

Editor: Doreen Smith 13 Sheridan Close Frampton Dorchester DT2 9PL Chair: Alan Holiday alanholiday@btinternet.com Tel: 01300 320811 e mail: heldon47@btinternet.com Secretary: Kelvin Huff kelvinhuff30@gmail.com



Ringstead 1994 (in the beginning...!)

Subscriptions are now due if not already paid at the Christmas Workshop, AGM or via BACS There's a renewal form in this issue





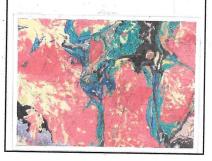
Loch Eilt landslip 22/1/18







Tom Price and Marble Bar





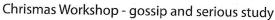
A week long geology fieldtrip UK 1988 'I wuz thur' Do you know where? DS



Ediacaran fossils









The Wash Water Storage Scheme. A correct explanation from Ramues Gallois

Dear Doreen, I read the item in the December Newsletter about the 'peculiar island' in The Wash with interest, mainly because it was so ill-informed. That was not the fault of Amusing Planet from which the item was copied, but whoever wrote the garbled account in Wikipedia on which it was based. The idea of building a barrage across the mouth of The Wash between Hunstanton and Skegness, a distance of about 15 miles. to make the largest artificial lake in Europe was first suggested in the late 1960s. This was not going to be a tidal barrage, but a dam capped by a motorway with a deep water port in the middle of The Wash that would become the major east coast access for hydrocarbons and goods from Europe. It was immediately opposed by those interested in retaining the extensive tidal flats as the UK's most important wintering and breeding grounds for waders, ducks and geese, and by the inshore fishermen and cocklers at King's Lynn who would have lost their livelihoods. It was also opposed by all the existing east coast ports. This barrage (no pun intended) of objections was soon followed by those concerned with the more practical questions of what would be the point of this motorway, where would it go to and from, and what would it cost. The M11 and M25 at that time were not even a gleam in the eyes of the planners at the Department of Transport let alone building a motorway from rural Norfolk to rural Lincolnshire.

However, the problem of a short-term shortage of water in London and the Home Counties that had been predicted by the government's chief advisory group, the Water Resources Board (WRB), still needed to be solved. The barrage scheme was therefore replaced by the construction of a series of bunds built out over the intertidal area in the southern part of The Wash. Each bund consisted of a roughly rectangular area of up to 24 sq km (c. 9 sq miles) enclosed by the existing sea wall and three additional embankments. The plan was to pump excess flood water to the bunds from the principal Fenland rivers, the Great Ouse, Nene and Welland, during the winter and to return it south to the London area at other times of water shortage via a network of tunnels, waterways and pipes. Salinity was never a problem. The fresh water was to be taken from upstream of the tidal slices at Downham, Market, Wisbech and Spalding that protect the region from seawater flooding. When stored in the bunds, the fresh water would form a low-density layer resting on the denser saline groundwater in the underlying sediments. Even if a bund was pumped dry, filling it with fresh water would push any saline water back into the underlying sediments.

The bunds proposal had numerous advantages over the barrage. It did not involve a road to nowhere or a new port, and the bunds could be built in stages such that they would only have a minor affect the fisheries and the intertidal habitats. Centuries of land reclamation around the edges of The Wash have shown that as each new sea wall is built seaward of the last, sedimentation adjacent to the new outer sea wall produces a protective salt-marsh apron with a few years. The bunds could therefore be built one at a time over a period of tens of years to match the increasing water demand in the London region. By which time, it was anticipated, the width of the intertidal zone adjacent to the first bund would be the same as that fronting the outer sea wall before the bund was built. This would retain the important wetland habitats and the fisheries.

The British Geological Survey (BGS) played a major part in the site investigations for the bunds and the tunnel aqueduct routes and in doing so acquired a large amount of geological data from an otherwise poorly understood region. The most cost effective construction method for the proposed tunnels (2.54m diameter lined with concrete segments) was to use a soft-ground shield, a small-diameter version of the type subsequently used on the Channel Tunnel and Crossrail. It was known that the bulk of the Ampthill Clay and Kimmeridge Clay which underlie much of Fenland would be suitable tunnelling medium, but is was also known that the method would not work with saturated glacial gravels or tills that contained large erratic boulders. However, these were unlikely to extend down to more than 100m below O.D. and could be avoided by tunnelling beneath them, albeit at a greater cost. The possibility that the Kimmeridge Clay contained beds of strong limestone similar to those that form the ledges at Kimmeridge Bay or organic-rich beds such as the Blackstone that could give rise to explosive gas-air mixtures needed to be explored. Over 2 km of continuously cored boreholes were drilled in the onshore and offshore areas and 860 km of seismicreflection profiles were run in The Wash and along the River Great Ouse. Taken together these proved a concealed pre-glacial valley system that had been overridden an Anglian Glaciation ice sheet, enabled the first detailed correlations to be made between the marine early Cretaceous successions of Norfolk and Lincolnshire, and allowed detailed stratigraphical successions to be described for the Upper Jurassic Ampthill Clay and Kimmeridge Clay that have subsequently proved to applicable to the whole of their English outcrops. On the distaff side, I personally acquired sciatica from lifting hundreds of core boxes at a time before the introduction of the 1974 H&S at Work Act and field geologists were regarded as an inexpensive disposable commodity.

