



Science Naturally - Spring 2015

New BNSS President....

This year we are very lucky to welcome Rod Cooper to the Society as the new President! Ian Julian had a chat with him to find more...

Could you tell us a little about your history, especially in Bournemouth?

After graduating with a degree in physics I undertook teacher training and then went to teach in Kenya for three years. This was a wonderful time in my life when with two colleagues I went on Safari most holidays to the various game parks in East Africa. I returned to England to continue my studies, first studying for an MSc and then a PhD. This was followed by a short period in industry before returning to teaching in Basingstoke where I married Elaine, who I had met whilst studying for the MSc. We then went to Hong Kong for three years after which we returned to England where I continued my career in education. I became a Director in a Further Education College before taking early retirement. I then set up my own company introducing overseas students to UK colleges and I still do this which has given us an opportunity to travel to many countries. We moved to Bournemouth about 12 years ago and spent the next three years writing two books, namely Discover Bournemouth and Discover Poole. Writing these books involved us in exploring the conurbation and surrounding area and the opportunity to indulge in my main hobby of photography since all the photos in the books, other than the aerial photos, were mine. I became interested in standing for the Council 10 years ago and, along with Elaine, we were elected as Councillors for the Wallisdown & Winton West Ward in 2007. I was fortunate to be invited into the Bournemouth Cabinet where I was given the Portfolio for Leisure and Tourism and I look back with a degree of

satisfaction on what I achieved in that role. I was elected Mayor in 2013 and it was a great honour for Elaine and I to serve the town in that role. Elaine had stood down as Councillor after one term and I am standing down in May after serving two terms. I would say to anyone who is thinking of standing for election as a councillor, do so. If elected you will find it most interesting and rewarding.

What are your impressions of the BNSS - good and bad?

What concerns me is how few people know about it and of those who do several have not been to visit. Why? When I was Mayor I usually asked guests to the Parlour how many museums are there in Bournemouth. It was rare indeed for anyone to mention any of them other than the Russell Cotes. I never had anyone give the correct answer of three. How many people reading this know of the third? (I am not including museums in Poole and Christchurch). So the 'bad' is that the museum is not being publicised enough. As for the 'good', there cannot be many societies and museums such as this in the country. Personally I have always preferred it to the Russell Cotes but then I am more scientific than artistic. Its extensive collection of artefacts is excellent and we

must get the message out to the public more often and raise the museum's profile.

Thank you for volunteering to become the President. I say that because the BNSS, like many organisations nowadays, are having problems recruiting volunteers.

It was an honour to be asked to be its President and I think that I should be thanking you and not you thanking me.



Photo: Ian Julian

Mary Thornton
welcomes Rod Cooper
at BNSS AGM 2014

Rod Cooper interview continued....

You say you do not wish to be a figurehead President. What do you have in mind?

I do not want to be President just so that I can talk to people (although that is important) but would prefer to leave some legacy, however small that legacy might be. I have ideas but I cannot carry them out without the wholehearted support of the Trustees and Members. So far I have discussed with the Trustees the keeping of live creatures, such as fish, in the building and also linking up with the various Bournemouth history societies. I would also like the society to apply for a major grant from the Lottery Fund. These are early days but I hope the Society will adopt at least one of these ideas.

What are your hobbies and do you have any particular favourite subjects - wildlife, science, history - that the Society is involved in?

I have already mentioned my interest in photography, watching Arsenal on TV, travel and writing books. I would very much like to write, together with Elaine, some more books about Bournemouth.

I believe you are an active supporter of Bournemouth FC?

Where did you get that idea from? There is only one football team and that is Arsenal! Mind you I am only an armchair supporter but Elaine knows that if one of the Arsenal matches is being shown on TV then she will not get anything from me for a couple of hours. She doesn't understand how grown men can get so tied up with their

team. I have been to one Bournemouth match but I prefer the warmth and comfort of watching a match at home. As Mayor, I invited the Cherries into the Mayor's Parlour for a buffet lunch.

The inevitable question: How do you think we can encourage some younger members? I am thinking of the age of 20 to 50. There seems to be a dearth of these age groups on field trips or attending lectures.

With difficulty! The trouble is that the 20 to 50 age range are busy involved with earning a living so they do not have much time for much else. In fact all the charities are having the same problem in attracting this age range. However I take heart from what I saw yesterday when there were around 500 people at the BNSS, many of them youngsters and the look on their faces was pure pleasure. Hopefully some of them will continue to maintain an interest in the Society.

