

Occasional Erratics



Newsletter of the
MEDWAY FOSSIL AND MINERAL SOCIETY

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The editor of this edition of the MFMS Newsletter was Nick Baker

Cover picture

Cliff in Upper Chalk, Bores Hole, Cuxton, Kent

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American Parks 11 : Saguaro

by Gary Woodall

When one thinks of the American west, often the image of a lone cowboy riding in a landscape of giant cacti comes to mind, or Wile E Coyote chasing Roadrunner across the desert, but of course never catching him. But most of the American west isn't like that, only the southern part of Arizona looks remotely like this iconic Image.



Lone Cowboy.



Roadrunner and Wile E Coyote.

In the area around Tuscon and running into northern Mexico lies the Sonoran desert, home to the huge saguaro cactus, and large areas have been set aside to protect this amazing landscape at Saguaro National Park. Whilst classified as a desert plant life is very abundant with numerous forms adapted to live in the dry conditions, especially many types of cacti



Saguaro National Park.

The most spectacular cactus is of course, the giant Saguaro, *Carnegiea gigantea*, the genus named after the great philanthropist Alexander Carnegie, the species is obvious. They can grow to 50 feet tall and live for over 150 years, they may not even grow their distinctive 'arms' until they are 80 years old. Like all cacti when it infrequently rains they absorb water, and they can hold enormous amounts, the stem visibly swelling when it does.

Around 1 in 10000 saguaros are cristate forms, the strange distortion being caused by fasciation, abnormal growth in a plant tip. Inside the stem are 'wooden' ribs that support the branches. The whole plant is covered in spines that can be up to 3 inches long, these are to deter animals. Despite this, Gila Woodpeckers make their nest holes in the cacti, these later being used by other birds like owls and finches.

The flowers and subsequent fruits are rich in nectar and many birds and insects use it as their major food source. Thus the Giant Saguaro is a keystone species, without which the Sonoran desert would be very different.



Very old saguaro.



Cristate form.

There are many other distinctive cacti in the Sonoran desert. The attractive Cholla, Teddy-Bear Cactus can be seen in gigantic groups. Many of the plants growing from fallen parts of the original. Tests have proved they have the same DNA. Prickly pears, of numerous different varieties, can be seen all over the American west and are common. The most unusually named cactus is the Boojum. It has many thin but very tall branches and was named after the strange landscape described in Lewis Carroll's poem 'The hunting of the Snark'. A cheekily named cactus is the Barrel Cactus, nicknamed 'mother-in-laws chair!'.



Cholla cactus.



Prickly Pear.



Boojum.



Barrel cactus.

It is not just cacti that can be seen, there are many varieties of flowering plants, remaining dormant until the rare rains when the desert bursts into colour. Mesquite trees and Creosote Bushes can be found over a very large range of the American southwest.

To the west of Tuscon can be found the Arizona-Sonora Desert Museum, the name not really describing it very well. It is actually part zoo, part botanical garden with a museum as well. The enclosures for the animals are huge and the 'fences' are designed so that they do not interfere with viewing, it often appears in lists of top zoos in the world in reviews. It holds almost every animal that can be found in the area and enables visitors to see wildlife that they wouldn't otherwise see.



Coyote.



Wolf.



Bobcat.



Mountain Lion.

In addition to the big attractions shown above, there are many other critters such as prairie dogs, desert rabbits, mule deer, bighorn sheep and an aviary full of desert birds. There is a reptile house, with rattlesnakes, which I would rather not see in the wild. It does have a museum which includes a superb geological exhibit, indeed the mineral collection has been described as one of the best regional collections in the world.

I was fortunate to visit the Tucson area while on a business trip to a convention to Las Vegas, hard life being an accountant! Anyway being 'nearby' I couldn't resist routing myself via Phoenix and drive down to Tucson for the weekend. But it wasn't only saguaro that I wanted to see a couple of hours away is the famous Tombstone, scene of the infamous gunfight at the OK corral in 1881, which pitted the Clanton/McLaury gang against the Earp brothers.