So why were the bunds not built? Was the scheme impracticable or too costly? The engineering and geological investigations showed that the bunds and

infrastructure could be built at a satisfactory costbenefit ratio, but what no-one had anticipated was the OPEC oil crisis. In August 1973 the Organization of the Petroleum Exporting Countries placed an embargo on oil exports as a reprisal against those western countries that they saw as supporting Israel during the Arab-Israeli War of the same year. The price of crude oil went up by 400% over a period of a few months. In Britain, petrol prices rose by the same amount, petrol coupons were printed in readiness for rationing, and the country was plunged into recession. Over the next two years the WRB revised its water-usage predictions downward and the Wash Water Storage Scheme was deemed to be unnecessary. It is still a viable option, but the privatisation of the water industry in 1989 has reduced

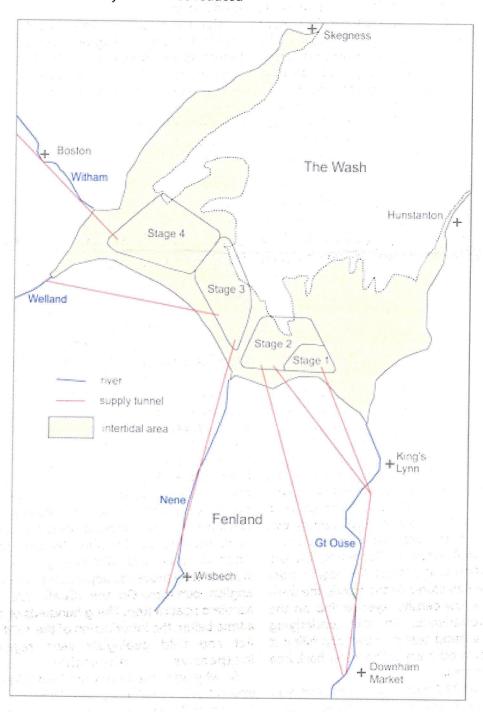
the incentive for companies to use supplies from outside their own area. As for the 'peculiar island', it was a small trial bank built towards the end of the investigation to test the long-term stability of a particular embankment design. It was obviously successful as it is still there.

Further reading

Gallois, R. W. 1978. Geological investigations for the Wash Water Storage Scheme. Institute of Geological Sciences Report No. 78/19.

Can be viewed online free at

http://www.bgs.ac.uk/data/publications/pubs.cfc?meth od=viewRecord&publnId=19864590



Precambrian Fossils. Alan Holiday

During my recent trip to Australia I was fortunate to be able to visit the Museum of South Australia in Adelaide and one of the displays was of Precambrian fossils that have been found in Australia. My interest was further developed more recently following the report on the internet of research that has found fossil material from Apex Chert discovered at Chinaman Creek near Marble Bar in Western Australia that is around 3.5 Ga. The chert is found between basalt lava flows and pillow lavas which can be dated radiometrically. Emails on these finds have been sent to DGAG members on Kelvin's circulation list. Thanks to Roy Musgrove for adding further information on this. Examples of these earliest known fossils are actually displayed in a gallery at the Museum which can be seen and even touched! The whole room shows fossil material which is surprisingly highly accessible. Some of the oldest known material comes from the Strelley Reef at Pilbara (again around 3.5 Ga) which is stromatolitic and I always find it amazing that stromatolites can be found through the geological column right up to the present time such as those at Shark Bay and Lake Thetis both in Western Australia. Of course, we have our own stromatolites at the Lulworth Fossil Forest and on Portland at King Barrow Quarry but a mere 145 million years old!

