always makes me alert to any rocky marvels. Something always comes up and so like usual, I found something nice.
This time it was a piece of sandstone with some little circular dents in it. It was an imprint of a tree root from the Carboniferous period called Stigmaria. Of course it was very heavy so mum got the job of carrying that one home.

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Further on we reached the world of crinoid stems. All over the place there were little pieces of stems big, tall, long, small. In between the stems were some gastropods.

Crinoids were animals that looked like plants. They have a long stem attaching them to the sea-bed (although some did move freely in the water) and arms on the top to catch food with.

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Gastropods were animals which lived in spiral coiled shells. Modern gastropods include winkles, whelks, limpets and snails.

When we came to our last stop at Elie we were told to hunt for garnets! I was so excited and couldn't wait to get started. Our backs ached as we scrabbled on the rough black sand searching for minuscule little garnets. All of us were lying flat on our tummies looking closely for tiny red specks in the mass of black pyroxene.

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Almost everyone had found at least one garnet — except me when,

‘I’ve found one, I’ve found one!’ yelled my mum. Excited and happy I rushed over to her full of delight. But when I saw it I stopped. It was tiny!

A few minutes later I suddenly shouted ‘here, here, I've got one!’

Then two, then three garnets and more …!
All of them were tiny but they were garnets after all and — what do you expect?

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They were called Elie rubies by the locals because of their vibrant red colour but of course rubies are a very different mineral to garnets and

‘All that is red is not ruby!’

At the end of the day I was exhausted after a long trip. It had been worth it though, (all trips are)!

I had found some nice stigmaria, crinoid stems, gastropods and of course, garnets!

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Chapter Four — A Hill, A Poem and An Award

Rockwatch is a national club for young geologists. You receive magazines and fact cards through the post along with details of events held throughout Britain.

In some areas, local groups meet and my local group is run through the Royal Museum of Scotland. Lots of different activities are held once a month on Saturday mornings and between October 2000 and June 2001 the group took part in the John Muir Award.

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John Muir was a famous Conservationist who lived from 1838 to 1914. He was born in Dunbar, Scotland and moved to the USA in 1849. He campaigned his whole life to preserve areas of wilderness.

The first part of the award is the Discovery Award and you have to complete four challenges:

Discover a Wild Place;
Explore its Wildness;
Conserve the Wild Place and
Share your Discoveries

Our Rockwatch group explored Corstorphine Hill in Edinburgh.

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Discover a ‘Wild Place’

This was my second visit to Corstorphine Hill because I had been with the Edinburgh Geological Society before and there is an excellent leaftlet produced by them telling you how it formed.

The hill was formed about 340 million years ago. Sand and silt were laid down by a river and eventually the sand turned into sandstone and the silt into mudstone.

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Volcanoes were erupting around Edinburgh at that time but at Corstorphine the magma didn't reach the surface and formed a layer in between the sandstone and mudstone. This magma hardened to dolerite, a hard crystalline igneous rock.

Afterwards an earthquake tilted to form the hill. Erosion by the glaciers in the ice-ages over the last 2 million years has formed the hill we see today.

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Explore its Wildness

There are many things that catch your eye on Corstorphine Hill. One is the Dolerite Quarry. The dolerite was formed from magma which didn't reach the surface and hardened as an intrusion. It is called a sill. It was quarried for building stones for walls and houses in the past. It is commonly named whinstone or whin.

Another quarry is of siltstone known as the pavement quarry. Siltstone is a sedimentary rock which forms in layers. In this rock there are small fossils of mussel-like shells.

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Amongst all this geology there is also some archaeology. On the glaciated surface called the Glacial Pavement there are cup markings. It may be part of a sacred landscape from Neolithic or Bronze Age.

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I don’t think they are just where boulders or pebbles have scraped the rock with the movement of the glacier because they are very well shaped unlike other grooves formed by glaciers. I think they may be made in line with a constellation of the stars! However, their purpose is unknown.

Conserve the Wild Place

With Rockwatch I went to the Dolerite Quarry and cut down trees, cleared branches and under-growth. Yes, I did say cut down trees because we wanted the quarry cleared for the public to see the rocks but don’t worry we also planted trees on top of the hill!