Main Street, Tombstone



The real OK corral

The town plays on its notoriety and on weekends cowboy re-enactors are everywhere. But amongst all the fakery lie many of the original historic buildings, like Big Nose Kates saloon and the Tombstone Epitaph newspaper. There is the real site of the OK corral where they re-stage the gunfight. But unlike the film version with Burt Lancaster and Kirk Douglas where the gunfight takes up the last 20 minutes of the movie, this re-enactment takes a more accurate 20 seconds! Just outside Tombstone is the actual Boot hill graveyard where the gang members were buried.



Film poster



Graves of the Clantons and McLary's at Boot Hill.

Editor's note.

Some years ago (about 60) there was a TV program where the producer defined what he called the 'Real West' - Take all the areas west of the Mississippi. Now enclose those areas with an annual rainfall of less than 10 inches. What has become known as the 'Desert Southwest' probably covers a variable climate, in terms of temperature, due to variable altitude. The cacti of the Senora Desert enjoy even mild winters—unlike the high table-lands of Nevada, Utah, or New Mexico, which often experience winter snow. In some respects Gary's portrayal is of a nucleus of that 'Real West'.

Magnificent Museums Part 5, Zadar, Croatia

Museum of Ancient Glass

by Gary Woodall

Zadar is a town in Croatia that in recent years has reinvented itself to become a major cruise ship stop in the Adriatic. Zadar already had a lot going for it as it was originally a Roman settlement and remains of the forum and other buildings can be seen. One of these is the column of punishment where wrongdoers were chained, much like the stocks. It also has a very good archaeological museum with the usual statues and other artefacts. In addition the town was a Venetian outpost in the middle ages and substantial remains of the old town wall and numerous buildings still survive in excellent condition. There is a fine cathedral with a campanile (detached bell tower) that you can go up, the steps are scary but the views from the top are terrific. But the real unusual sight is a museum dedicated wholly to Roman glass.



The Museum of Ancient Glass

As you are no doubt aware the Romans made very fine tableware and much of this was made from glass. Indeed locally we have the Darenth bowl which is in Dartford museum. But in Zadar such fantastic glassware finds have been made that a whole museum is dedicated to it.

Opened in 2009 the museum was built in the palace of the Cosmacendi family dating from the 19th century. But modern additions were sympathetically added to give a total of 8 well-lit display rooms. All manner of glass objects are on display, bowls, large and small, cups and other drinking vessels and perhaps the most interesting jewellery. Strung into bracelets and necklaces glass beads are most elaborately made, some with inlaid gold. They would not look out of place in a present day jewellers.



One of the rooms with glass jars



Fine table bowls



Jewellery

In order to further encourage tourism, in 2009 an installation called "Greeting to the Sun" was constructed on the waterfront. It consists of a 22 metre diameter circle of glass, representing the sun. There are 9 smaller circles representing each planet, to scale as regards size but not distance. Each circle is fitted with solar cells which absorb energy throughout the day and release it in a light show at night. It has become a popular spot to hang out in the evening and placed Zadar well and truly on the cruise ship ports of call in the Adriatic.



Greeting to the sun in the day



Lightshow at night

My Life with Fossils

Tony Mitchell

Soon after I started collecting fossils, almost 40 years ago, I realised that I should create a catalogue giving each specimen or group of the same sort, a code, name, collection site, and geology. Betty allowed me to use the 'music room' where she had a piano and kept her recorders and music, so long as I did not make a mess. Extracting fossils from their matrix never created any dust or larger bits of debris, did it? In good weather I worked outside, but I often did some work indoors!

A friend mentioned a newly formed society, Medway Lapidary and Mineral Society, and, as I was doing an Open University degree involving among other subjects, Geology, I agreed to come to Green Street and give a talk on the interpretation of geological maps. I liked the group and joined. It was here that I heard about fossils on the isle of Sheppey. It was only on my third visit, alone, that I found my first shark's tooth. I attended many field trips and rapidly amassed a small collection.