The earliest macrofossils are Horodyskia williamsii, known as 'string of beads' fossils also found in Western Australia south of the Hammersley Range and area around 1.2Ga. They resemble modern sulphur bacteria. Still more recent branching stromatolite fossils (Omachtenia) from South Australia dated around 660 million years can also be seen. The Precambrian fossils for which South Australia is particularly famous make up the rest of the display in this gallery, the Ediacaran biota. Reg Spriggs found Ediacaran fossils in the Flinders Ranges of South Australia in 1946. These were the

earliest complex bodied animals and plants to be found in rocks ranging in age from 542 to 635 Ma. The fauna was a range of soft bodied sedentary or slow-moving organisms some of which would graze on microbial mats on the sea flow below wave base. Dickinsonia was one member of the Ediacaran biota and some fine examples are seen in the gallery and a range of sizes. Examples of the microbial mats are also displayed with descriptions such as 'orange peel' and 'elephant skin' textures! Another member of the fauna was Arborea, a soft bodied colonial coral. This had a frond like appearance and a basal disc which attached it to the sea floor. Sea anemone like creatures were also present (Mawsonites). Funisia is one of the first Ediacaran fossils that is thought to have reproduced sexually as seen now in some living corals

Following on from this is the Cambrian creatures evolved that could burrow to escape predation and feed on organics debris in the sea floor sediment or alternatively developed a shell or carapace for protection.

If you ever go to Adelaide I thoroughly recommend a visit to the Ediacaran Gallery in the Museum of South Australia. My thanks to Dr Jim Gehling (Senior Research Scientist) and Dr Mary-Anne Binnie (Collection Manager in Palaeontology) who found time to show me round the Gallery and allowed me to visit the laboratories where I even saw holotypes of some of the fossils from the Ediacaran biota.





Arborea

Dickinsonia

from the website of Gov.UK

At 06:47 hrs on Monday 22 January 2018, a passenger train travelling between Mallaig and Glasgow Queen Street struck a landslip. The leading vehicle derailed and tilted to the left. There were no injuries among the five passengers and two crew on board. Passengers were evacuated to the nearest road access by a specialist rail vehicle and then transported by taxi.

The landslip was on a remote section of track between Lochailort and Glenfinnan where the line runs across sloping ground above the shore of Loch Eilt. The accident happened in darkness following a period when significant snow melt occurred at the same time as moderately heavy rainfall. The landslip originated above the railway boundary. A proportion of the several hundred tonnes of material that slipped was deposited on the railway. This destroyed a section of a

fence installed recently to protect the railway from individual loose boulders rolling down the adjacent slope.

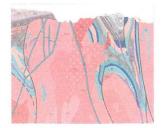
The West Highland railway runs along the south shore of Loch Eilt while the A830 follows the northern shore and the area is associated with the Harry Potter films.

At the very head of Loch Morar is a large intrusive body of Trondhjemite which forms the imposing rocky sentinel guarding the entrance to Glen Pean. A light coloured igneous rock rich in Oligoclase which is associated with the Caledonian Orogeny of the Scottish Highlands. Immediately to the East of Loch Morar lies the significant low angle fault know as the Sgurr Beag slide which can clearly be seen when driving the A830 towards the East end of Loch Eilt.

Alan's mention of Marble Bar reminded me that I have a sample of that formation. Not that I've been there but my brother worked at the Tom Price iron-ore mine, close by, for several years. Marble Bar was named after a stunning formation of jasper which settlers mistook for a huge bar of marble.

Into the tropics and very isolated, the only way in was by air when Philip was there though there were tracks if you had the right vehicle and a lot of common sense. The natural scenic beauty of the area offers many places for exploration. Very few habitations, posssibly now more in the way of mod-cons but huge gorges in all directions with tremendously varied rock formations. Marble Bar had a population of over 5,000 after gold was found nearby in 1891, but today the town has about 410 inhabitants. However, it continues to be a very productive centre, with gold, tin, silver, lead, zinc, copper and jade deposits being mined.

My brother and his wife made the most of their exploration opportunities wherever they went in Australia and we exchanged Australian minerals for Dorset fossils for many a year. *Doreen Smith*









Marble Bar complications, outcrop and mineral sample

Tom Price Mine

Fleet Field-Trip 10/2/18

report Kelvin Huff

photos Malcolm Wright







Alan must think he is jinxed as the weather was the same as the previous trip here, heavy rain and strong winds! Undeterred, a good-sized group of us assembled at Wyke Castle for the short walk down to Pirate's Cove. The tide was low as we worked our way south to begin with, noting the prominent Canns on the landward side of Chesil Beach. These hollows are the result of percolating sea-water, most likely in storm conditions.

The shore of the Fleet Lagoon crosses the Weymouth Anticline obliquely, a broad fold in Jurassic strata. The low cliffs and slumped banks provide fair exposures of Middle to Upper Jurassic, through Fuller's Earth/Frome Clay, Forest Marble, Cornbrash, Oxford Clay, Corallian and some Kimmeridge Clay. A special significance is that because the shore transects the core of the anticline it is revealing Middle Jurassic strata such as the Cornbrash which is difficult to see elsewhere.