You have mentioned getting Bournemouth University involved, and giving us free advice on how we might improve our presentations. Could you explain this?

I have been in touch with the Arts University of Bournemouth and they would very much like to be involved with the society from helping to suggest better ways of using the existing building to submitting Lottery bids. It is still early but they seem very keen to work with us over the next four or five years.

Interview by Ian Julian.

Update on the Geography Section with Martin Western



I have endeavoured to attract speakers on the issues of water, energy and food which are some of the major issues the global society faces. Equally these cannot be separated from the environmental effects, and we have had a variety of speakers on energy issues. Tilack Gininge (Bournemouth University) gave us two superb lectures (talks!) on environmental law and fracking. Chris Miller (involved in the energy business for 25 years) gave us a outstanding presentation on the emotive issue of keeping our lights on and will follow with another on the Energy Crisis. I have given a number of lectures on how countries, Norway and Santorini, with scarce resources exploit them to generate income and raise employment. With the latter I showed how disaster for one generation may actually benefit future generations. Additionally I gave a talk on food and large scale farming showing that without adequate research planning can be disastrous (the notorious Kongwa Groundnut Scheme, Tanzania) and how cheap labour is exploited by Multinational Companies at Lake Naivasha, Kenya. I enjoyed giving a talk on my research into the climate of Bournemouth showing the underlying seasonal and long term changes revealing how temperatures are rising, sunshine is falling. We can look forward this year to talks on the Energy Crisis, Water Aid and Marine Conservation from our new member, Barry Haynes.

All Aboard! The Young Explorers

“Any children want to come on a boat around Poole Harbour this Saturday? It will be for a couple of hours birdwatching and may be very cold.”

The Young Explorers



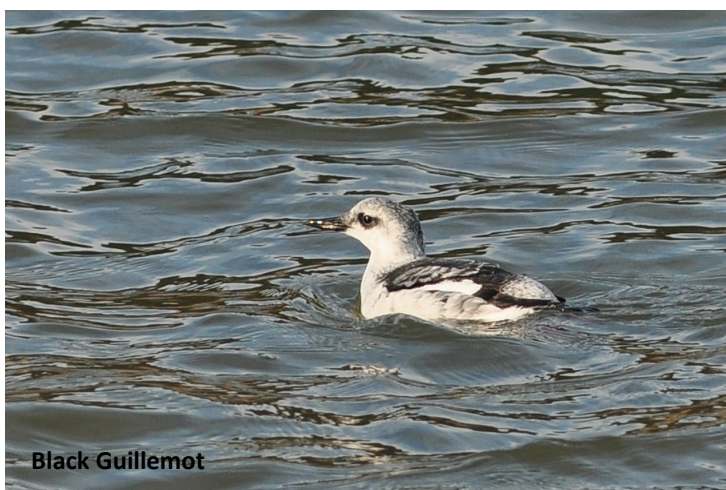
Following a generous invitation, I hoped to get a family or two. It was very late notice, so we were delighted when nearly all of the Young Explorers present expressed a desire to come along. As a one-off, parents were allowed to accompany them, and so it was that over 20 of us set off from Poole Quay on 17th of January.

Yes, it was cold, but not too bad. Blue skies and a kindly sea ensured a great morning was appreciated by all. Next year, we may try and get a boat trip arranged by inviting *all* the Young Explorers, via an email drop, and just maybe, if you're good, invite BNSS members.

The commercial boats do not run in winter, but it's the best time to do a cruise around one of the most scenic harbours of the world, as the winter waders, sawbills and geese are here - and in profusion. We saw plenty of Avocets, RB Mergansers, Goldeneye, but the bird of the day was the *Black Guillemot*, a cousin of the common Guillemot. In winter plumage, it is - - white! We obtained the best view ever in Dorset of this rare visitor, seemingly oblivious of the boat, so I was fortunate indeed to obtain the best photograph for the Harbour records.

We saw a few of the Spoonbills (47 in total, by far and away a British record this year, and means they nearly all winter here). Throughout the 2-hour trip, Mark

Constantine gave a superb commentary. I am trying to agree a date when Mark can give us a lecture at the BNSS, both on the running of Lush and his charity "Birds of Poole Harbour". He is one of our top ornithologists and has



Black Guillemot

written several books, including his latest on the science of bird sound. Together with his wife Mo, Phyl England, and Paul Moreton, they organise fabulous trips, and not bad value as they are free. (Paul will be giving us a talk on 13th of June.)