One important field trip was with the GA, organised by Ed Jarzembowski. The site visited was Thorness Bay on the Isle of Wight, and was attended by a score of collectors. There was a very low tide, so some of the Thorness fossil bed was exposed. The fossil bed is normally a band of hard blue-grey limestone [remember, I am colourblind] about 8 cm thick but at the sea's edge it was in nodules up to 30 cm thick and these were attacked with enthusiasm. They were 'full' of fossil insects, and some people collected 100 fossils each.

Fortunately, the rock bashing was done on the dry sand which was now littered with bits of rock. I suggested to Ed that this looked like vandalism, and I thought that I could drive down, almost to the beach, and collect several bags of bits if he organised the scavenger hunt. Over the following months I reduced the haul to chips, using the rock chopper, built for me by Harry Day, [the carpet in the 'Music Room' has survived]. and extracted almost 5000 fossils. These were sent to Ed to ID, while he was at the Booth Museum, and some were new to science and were named for me. They are now at the Booth or Natural History Museum. The rest are in Maidstone, and no longer stored at home.

I soon realised the need for a catalogue so that I could quickly find the specimens I wanted for School, Fossil shows, and the Maidstone and Medway societies. It consisted of a Foolscap Ledger, with a page [or 3] for the names, in alphabetical order, with X,Y and Z sharing one page and another set of pages for types, Ammonite, Crab, Seed and Gastropod etc.. Each specimen was numbered according to where it was stored. The problem with a catalogue in book form was, that when I brought home a new collection, I could not keep the names in Alphabetical order, or find what I had from other sites as site names were beside the species name and would all get mixed up.

1-6	<i>Balanus crenatus</i>	Diatomite	Essex	USA
1-54	<i>Balanus crenatus</i>	Ammonite	Essex	Folkestone
9-22	<i>Bekettia mastixoides</i>	fruit	Essex	• Sheppes
9-40	<i>Bursaroceras</i>	seed/fruit	Essex	• Sheppes
1-82	<i>Batillaria concava</i>	Gastropod	Essex	Atton Bay
1-83	<i>Brotia melanoides</i>	Gastropod	Essex	Atton Bay
1-84	<i>Batillaria ventricosa</i>	Gastropod	Essex	Atton Bay
3-25	<i>Bathytoma</i> sp	Gastropod	Essex	Chertsey Hill
5-1	<i>Bathytoma granata</i>	Gastropod	Essex	• Sheppes
5-24	<i>Bartonia causta</i>	Gastropod	Essex	• Sheppes
5-29	<i>Balinella</i> sp	Gastropod	Essex	• Sheppes
5-50	<i>Balinella</i> (or <i>Glychria</i>)	Gastropod	Essex	• Sheppes
3-42	<i>Brotia melanoides</i>	Gastropod	Essex	Upton
5-46	<i>Donellitia laevicula</i>	Gastropod	Essex	• Sheppes
5-59	<i>Bathytoma turbida</i>	Gastropod	Essex	• Sheppes
6-5	<i>Barnhamia daviesi</i>	Ray shell	Essex	• Sheppes
6-28	<i>Besselia</i> sp	Bygozoon	Essex	• Sheppes
5-75	<i>Balanopsis sapindan</i>	Cephalopod	Essex	• Sheppes
7-25/26	<i>Bathytoma</i>	insect	Columbian	Washington
8-12	<i>Bathytoma turbida</i>	Gastropod	Essex	Atton
7-44	<i>Bathytoma</i> sp	Ammonite	Oligocene	Hampstead
8-49	<i>Bathytoma</i> sp	Ammonite	Oligocene	Hampstead
8-50	<i>Bathytoma</i> sp	Ammonite	Oligocene	Hampstead
8-8/6	<i>Diathoidia</i>	insect wing	Columbian	Washington
9-97	<i>Bovaris</i> Amuri	insect beetle	Essex	Colnards
8-93	<i>Silifera</i>	insect wing	Oligocene	Hampstead
12-4	<i>Bathytoma</i> sp	Gastropod	Selwyn	London
1-75	<i>Bonellitia</i>	Gastropod	Essex	Atton Bay