The first exposures encountered were those of the Corallian Group (Sandsfoot Grit). These are well-cemented sandstones deposited in shallow, marine conditions. The Sandsfoot Grit is highly bioturbated and criss-crossed by many small burrows as well as the larger Thalassinoides trace fossil. Body fossils found included numerous bivalves preserved as internal casts (Pleuromya *uniformis* and Mactromya *aceste*) plus belemnite guards. Working further south the basal Kimmeridge Clay (deeper water mudstones) was seen, containing numerous shells of the flat oyster

Deltoideum delta.

Re-tracing our steps, we then began working northwards and down the Corallian succession. The Sandsfoot Grit is underlain by the Osmington Oolite Formation. As we walked southwards, the Nodular Rubble beds were seen, succeeded by pure creamy oolitic limestones (Shortlake and Upton Members centre photo). The oolitic texture was clear under the hand lens and other sedimentary structures were seen, including small-scale cross-bedding and ripple marks. The combination of this evidence indicates a shallow, high-energy marine environment. The environment of the time was similar to the modern day Bahamas with shallow, tropical seas. Numerous trace fossils were seen in the form of Skolithos and Arenicolites burrows. Some of the group found small echinoids (Nucleolites scutatus) which can be collected as they are weathered from the limestone. They look similar to a flattened pebble but have delicate ornamentation on the shells. For those who didn't find them, Alan had a small treasure trove of 'ones he'd found earlier' to oblige!

We then moved on to park close to our next location. Lunch was taken in our vehicles, with rain hammering on the roof! We headed towards Tidmoor Point (Lamberti Zone of the Oxford Clay) but diverted to Tidmoor Cove as Army firing was in progress. The clay is slumped in the low 'cliffs' but it is better to search the beach where the fossils occur having been washed out

of the clay. Avoiding the patches of eel grass, numerous small ammonites (Quenstedioceras sp.) belemnites were found, along with numerous large Gryphaea sp. oysters. Moving north-westwards and into the core of the anticline, our final stop was at Moonfleet Manor. Descending to the foreshore, numerous large blocks of Forest Marble were seen and represented the oldest Jurassic rocks seen today. The Forest Marble is a highly fossiliferous limestone (not a marble in the geological sense but a limestone that can be cut and polished). The name Forest Marble comes from the place in which it was first studied, the Forest of Wychwood in Oxfordshire. It is widely used as a building stone (walling, roof tiles and damp-proof

courses). The fossils are mostly broken up as the rock was formed in a high energy (shallow water) marine environment. The shells were probably transported into the area after the organisms died. Fossils included crinoid ossicles, brachiopods (Goniorynchia boueti) and oyster shell fragments. An interesting find was the complete calyx of a crinoid weathered out on a block of the Forest Marble.

As we were all slightly damp by this time it was decided that this would be our last stop. Malcolm, on his first trip as our new Field Trip Officer, thanked Alan for an extremely interesting and enjoyable day. Third time lucky with weather next time! Kelvin Huff





photos Redcliff show clearly that the back slope is now severely affected



Eric Robinson was given this slab of ammonites as a thank you for a lecture (not in Dorset) he gave some years ago. What are they?

The Ringstead photograph on the front page will be recognised by long term members. A battle we lost but West Dorset District Council later realised the errors of their decisions and their rescue efforts ceased after a few years. I haven't been down there recently but the Warmwell gravels dumped all over the beach supposedly to protect the houses (gardens really) soon started to travel and cost far too much money to maintain. Ringstead was really the jump start for forming the Dorset GA group in 1993 in the first place mainly from OUGS members who were also GA members and other GA members some well versed in Dorset geology. A meeting set up to explore the possibility garnered some 40 plus members and a committee of 9 was elected. Adrian Brokenshire was our first Chairman and Jane Clarke volunteered to produce a newsletter (produced the hard way). First

fieldtrip was Brandy Bay, led by Steve Etches, 2nd was Portland Raised Beaches led by Adrian. First lecture was Purbeck Marble by Trev Haysom. First major event was the Sunnydown footprints which involved a good many Dorset GA members. All organised in short order. The field trips continue of course but Pat White and myself were already organising a geology lecture programme at the Dorset County Museum so I suggested we didn't run counter to that and encouraged members to attend those instead. Workshops proved popular as did the Wimborne Fair (which ceased in 2015 mainly due to considerable disruption by East Dorset District Council) but the Christmas Workshop in particular still attracts enough members to make it well worth while as does the Chairman's FT and DGAG picnic in July (plans are afoot to make it Worbarrow again this year). Doreen Smith