Thanks to them, and to the parents who were quite well mannered for their ages, but especially the Young Explorers themselves. They were so well behaved and full of enquiry, with not a whinger in sight, that unanimously it was agreed, we will have to do it again!

Article & photographs by Ian Julian



RB Mergansers

BNSS Open Day and Wildlife Gardening Event

This April the BNSS once again opens its doors to the public for our Open Day!

This year, the BNSS has teamed up with the Dorset Wildlife Trust to add an extra element to the day—**wildlife gardening!**

Working with Katie Wilkinson of the DWT, the Society has invited various groups in the local area to bring information and activities into our garden to help families make their gardens more wildlife friendly. DWT will be bringing in information about the Great Heath projects, as well as activities to make wildlife homes for the garden. Other organisations attending will be Butterfly Conservation, Amphibian and Reptile Conservation, Dorset Bat Group, Bournemouth University Festival of Learning, SembCorp Water Company, and Bournemouth Borough Council Recycling Team.

As well as all this happening in the garden, the usual BNSS Open Day activities will also apply. Light refreshments will be served in the Museum Room and craft activities and live insect demonstrations will be held in the lecture hall. All of the rooms will be open to the public with a kids adventure trail to follow!

Our last open weekend was a huge success with a record number of people through the door. For this event to be equally successful we need all the help we can get



making sure the day runs smoothly. There are various ways you can volunteer including:

Room Steward, Front Door Steward, Tea and Coffee Committee, Garden Steward, Shop Sales, Membership Desk....

If you are free on **Saturday 11th April** between **10am and 4pm** and would like to help in some capacity, please contact me at publicity@bnss.org.uk or pop in and see me on a Tuesday morning. Volunteer shifts will be split into 10am-1pm and 1pm-4pm so you should also get a chance to have a look at everything going on during the day. There is

a volunteer sign-up sheet in the BNSS hallway by the noticeboard. Please feel free to put your name down and I will contact you with more details.

It is shaping up to be a really exciting day! Even if you can't volunteer your help for the day—please come along and see what we are doing and spread the word to friends and family!

Katherine West, Communications Officer

ADVENTURCATION with AUB

On Wednesday 18th February, the BNSS held a family friendly event organised by Events Management students from the Arts University Bournemouth. It was a fun morning, with kids activities in the Lecture Hall, insects in the Museum Room (courtesy of Steve Limburn & Mark Spencer!) and owls from Liberty's Owl, Raptor and Reptile Centre. Even though the event only ran from 10am-1pm we still had over 500 visitors through the door and a queue forming by 10am! Thank you very much to the students for organising the event and to all of the Members who gave up their morning to help out. It was very busy and everyone's help was hugely appreciated!

Notices

BNSS CALENDARS 2016

Please submit photographs of local areas for consideration for the 2016 Calendar. They may be pictures representing any of the sections of the Society. Send by email to Margaret Evelyn:

samarg@greenbee.net, or prints to

Margaret Evelyn, 30 Mayford Road, Poole, BH12 1PU. Prints may also be left in Margaret's pigeonhole at BNSS.

The closing date for entries will be **Tuesday 31st March 2015**.

Please enclose contact details, as well as approximate date taken, and any details of interest.

ANNUAL COACH OUTING 2015 WEDNESDAY 3 JUNE

We shall be travelling to Lacock from the BNSS. There will be visits to the Camera Museum, Lacock Abbey and a guided tour of the gardens. After leaving the village, we shall go to the Canal Centre at Devizes, and have afternoon tea hosted by the Wiltshire Women's Institute.

I am currently negotiating the possibility of one or two interesting surprises en route!

Please note: National Trust members will travel at a reduced rate. More details to follow.

Keep Wednesday 3rd June clear in your diary!

Margaret Evelyn

Stephanie Roberts

In this newsletter we would like to remember Stephanie Roberts, who sadly passed away on Sunday 15th February 2015. She had been battling severe cancer; she is now at rest and no longer suffering.



Stephanie joined the BNSS in 2007 and became curator of the Society's Egyptology collection. She contributed a huge amount to the Society, organising, researching and documenting the collection and making it a valuable resource for schools and visitors. I personally remember her help and warm welcome when I first visited the Society during my degree in 2010. She was a wonderful, enthusiastic and dedicated member of the Society, and she will be sorely missed. Here are some tributes to Stephanie from BNSS members.

Her quiet hard work and deep knowledge about Egyptology was always appreciated by me and the many visitors to the museum who visited the society on open days.