The best I could do was a separate page for A another for B etc. The advent of computers, starting, for me, with the ZX81 with 1 kilobyte of data storage, which I soon updated to a Spectrum, was that I was soon able to programme it to produce a searchable catalogue. I have tried to get other members to create a catalogue, but without much success. Fossils, like antiques, have little value without provenance. During research for our books on the London Clay, we spent a lot of time at the Natural History Museum stores in London. I was surprised to find how difficult it was, even for specialists, to find the specimens they needed. The cabinets and shelves were arranged in Family order so that if [when] a species was moved

to a new family, the specimens had to move too. They were housed in card trays with their details on a separate card in the tray. What was often missing was a code on the specimen AND on the card, so that specimens were sometimes replaced in the wrong box.

I quickly needed a better storage place so bought a double kitchen unit that fitted into the alcove beside the chimney. Two lengths of aluminium angle, provided sliders for a tray of plywood with plastic angle, hot glued to each side. The vertical spacing of the trays was decided by the thickness of the fossils to be stored in it, irrespective of what it was or where it was found, varying between 2.5 and 7 centimetres high. As more was collected, more trays were added, including, at the bottom, a really deep one for large specimens. There are now 56 trays. Each specimen had its code stuck in a suitable position, and put in a box, made to fit it out of card. The fossil's code started with the tray number, 01 to 56, followed by its position in the tray, 001 back left to over 400, front right for the trays holding seeds in their glass phials with silica gel.





Fossils removed for display are easy find using the computerised database and to return to their correct space after the display.

Our latest book was published in 2009, but a specimen I had lent to their fish expert for further study was not returned. He is now deceased, and the fish was only 'discovered' in his office in late 2023. It could only be identified as belonging to me, because one of the photographs, circulated to likely donors, showed my catalogue number and so could be linked to my database and the information card he had sent me, and I had kept in my collection.

After publishing our two books, I continued to take photographs of some of my material, [an ongoing project as there are over 6500 specimens] and attach them to my database. James Downer suggested that a database of the fossils of Kent would be a good idea for a project, and it was given the name the Kent Fossil Database, [KFDB] as a working title. It is now a database of the Fossils of Kent in Public and Private collections and is designed primarily for researchers. We had learned from the first book that there were many collectors out there, with material that we could,

and did, use in the second book.

Maidstone Museum needed a catalogue, particularly of their Natural History material with more than 5000 specimen fossils, as well as Birds, Shells and Insects, mostly from the 19th century. In 1977 there was a fire in part of the store resulting in the loss of much material. Almost all the fossil specimens and labels were saved and returned, but most of the labels were in a pile on their own. Where there was a label with a fossil, it was not necessarily the right one. The handwritten, accession files still existed, but it is seldom possible to use it, as a whole collection is simply recorded as, for example, 'several hundred fossils donated by Dowker, October 1867'. Anyway we still could not connect most unlabelled specimens with their label.

I created a Fossil Database for them and proceeded to enter all the specimens, with or without any provenance. They were stored in Dexion shelving in the 'Lower Store', so I started by numbering each shelf and each fossil with a unique number, starting with the shelf number. The first 3 shelves were easy, as the previous curator of natural history had already catalogued the Ice age material with a number on every specimen. This work was well under way when 'the powers' decided to redesign the store with more up to date sliding shelf units as often seen on TV when 'I have been granted special access to the storerooms'. This allowed the council to sell Chillington House and the library next door. It had been used as a store for the museum and much of the material now came to the museum store which was soon completely full. In some way it was good that most of the stuffed bird material had been lent to a museum in Poland. They now claim they were given them, which is as well because if they were returned, there is nowhere to put them. Ed, now curator of Natural History was given pretty short notice of the revamping of the stores so the whole collection now needed cataloguing and packing into an empty shop in The Mall shopping centre. I had to produce separate computerised databases for Rocks, Minerals, Shells, Birds, and other natural history items. As far as birds were concerned, 'they', insisted on separate databases for Stuffed Birds, Bird Skins, Bird's Eggs and Bird Nests. Volunteers were then recruited to put in the data. In the case of the shells, they did not check that he could spell or understand the jargon. I have since had to check all his work and correct it. You would be surprised at the number of ways he could spell Brenchley, or that he did not realise that 1883 was not a country, or a shell was not donated by Java collected in Julius Brenchley.