Dear Weather Rescue citizen scientists: 3725 of you have helped successfully rescue around 1.5 million lost weather observations taken on the summit of Ben Nevis and in the town of Fort William between 1883 and 1904! It took you less than 12 weeks. This is a wonderful demonstration of what citizen science can achieve, and it would not have been possible without you. Climate science has benefited from your dedication and this project has already inspired others to plan similar efforts in other countries. Thank you! But, this is not the end for Weather Rescue... We have recently launched an ambitious project to rescue another set of lost weather observations, taken all across Europe in the early 20th century. I know that some of you are already taking part, but if you have not heard about it, the project is discussed in this BBC article (http://www.bbc.co.uk/news/ science-environment-42175307) which also shows some of the rescued Ben Nevis data! If you have some spare time, please help us continue the Weather Rescue adventure: www.weatherrescue.org Many thanks, Ed Hawkins, project lead for Weather Rescue

DGAG Field Trips and Events 2018

contacts: **Kelvin** email kelvin30@gmail.com new field trip officer

Malcolm email m.wright603@btinternet.com
Doreen e mail heldon47@btinternet.com
telephone 01300 320811

Saturday 10th February The Fleet leader Alan Holiday

The Fleet shores offer good possibilities for fossil collecting and a partial section across the Jurassic strata of the Weymouth anticline. Hard hats aren't required but come prepared with a packed lunch and boots that don't mind mud!

Meet by the track down to Pirate's Cove for a 10.30 a.m. start. The NGR is SY 660773 (post code DT4 9GL,Wyke Castle). We can go down to the Fleet and work north and south before going to Tidmoor Pont (driving) and Tidmoor Cove then on to Moonfleet Manor. Parking is limited, especially for Tidmoor Point so we need to take as few vehicles as possible.

Thursday, 15th March Salisbury looking at building stones in the Cathedral Close and the Cathedral leader Kelvin Huff

Meet outside Salisbury Museum (in the Cathedral Close) at 10.30 a.m. There are several Park and Rides for Salisbury, depending on the direction you come from. The Cathedral "suggest a donation" on entry-currently £6.50 for seniors.

We'll do the Close first as there is a Communion at 12.00 each Thursday. After lunch, we'll look at the Cathedral.

DIGS (Dorset's Important Geological Sites)

anyone willing to be involved in conservation work on RIGS sites on an occasional Friday
Any ability welcome as and when you are available, contact Alan Holiday

WESSEX OUGS

To book a place, contact: **Jeremy Cranmer** wessexdaytrips@ougs/telephone 01305267133

February (Sunday) 18th Introduction to Mendip geology Leader: Alan Holiday

Location: Mendip

22 (Thursday) February Visit to The British Ocean Sediment Core Research

(BOSCORF) NOC, Southampton Millie Watts & Dr Suzanne Maclachlan

April (Sunday)29th Geology and fossils with coastal change Leader: David Bone

Location: Selsey, West Sussex

DNHAS Lecture Series 2018
doors open 6.30 for 700pm start all on Wednesdays
admission £3.00 for DNHAS members
£5 for non-members
and pre-booking apparently required

February 14th Prof David Martill of Portsmouth University

`In search of dinosaurs in the Moroccan Kem Kem'
The search for Spinosaurus & other magnificent animals
that lived in North Africa about 100 million years ago

March 14th Dr Mark Witton

The science of palaeoart: the life appearance of fossil animals (Dr Mark Witton)

April 11th

Dr Steve Sweetman, University of Portsmouth

Dorset landlord's ancestor was an early Cretaceous `rat'!! The discovery of Man's earliest ancestors, in Durlston Bay'.

> Museum of Jurassic Marine Life Kimmeridge, Dorset, BH20 5PE info@theetchescollection.org 01929 270000 open 10.00am-5.00pm every day

Aims of the Dorset Geologists' Association Group

- 1) To promote Dorset Geology.
- 2) To hold field trips/lectures in Dorset and surrounding areas not necessarily limited to famous locations, but also to less well-known coastal and inland areas.
- 3) To promote geological interest among school-children and help the schools to make full use of local facilities within the Earth Science curriculum.
- 4) To compile and maintain a list of people and resources with specialist/general knowledge of Dorset Geology and potential field trip leaders, which would be available on request. The existence of this list to be widely publicised.
- 5) To monitor temporary/new exposures and help to keep the data base at the Dorset Environmental Records Office up to date concerning Geological matters.
- 6) To distribute information in the form of the national/local circular to members and interested parties.
- 7) To co-operate with the local RIGS Group and to participate with local Rockwatch Groups.
- 8) To participate in any promotion/campaign run by the GA central office (within reason).
- 9) To correspond with other local societies for the mutual benefit of all.