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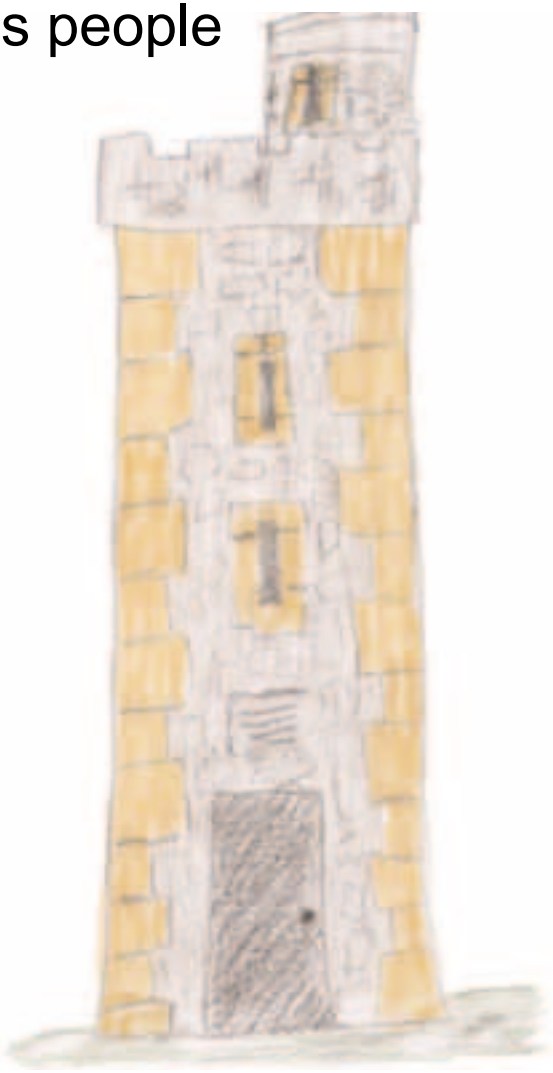
Share your Discoveries

I wrote a poem which I think tells people why this place is special.



Sketch of Corstorphine Hill Tower.

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Corstorphine Hill

A hill formed from
A river,
A volcano it didn't
Quite make.

A layer of dark, dark,
Dolerite,
Earthquakes, raging
Made it tilt.

Mudstone on top,
And sandstone on the bottom,
Cages the dolerite,
Like a sandwich.

Ice sheets eat the
Mudstone away,
Leaving cliffs of
Dolerite.

Vegetation moulded over
The cragged dolerite,
And luscious trees,
Covered the gentle slopes of sandstone.

Then quarries quarried
Into it,
And man built a tower
Of stone.

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Chapter Five — The Mountain of Minerals

Now my mini museum was building up to be a mountain of minerals. I just needed more room! All the videos and games had to move but sadly my dad's drinks cabinet stayed. My dad would just not let it go! (Find out later in the chapter what happens next.)

The cataloguing was getting more and more and more. I had to improve my system. When I first get a new mineral, then I enter the details into my computer database.

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The details are the name of the mineral, the location where it was found, the formula and hardness, and any special notes about the mineral. I also give it a catalogue number. I have a number for the type of mineral and also a number for how many of that type I have.

I print a label to put beside the mineral on display. Before the mineral is put on display I stick a small sticker with the catalogue number on to it. This makes sure that it will always have its catalogue number even if it gets separated from the label.

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Displaying the museum in an interesting and correct way is also a challenge.
I display them by their classification groups — native elements, oxides, silicates, carbonates, sulphates, sulphides, phosphates, halides.
Of course, I have to display them in an attractive way and can spend a long time rearranging in order to give a good presentation!

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Although the museum is called a Mineral Museum, it has got some rocks and fossils in it. I have a selection specially for fossils. My rock shelves have the three different types of rocks: igneous, sedimentary, and metamorphic.

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Since all the rest of my museum had expanded I thought it would be nice to expand my shop as well. There were two cabinets still unused, so I chose one to hold shop stock because there was going to be a big difference!
I had new ideas for my shop to make it more exciting.

I made many things just like a real museum shop!

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From my tumbled stones and cards with Jane Robb's Mineral Museum logo on them, I made:

Key-rings;
Quartz pendants;
Mineral sandpits;
Lucky gift stones;
Gem bugs;
Shell baskets;
Tumbled for you stones;
Bookmarks;
Pick and Mix stones!

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On the computer and with the help of my mum, I made postcards, notelets, and gift cards all with the Jane Robb's Mineral Museum logo. I had written little books which my mum typed into the computer and made into booklets with fancy covers. Magnificent Minerals, The Earth and Curious Collecting.

Finally I wrote a guide book and for a surprise my mum had bought me pencils with Jane Robb's Mineral Museum printed on them!

I had a shop!

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I still have all my experiment tools to deal with, my hardness kit, molecular structure kit, UV light source, magnifying lens, streak plates and hydrochloric acid. There was nowhere for them to go unless I asked my dad …

… “Daddy, I need some more space in my museum, could you help?!”

My dad knew what I was talking about. The drinks cabinet!

At first, he was not too pleased at the idea but he had to give in. The drinks cabinet moved out.
The experiment cuboard moved in.
The room is all MINE!

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Chapter Six — Never to End

From an idea to a beginning to a museum and hopefully never to end.

I had the vision for my museum —

‘Rocks in Your Eyes’

And now that I have the museum …

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