The fossils were now stored in standard sized plastic boxes, which contained, as far as possible, one layer only. The storage area was designed to hold these boxes, but no-one realised that fossils were heavy and may warp the shelves so that lower boxes could not be easily slid out. I recorded which box every fossil was stored in. Unfortunately, the workmen who moved everything from the shop to the store, just filled the shelves with whichever box they picked up with no consideration of box number.

The whole of the Museum's Kent fossil material is now in the growing KFDB, along with all Mick Cuddeford's material stored there, and my fossil insects. Photographs are also being included. The other major museum included is the Sedgewick Museum in Cambridge who sent me 5700 records to add to the database giving a total of, at present, 21223 records from 119 collections and 443 sites. I already have 5600 photographs and am adding more from my own collection and from members of Facebook every week. Photographs should have a scale, other than a coin or pencil, and preferably in metric units. The easiest method is to include a ruler, but, especially with close-ups, make sure it is at the same height as the maximum dimension of the specimen to prevent parallax distortion.

Researchers are usually more interested in 'sexy' species as it is easier to obtain grants to study dinosaurs than fossil lobsters. Graduates, on the other hand always need new material to study, so a way of finding out where specimens are in obscure collections is very valuable to them. That can include micro fossils as they are good for dating rock layers. This means that they will only want to look at your material in detail if you have recorded where it was found. A grid reference or similar is of use: 'near Manchester,' or 'by the seaside in North Kent' is not.

Several years ago, I received a phone call from a Mrs Searl. Her father, Don Searl, a long-time member of both the Medway fossil and Mineral Society and Kent Geology Group in Maidstone, had died 6 months before, and what should she do with his fossil collection? We knew that it was very extensive and would be valuable, as he had spent heavily creating it. Anne Padfield and I drove to his house to have a look. Where was his catalogue? Probably, if it existed, on the computer, which had already been wiped and sold. They would search his papers. A long look at the collection showed it to be even larger than we had expected in cupboards, cabinets and shelves in several rooms and in the garage.



Although many ammonites had decayed, all his superb collection of Russian ammonites had survived with the original labels attached. There were 2 drawers upstairs full of meteorites, a few of which were still labelled. There were a total of 138 drawers of fossils

We had to advise that she contact a dealer, who quickly came and collected most of the material with or without provenance as he already knew Don and would now get back specimens he had sold him. He paid enough for Don's daughter to be happy, but left a lot of stuff behind, which I removed later. The dealer admitted to me that he would guess a suitable provenance before selling them. Several specimens were individually worth over £500 with provenance. Now, with 'provenance', the dealer would do very well. No catalogue was ever found.

Moral. Create a catalogue, and have a separate copy stored elsewhere.

My introduction to science and especially fossils was down to my grandfather, Gramps. He worked in the pathology department of Cambridge University and as an honorary BA had access to places mere mortals could not reach. With him I could attend lectures and visit the University Library, and even the store. The Sedgewick Museum was a particular favourite, as he knew the curator, and was able to answer my frequent questions, but there are other places such as the zoology museum which the public seldom visited. As a junior he would take my brother and I to the Science and Natural History Museums in London [with lunch at The Strand Palace] where he would guide us for the first hour and then let us free until tired, while he waited beside the Foucault Pendulum.

While on holiday in the northern Pennines the family walked to Cauldron Snout waterfall. On the way I picked up a small, but heavy, white rock with black crystals in it, and pocked it, to ask Gramps what it was when we got home. He did not know, but knew a man who did. At the Natural History Museum, we walked to the door at the end of the Marine reptile gallery, knocked and we were invited in. A Scientist came especially to see ME and my rock. It was Barytes with Galena, and he spent time explaining what it had been mined for. Unfortunately an appointment now has to be made to have specimens investigated.