I only met Stephanie occasionally, but I was always impressed by her kindness and thoughtfulness. When I joined by the Society I became aware of her dedication to Egyptology which was demonstrated by the superb way she organised and catalogued the collection. I, like many, will miss her.

Katherine West, Communications Officer

What a delightful, brave, talented lady you were! You will be sadly missed by all at the BNSS.

I learnt so much from you, not only about Egyptology, but even more about courage and kindness.

You will always be an example to us all.

BNSS 2015 Photographic Competition

The BNSS 2015 Photographic Competition is now open!

The theme this year is **DORSET** and the categories are **Plant Life, Wildlife and Landscapes**.

There is an **Adult Section** and an **Under 16s Section** and you can submit up to 4 photographs in each category.

Martin Western says *"I am pleased to continue what is now annual event, and hope this will encourage people of all ages to get involved in a love of nature and hopefully another way of recruiting future members. Katherine West is playing a central role in publicising our competition. I will continue to run photo workshops as these have been successful with publicity in the Echo of attracting people in from outside the Society."*

Full details can be read on the website at bnss.org.uk/photography

2014 Geology Field Trips - Part Two

Ray Chapman has written about the wonderful 2014 Geology Field Trips. There was so much to tell that I have had to break it down into two articles! Here is Part Two—worth waiting for!

Late August and it was off to Portland. The morning was spent studying the raised beaches at the Portland Bill area. Walking to the Admiralty fence we noted the old quarry working and the fact that some of the path material was formed by debris from the raised beach. Both of the raised beaches are of Late Pleistocene age, the west beach some 210,000 years old. At the time it was formed the sea



level was lower and its temperature 3°C or so

lower than today the land was lower as well. The beach formation was examined it consists of small pebbles, well rounded in places not in others, and fragments of shell which had been broken by the wave action on an high energy shoreline. These are all cemented together by calcium carbonate derived from the local limestone. Many of the local pebbles have been bored by sponges. The East Raised Beach is younger at 125,000 years and the sea level was high. The beach sand is friable with rocks of the Purbeck Limestone well rounded and jumbled. The wave action was much gentler here although still active and there are a large number of mollusc shells predominantly gastropods, some have retained their colouring. There are dozens of species known today but generally found in the Arctic. The picture shows *Littorina littorea*.



Then it was off to Tout Quarry firstly for lunch and then to study both the rocks and the sculptures. The disused quarry is mainly of Portlandian age with a thin covering of Purbeck, the quarry is a centre for stone masonry with courses being given in the summer as well as an annual competition. Over the years many of the rock faces have been carved with sculptures and more recently stand-alone sculptures have been placed in various positions. So we were able to study the rocks as well as the sculptures. The Lower Purbeck is a marine bed and we were able to inspect some algal growths particularly where there were tree branch holes. When the trees were drowned the algae formed around the branches and after the branches decayed the round growth was left. The Portland Limestone was also marine and contained ammonites and molluscs. In several places the rocks were covered in tufa called flowstone. This is calcite that has been leached from the rock by precipitating water and as it flowed down the rock it left a sheet of calcite rather like a stalactite forming. The sculptures were followed using the guide sheet but as they were not

numbered there had to be some interpretation of the names. A small bridge called Lano's Arch is situated near the centre of the quarry, this was used to move rocks over the arch as well as under it to the docks for transport. The arch was built in 1854 as a dry wall construction, apart from some remedial work to damage on the top surface it is as it was originally. A walk along West Weares just outside the quarry gave wonderful view over Chesil Beach and enabled us to see the waste stone that had been dumped over the cliff.



2014 Geology Field Trips - Part Two



The final trip of the year in September was to Dancing Ledge followed by Keates Quarry. Walking from Durnford Drove car park on the Middle Purbeck we passed Spyway Barn and continued to the steep slope down to the sea. As the steps down has become impassable due to a rockfall we walked on the grass which fortunately was dry. The quarry is very old and only stopped working in 1914 when the economics of shipping the rock to Swanage could not compete with quarries with road access. The quarry is in the Portland Freestone, at the top we could see the almost white Shrimp Bed, the fossil shrimps are few and far between, below that

the Titanites Bed although none of the giant ammonites were visible. The next bed, the Pond Freestone was a preferred bed for building stone as a freestone can be cut in any direction, it is a shelly, sandy limestone. Then the Listy Bed, a fine lithified sand with a chert band, below that the House Cap with large bivalves and ammonites. Walking to the cliff edge we could see Green Point to the east, the green being due to algae formed on a small waterfall from the surface to the west Winspit could be seen in the distance.