Committee members:

Chairman/Librarian/GA Secretary/Sales Treasurer Fieldtrips Officer

Newsletter/Events/Web ordinary ordinary ordinary

Alan Holiday Kelvin Huff Alison Neil

Malcom Wright Doreen Smith John Larkin John Scott Robert Chandler Weymouth Dorchester Weymouth

Frampton Wareham Wimborne Surrey

01305 789643 01305 265527

01305 259712 01300 320811

alanholiday@btinternet.com kelvinhuff30@gmail.com

alison.neil@madasafish.com m.wright603.btinternet.com heldon47@btinternet.com

The Lulworth-Tyneham Range walks 2018

open every weekend and 30/3-15/4 except 24-25 February 2018 17-18 March 2018

check the recorded message on 01929 404819 Tyneham Village Exhibitions open 10.00 to 4.00 pm DIGS postcards, leaflets and DVD available from Alan Holiday contact details above

Tide tables for the UK available send port & date to Doreen (as above)

any member noticing work on any likely useful rock exposure, please notify Alan, Kelvin or Doreen

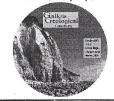


contact DS The DGAG car sticker @ £1.50 to members

DGAG Library books have now been transferred to Alan Holiday. The books available are mainly Proc. Geol Assoc from 1936 onwards and QJGS from 1939. There are other books which can be borrowed. If you are interested in a particular geological subject, please contact Alan or Doreen

DGAG Sweat & Polo shirts available from Kelvin Huff details as above Various sizes are available from medium to XX large.

Dr Ramues Gallois has produced two very detailed reports on "The Undercliff" and "Church & Ware Cliffs' which I have available on CD @ £6.00 (inc p&p) DS



Dorset Geologists' Association Group

SUBSCRIPTION RENEWAL

I wish to renew my subscription as an *ordinary member @ £12.00 student member @ £9.00 newsletter only @ £7.50

and enclose my remittance (*please delete as necessary)

Name

Date

BLOCK CAPITALS PLEASE

Send the completed form, together with your subs, to Alison Neil (Hon Treasurer) 15 Littlemoor Road, Weymouth, Dorset DT3 6LA

please ignore if you have already paid for 2018

Minutes of the Annual General Meeting of the Dorset Geologists Association Group

Held on 13th January 2018 at Broadmayne Village Hall

The Chairman welcomed members to the AGM of the DGAG. There were 32 attendees, including 2 visitors.

1. Apologies for absence had been received from R.Musgrove, R.Bale, Barton, R.Chandler, J.Cranmer, R. and S.Alderman, V.Fogarty, N.Donnelly, M.Wright, N.Simpson.

2. Minutes of last AGM.

The minutes were accepted as a true and accurate record of the meeting.

3. Matters Arising.

Item 4.1: Bournemouth Geological Terrace. In answer to a question from the floor, Alan reported things are at something of a hiatus, owing to BU's reluctance to allow any marking or labelling of the specimens. During the discussion that followed, a suggestion was made to have the specimens professionally cleaned to aid identification. Alan will make further enquiries.

4. Officers Reports.

4.1 Chairman

Well I have now been in post for 11 years, and the time seems to whizz by! Is it because I am getting old!? I don't feel old despite reaching 70 years last June and I believe that rocks are the foundation of my good health; fresh air, exercise and deep time thought plus the friendship of other like-minded people over the years could be the answer! One of my Kingston friends said he envied me when I retired because my academic interest was my hobby – he went into transport engineering!

It has been another good year for DGAG with plenty of activities although some more successful than others. The beginning of the year started with the loss of our President John Chaffey. He was one of the founding members of DGAG and made an immense contribution to the group over 20 plus years leading innumerable field trips and writing countless articles for the newsletter. His energy, enthusiasm and good humour added to his great knowledge of geology and landscape resulted in us having an extremely valuable member of the group. He is greatly missed. My words sadly do not do him justice. Thanks to Kelvin we had a good selection of field trips although one had to be cancelled at the last minute (Lulworth to Durdle Door) as only one person signed up for it apart from Kelvin and I, and we had already carried out a recce! Fortunately, the next trip to Mupe from Lulworth was rather more successful. I mentioned last year that the Fossil Forest was closed, and it is still closed although hopefully the necessary maintenance work will be carried out shortly and this important site should be open to the public again later in the spring. The Durlston Bay field trip was also very enjoyable if rather more physically challenging We also had an excellent trip to the Malverns and Forest of Dean and I am looking forward to this year's 'away day' to the Black Country. Despite venturing out of Dorset for the Chairman's Picnic we had a good turnout almost certainly helped by the picnic which seems to make

these events more popular than any other events on the DGAG calendar apart from the Christmas workshop – any connection? Could it be Doreen Smith?!

Last year I also mentioned that some progress had been made of the Geological Terrace at Bournemouth University but unfortunately things have ground to a halt again as we could not get permission to mark the stones once we had identified them. This has made further identification very difficult. If anyone can think of a way forward I would be very interested to hear your ideas.