Holidays, with or without the children usually included collecting fossils, at some time or other. The Isle of Wight was visited twice, camping in our tent with the two children. Both were keen to find, but not collect fossils. One sunny day, Betty entertained them on the beach at Alum Bay while I climbed up to search for the 'Black Band', which could contain fossil teeth, of crocodiles and mammals. Martin appeared to ask if I had seen the new QE2 sail past. With my nose to the cliff face, I had not. I could see it if we climbed around the corner. We did, and I saw it disappearing towards Southampton. Oh, and Mum says it's time for lunch. Descending by a new route, a fossil jawbone with teeth appeared on top of a small rock. I stopped and said that the rest should be close by. 'Like this' replied Martin holding up the counterpart



Later, I revisited the Natural History Museum, and knocked on the door that Gramps had used many years before. A new scientist, Gerry Hooker, arrived and got excited about the jaw, and could the museum have it? Obviously, it could. It was the first specimen of an [*Acotherulum saturninum*](#) found in Britain. Soon afterwards a plastic cast of my specimen arrived by post.

I now got invited to the annual 'dig' near Lesnes Abbey, organised by Gerry, complete with JCB and a bowser and sieves to separate fossils from sand. As usual I donated specimens when asked, and now have a marsupial, *Ailoravus mitchelli* named for me.

Not every find ends so well. See my article 'The one that got away' in a 2014 edition of Occasional Erratics. When we travelled abroad with a tent or caravan, a hammer and chisel would happen to be in the luggage. A holiday in the Auvergne, included an unannounced visit to Andre Nel, the French fossil insect expert. He was very nice and gave me directions and information about collecting sites near the campsite. One was a shallow quarry with a scattering of suitable material to split. One larger one I lifted, revealing an Asp curled up asleep

It quickly awoke and, I am pleased to record, wriggled rapidly away from me as I remembered Cleopatra. I collected a number of fish and other fossils from various sites in the area and, on the slopes of Mt Victoria, some fossil eggshell. In Germany the quarries around Solnhofen are renowned for their examples of the first feathered bird, Archaeopteryx. They are easy to enter and collect from, though all the best specimens are found by the quarry men and sold to dealers who come weekly. None the less, I still found some interesting material. Without our own transport, more distant holidays don't encourage fossil collecting. In Armenia I wanted to buy local fossils but all they had were from Sheppey or Morocco.

If you have any Kent fossil material, especially vertebrate, unusual specimens, or from an inland site such as a quarry, riverbank or road or building work, and would like to have it in the KFDB, the minimum information required is its scientific name, if known, otherwise fish, ammonite etc will do, and site in as much detail as you can. If possible, include its code number in your catalogue, the geology detail, and a photograph with a scale, and let me have a copy to add to KFDB. Many of the specimens already in the database only have 'shark', 'ammonite', 'fish' etc. as their scientific name. New species are constantly being discovered so your specimen may not have a name yet, and may be named for you. [or not]. If it is to be named it must be deposited in a recognised museum or university collection as the Holotype for all to study. Obviously, your fossil cannot get a name, if it does not exist as far as the researcher is aware. Hopefully, someone looking at a photo of your Fish, Tooth, Crab etc. can identify it, and the name changed in the database. You retain the copyright to the photos and do not have to donate specimens to museums unless it is an unknown species and you don't want it to remain that way.

I could do with a volunteer to contact other local museums for a list of the Kent fossils they hold. A student at Royal Holloway has just got permission to send a list of the Kent fossils in their collection to add to those from Maidstone, Canterbury and The Sedgewick Museums. The database will eventually be online for anyone to search. As your full name is not given, other than, in my case, '1', under the heading Collection, anyone interested in one of your specimens must first contact me. I will then pass their request to you, and it will be up to you to reply or not.