Dropping down to the lower cliff we could study Dancing Ledge itself. The ledge is in the Portland Cherty Series, it was used to lower the quarried stone onto the barges that took it to Swanage. The stone was first lowered from the cliff some 5 m to the ledge, moved on carts on rails, the cuttings still being visible, and then loaded onto the barges. The ledge has a very lumpy surface due to the numerous large ammonites embedded on the surface. These are termed Behemoths as they are so worn to be unidentifiable but they are *Titanites* sized. We also noted the swimming pool that had been blasted into the Ledge by Durnford School where the pupils used to take an early morning swim. One or two of the party climbed down onto the ledge for a closer study. Those that stayed on top were put to shame by a party of well-equipped young schoolchildren who had been group swimming off the rocks and climbed up the cliffs in no time at all. Leaving Dancing Ledge we went west along the coast path to Hedbury Quarry, the strata here was the same and there was a large cannon mounted on the quarry floor. It is dated from 1803 and may have been from a defensive battery or from the wreck of the Halsewell just along the coast. We then turned back up the long steep slope and back to the car park.



We drove to Keates Quarry and having checked that it was safe to do so and walked to the area where the dinosaur footprints are. These are large, almost a metre across, impressions on the quarry floor. They were made by Sauropod dinosaurs, probably a large number of them milling around. The surface of the lagoon beach they were walking on was a soft shelly limey sand and their feet sank deep into it making the impressions, well they did weigh about 30 tonnes! The assembly is among the largest known in Britain and was discovered by Kevin Keates, the quarry owner, in 1997 when quarrying the area. After identification they were examined, a paper written and then they were covered to prevent damage. Late last year they were uncovered and it was decided to open them to the public. Further work with display boards and a path remains to be done but they can be accessed from the Pilgrims Way at Worth Matravers The Keates family has been quarrying in the Purbeck for 300 years and our thanks to Kevin for permission to park in the quarry and walk to the footprints.

Another successful set of field trips, the dates are already set for next year so come and join us. Let me know of any areas you would like to see.

Ray Chapman, Trustee and Geology Chairman

Cabinets of Curiosities

The BNSS has all sorts of wonderful objects hidden away in its many drawers and cupboards. Here is something recently found in the Geology collection....

While I was browsing through the Accession Register in the pursuit of information for Accreditation I came across the following entry:

Oct 2	13	Tooth.	Molar tooth of Rhinoceros, probably Sumatran. For Types of Dentition collection 1 (Collected by F. A. R. Wallace.)	gift	W. G. Wallace.
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I had often wondered whether we had any of Alfred Russel Wallace's collection and at last here was something. A R Wallace is recorded as being an Honorary Member from 1908 until his death in 1913. His son W G Wallace became a member in 1912, we have his nomination form signed by his father. It was the son who donated the tooth to the Society in 1918. The Accession Number is written on the tooth.

The find was the molar of a Sumatran rhinoceros *Dicerorhinus sumatrensis* although Wallace used its old name in his book '*The Malay Archipelago*'. 1869 Ch. 8. The following is an extract from the book:

'The rhinoceros (*Rhinoceros sumatranus*) still abounds, and I continually saw its tracks and its dung, and once disturbed one feeding, which went crashing away through the jungle, only permitting me a momentary glimpse of it through the dense underwood. I obtained a tolerably perfect cranium, and a number of teeth, which were picked up by the natives.'

The Sumatran Rhinoceros is very rare now living a solitary life in the Sumatran jungle and possibly reduced to 100 individuals. Still it is nice to have something that was handled by Wallace. The tooth can be seen in the cabinet in the Museum Room.



Ray Chapman, Trustee and Curator

I hope you all had a very enjoyable Christmas and New Year! We have a lot of exciting things to look forward to in 2015. The April Open Day with the Dorset Wildlife Trust on Saturday 11th April will be the first big event - and I hope to see you all there! The October Open Day last year saw over 1,000 people through the door and we will need all the help we can get if this event is going to be as successful!

We have welcomed a new President and new Trustees, who have already hit the ground running and are working hard to help the Society improve and grow. Ray has also submitted the Society's Museum Accreditation application to Arts Council England. Fingers crossed that we get a positive response back!

As always, if you have any questions, comments, suggestions or newsletter articles, please do drop me a line at publicity@bnss.org.uk or pop in and see me any Tuesday. My door is always open!

Katherine West, Communications Officer.