As in previous years we are still looking for committee members to augment the small team that run the group and as usual I would like to thank the committee members for their efforts on your behalf. I hope that by the end of the AGM we will have a Field Trip Officer! As ever, suggestions for future activities from the membership would be very welcome.

I mentioned last year about the development of the Building Stone Group and Kelvin has been instrumental in developing the website which is a great asset, providing knowledge of stone from Dorset and further afield. The information has been collected by several people some of whom are DGAG members. If you are interested in building stone then your contribution will be appreciated.

Apart from DGAG activity there has been a lot more with visits by groups from Suffolk, the United States and the Rockwatch week at Leeson House in August. So, it has been a busy year and I am looking forward to more geological activity in 2018. I am already booked up for London South Bank University in March, Rockwatch in August and Malvern U3A in October. And don't forget there are the DGAG field trips, OUGS field trips and DIGS conservation events.

4.2 Secretary

This is my 10th A.G.M. so I'm beginning to run out of new things to include in my annual report! I didn't anticipate being in the job for so long so if there's anyone else who fancies the job just let me know, I believe in sharing the joy. As far as committee meetings go, we met every three months in 2017, excluding the A.G.M., and that regular face-to-face contact with fellow committee members has been very useful.

On a monthly basis, members on my e-mail group receive updates and details of forthcoming events such as field-trips from me. As I've been running the field-trip programme with Alan, I've been handling the sign-ups (with Doreen) and running the attendance lists and passing on field notes and itineraries.

I've kept members updated with communications from the G.A and other geological news. The Facebook Group continues to work well and is updated pretty regularly with photographs (mainly by Alan!). I've also used the page to set up invitations to events like this one. Facebook's global presence means we get requests to join up from individuals who live a long way from Dorset

such as the Far East. I'm pleased that Dorset geology is attracting interest from around the world! We continue to have at least one activity per month, which is pretty good for a small society. We again had a very successful residential weekend is to the Forest of Dean and the Malverns led by Noel Donnelly. This year, Noel is showing us around Shropshire for two days in May followed by a day in the Black Country, organised by me with help from the Black Country Geological Society.

For some years we have been donating a Geology prize to All Saints' School in Weymouth and 2017 was the last occasion for this. Unfortunately, Geology has now been removed from the curriculum and is unlikely to be reintroduced any time soon. We have made attempts to give prizes to the few remaining Dorset schools offering the subject but so far we've received little or no response.

Our annual dinner took place in November at the Wessex Royale Hotel in Dorchester, with Dr. John Whicher as the guest speaker. Again, everything went well and John provided an entertaining after-dinner activity on fossils which everyone seemed to enjoy. The event has been booked at the same venue for November 2018 with a certain Bob Chandler as the guest speaker.

This year I have also spent quite a bit of time developing the Dorset Building Stone website, following research visits by a small group of mainly DGAG members. There is now a considerable amount of material on the site on Dorset's churches, quarries and other buildings which has not been published before. If you'd like to see the progress we have made just follow the link from the DGAG Home page.

I finish by thanking the members and committee for their support over another busy and enjoyable year and look forward to a successful 2018.

I hope you will agree that our finances are still healthy!

4.3 Treasurer

We had a balance of £5142.05 at the end of our financial year (31st October 2017). Our total income, mainly from subscriptions was £1901.98 and our total expenditure was £2431.27, so we used up about £530 during the year to subsidise our activities. Our biggest items of expenditure were, as usual, the newsletter (£722), our insurance for field trips, organised through the GA, (£171), and our website (£125). The officers' expenses include our contribution to a new laptop, owned jointly with DIGS, for which we paid £212, so the day-to-day expenses, including travel to GA meetings, some postage, etc., amounted to £79. You will see that DGAG has partly subsidised most of our activities, to the benefit of members, including the AGM day, our field trips, the summer picnic and the Christmas workshop. Our annual dinner is self-financing, but for paying for the speaker's dinner; however it straddles two years in the accounts because of its timing in November.

Our membership is holding up, and we finished with 107 members at the end of 2017. We just had a few sales to help boost our finances (£41). As always I would like to

thank the other members of the committee for their help, and Roger Chapman for verifying our accounts. Newsletter costs were also discussed at some length and these suggestions will be fed into the discussion regarding membership fees.

4.4 Field Trip Officer

As this post was vacant for the previous year details of trips have been covered in 4.1 and 4.2 above.

4.5 Events

All events were successfully completed. The Chairman's fieldtrip and DGAG picnic at Ham Hill was particularly successful thanks to Sheila Alderman's local connections (!) and the fine 'ice-cream' weather.