The fields searchable will be Code, Common name, Name, Part, Confidence [of identification], Family, Order, Class, Phylum, Site Name, Site detail, Nearest town., Grid Ref, Bed Number, Subzone, Zone, Formation, Epoch, Period, Collection. Then choose only those fields you need to see. Remarks and Picture are also displayable

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Art, Science and a little bit of Alchemy

Nick Baker

Tony has just given his journey with fossils. So, in the way of a page-filler, may I offer my journey also. The alchemy comes right at the start. In the summer of 1959 (I was 15), the family was on holiday. One day I saw a little book—*The Observers Book of Geology*. The cover photo was of cliffs of pink Old Red Sandstone, on the west coast of Scotland. That is what attracted me. But I knew nothing of Geology. I had never heard the word. At school, the teachers sneered at Darwin, as did my parents. The book remained on my bedroom shelf for a year.

The following summer, my father and I were burning some garden rubbish. I must have thrown a piece of rock into the fire. Some time later I was combing through the ashes, I found this lump of black rock. What was it? I got the book. No luck. Then knocked a piece off. Even at that stage I knew what granite looked like. But too late. Some strange cerebral virus must come from that book. Now I was curious. Did the rocks of the Earth really give information to its pre-history? No one had ever given me the slightest hint.

First off, I started a collection of local sedimentary rocks. Fossils were close but far away. One day I was walking on the top of the downs near Wrotham. I came to chalk cliff. I did not know the place had a name for some time (Fluttermouse Hole) but it commanded the following decades.

I discovered the Geological and Natural History Museums. Got a lot of local guide books and maps. I discovered Blue Bell Hill. There was a problem. I was shy—at that stage, pathologically shy. And I always wanted to visit a place and not be seen. So fossils collecting was hap-hazard and it was 1962 before I found any fossils. Meantime, I discovered Sheppey. The yield was high but the lifespan short, and my visits did not go beyond 1962. The shark teeth survived but those pyrite gastropods did not.

In 1963 my interest died in a moment. It was the first of several interruptions. Being alone caused me to question what I was doing, but there were no real answers. My interest came back slowly, but then another challenge came. Mother and my sister joined a local Pentecostal church and after a while I joined them. You see, dear readers. I knew *Oranges are not the only fruit* before it was a book and a film. And it was asserted that belief in evolution was a sign of demon possession, as were most illnesses considered as such. Well, to cut a long story sideways, I escaped via the C of E. All Souls, Langham Place, had a large number of students and quite a few studying geology and evolutionary biology.

But there was still a break on my geological interests—the women! My interest did appear to have been substitutionary. In 1969-78 several affairs came and went. Then in 1978 a door slammed and I was back, alone but with the geology full blown. I still had a few friends and we often spent a week at Marloes Bay—Great for Silurian geology. In the week before our 1978 visit I back-packed, from Gloucester to Carmarthen—via The Forest of Dean and Brecon Beacons.—walked 120 miles in six days, examining the geology on the way.

Then in 1979, another innovation. A gent by name of Chris Darmon was advertising the **Nationwide Geology Club**. I signed up and joined a trip to South Wales. Chris was then a schoolteacher and he often brought along children from his school. I was the eldest attendee but that evened-out with time! But a big innovation of this was that Chris is very much a hard-rock geologist and so for the first time I was introduced to igneous and metamorphic rocks. In the years 1979-95 I was on about 20 field trips, including about five to Shetland. In those days we did not do foreign trips, save one to the Black Forest (1991)

In 1984, the same lady who precipitated my escape from the Pentecostals asked if I had considered The Open University. I hadn't but then did and did a BA course in Earth Science (1985-91). And so I was also introduced to the **Open University Geological Society**.

The trips with the NGC meant that my local (largely Kentish) geology blossomed as 'soft rock', and meant that I had a large number of Micraster. In order to reach a definitive identification I contacted Dr Robert Stokes at Kingston College. The meeting resulted in me being elected to the **Geologists Association**.