The Christmas Workshop again was a happy buzz at Broadmayne. Colin and Linda Morley found themselves chief restaurant staff and coped with no problems at all. As for clearing uppers, washing uppers, etc. as well as setting up tables to start with, I think most attendees were involved one way or another. Thank you one and all

4.6 Newsletter:

All 6 issues went out mostly later than usual because there were some very tricky moments. The main problem is that it is all done with standard household machinery i.e. mine, and nearly 2000 pages 6 times a year does mean a fair amount of strain on them. My ancient mono laser has gone to commodities heaven but I have a fairly reliable 'modern' machine now. I've also had to replace my computer though if Windows 10 keeps on upgrading it might just go out the window altogether. All the newsletters were full of interesting articles on many different geological subjects, all gratefully received by yours truly and appreciated by our far-flung readers. Many thanks to one and all and keep them coming. Again a few reports on field meetings from those attending rather than those arranging would be good

4.7 Website:

The Dorset GA site is still growing and I've added a number of pages to it in 2017 as well as all the newsletters of course. There have been quite a few website hits and queries this year. Are you aware that you can go to the archives and read the newsletters back to the beginning? There's a lot more to do but I'm still rather behind anyway after another difficult year. Hopefully I can catch up in 2018. I think I've been saying that since 2011 when I had my first hip replacement but every year since there have been complications

4.8 Sales:

There was nothing to report for 2017.

4.9 DIGS

I am pleased to be able to look back on another successful year for the DIGS group thanks to the efforts of our members who have continued to do a great job in different ways. We have continued to carry out excellent

conservation work at a number of sites and our efforts are appreciated by the geological community at large. We have carried out conservation at Whitecliff (Poole), Wanderwell (Bothenhampton), Upwey Cutting, Rockpit Farm (Maiden Newton), Poxwell, Todber, Holt Farm (Melbury Osmond), and Westhill Chalk Pit (Corfe) which is a fine record of activity for the year.

We have one of the most active groups in the country and I am extremely grateful to the whole group helping in whatever way they can. We are also being asked to help with other groups and in particular the reestablishment of the Somerset RIGS group following the death of Hugh Prudden. The newly revamped website is also a great asset and I am so pleased that Gillian Gunner is so willing to help and keep it all up to date. We regularly receive emails seeking information or expressing interest in the group.

We are still hoping to develop new sites but so far this hasn't happened although it looks as though Spring Lane at Longburton is about to happen at long last (thanks to Pete Bath's interest). Unfortunately, no progress has been made with Home Farm, Corscombe and the Toller Fratrum site has deteriorated so much it was decided that it is not viable.

The postcards associated with the Purbeck Keystone Project (2008-2011) have finally all gone and I don't think there is any point having a reprint as I don't think they were too successful which I found surprising. There are still plenty of Beneath your Feet walks leaflets especially the Purbeck ones and it is proving difficult to find an outlet for them due to lack of display space at TICs. However, I have found by 'going and knocking on the door' there was some success later on in 2017.

5. Election of New Committee

All existing committee members agreed to serve for another year. We welcomed Paula Smith to the new Committee as Field Trip Officer and OUGS Liaison.

The committee Members for 2018 are:

Alan Holiday Chairman/ DIGS Kelvin Huff Secretary/ Sales Newsletter/Events/Web Site Doreen Smith Alison Neil Treasurer Field Trip Officer/OUGS Liaison Paula Smith Vacant Rapid Response John Larkin Ordinary John Scott Ordinary **Bob Chandler** Ordinary

6. Membership fees from 2019

A wide-ranging discussion considered the pros and cons of an increase in membership fees. Many of our events are subsidised from DGAG funds so at present there is a progressive erosion of the capital we hold. Members taking the Newsletter digitally are effectively subsidising those who take the hard copy. Some members are 'Newsletter only' and pay a reduced annual subscription so there is already an 'Associate' and 'Full' system of membership. A suggestion was made that we could charge prices closer to cost for events such as the Chairman's Picnic and Xmas Workshop to reduce our

losses. A show of hands amongst those present indicated general assent for a membership fee increase. Paula offered to do a survey to see how much other local groups charge and the Committee will discuss the whole topic further at their next meeting.

7. GeoWeek, Sat 5th May - Sun 13th May 2018

Members were asked for suggestions for an event to mark GeoWeek, possibly involving children and ideally with community involvement.

8. A.O.B

Yvonne raised the topic of a suitable way to mark John Chaffey's life and work and the committee will liaise with Ruth Chaffey to work towards a solution.

Meeting closed at 3.05 p.m.

The AGM was followed by refreshments and talks on the geology of:

"South Wales" by John Scott "North Wales" - Doreen Smith

Dorset Geologists Association Group Balance Sheets and Income and Expenditure Accounts 2016-2017

Income and Expenditure Account 2016

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by R. Chapman

Hon. Treasurer - A.Neil 3752