In the OUGS there were several meetings discussing the production of rock thin sections. I did not know that they could be produced by hand. I began production successfully and produced about 200 in 1985-95. I got into correspondence with one Alex Herriot, of East Kilbride. He had produced 5000 thin sections across several decades

In 1991. I was still on the look-out for a local geological organisation, in addition to the OUGS. Jim Greenwood was a member of Chris Darmon's NGC and The Essex Geological Society. He pointed me in the direction of **The Kent Geologists' Group**, of which I joined in 1991. There I learned a lot (from Dr A. J. Rundle) about the collection and mounting of micro-fossils—another area that I had been assured was not possible. I don't know how many micro-fossils I have collected and mounted in faunal slides, but I think the number is between 15,000 and 20,000. I was discussing micro-fossils with Tony one evening, when he invited me to give a talk to **The Medway Fossil and Mineral Society**. The talk was on July 7th 2010 and was entitled *Aspects of Chalk Stratigraphy*.

A big question that has bugged me down the years, is why my interest does not go deep into the subject, to the extent that my understanding is limited—It was a struggle with the OU to expect to understand more than I did. It almost seemed that I viewed Geology in an artistic framework. It was Time and Landscape. And there were many distractions along the way. Also that my interest appeared fragile. Several times, across the years, it was gone in a moment. I think I do know the answer now—at least a little. I will leave it at that—at least here anyway.

But where did you find it?

Nick Baker

Time and again, you may witness the scenario of someone arriving at a meeting or roadshow, clutching a fossil or mineral, and there is no knowledge of the location of where it was found, let alone the rock bed. The scientific value drops to next to zero. Yet, the location is the easiest to record. The rock bed may be less certain.

So what about location. Over the years, I have defined my method by two systems. **The Ordnance Survey Grid** and a **direction and distance from a known landmark**. Example..

Bank of lane, 200 metres west by north of the church at Hucking, Kent
TQ 843584.

Upper Chalk, Cretaceous_Coniacian_Normanniae zone.

West by north is a direction midway between west and west-northwest using a 32-point compass.

The OS Grid refers to a survey system based on kilometre squares– countrywide from Shetland to the Isles of Scilly. **TQ is a 100 kilometre square**. The first three numbers is the distance easting, and the second three the distance northing from the start-point on the TQ square. The bottom left hand corner. So, we are 84.3 km east and 58.4 km north of the start point. This is a guide to people following on . It presumes that I knew where I was at the start. Well, I got to know about OS maps in the Boy Scouts, and had a load of knowledge about land navigation drilled into me. In bare hilly country I used a pocket aneroid and the map contours as an extra guide. I would navigate across 10 or 20 miles, knowing where I was on the map. On clear days I would do solar navigation, using my watch. I would resort to compass if the sky clouded. At the present time I have about 60 OS maps. I am un-used to satnavs, so cannot really help much, but if it gives you your OS Grid position, that will be fine. Those using OS Grids may be relatively rare, since the UK is the only country that has used that system.

So, if you can ascertain your position to within a 100 metres, that may be fine, especially since you may not know what rock strata are involved– and in that your position could be crucial, in areas of complex geology.

A rundown of meetings since April.

Apr 24.	Specimens with name beginning with letter S	ALL
May 1	?	
May 8	Rocks of colour Black	ALL
May15	Isle of Sheppey	ALL
May22	Metamorphic Rocks	ALL
May29	The Piltdown Fraud	Nick
June 5	Stratigraphy I	Anne
June12	Romney Marsh	Nick Hampton
June19	Fossil Fish	ALL
June26	Oil and Gas	Tony
July 3	Norway	Brian
July10	?	

Sept11	Specimens with name beginning with letter T	ALL
Sept18	Fossil Reptiles	ALL
Sept25	Mineralization	Tony
Oct 2	Microfossils and Minifossils	ALL
Oct 9	History of Geology via Noted Geologists	Tony

Oct 16	My favourite beach	ALL
Oct 23	Rocks and minerals with structure	ALL
Oct 30	AGM and “20 picture on a stick”	ALL
Nov6	The Llyn Peninsular	Brian
Nov13	The Silurian	Tony
Nov20	Stratigraphy II	Anne
Nov27	Plate Techtonics—Theory and Fact	Tony
planned		
Dec 3	Specimens with name beginning with letter U or V	ALL
Dec10	Alternative collections, and Silent Auction	ALL