

Spring 2017

# TOUCHPAPER

The Newsletter of the Royal Gunpowder Mills Friends Association

**Tony Barratt – 1970's**

**2017 AGM/Reunion**

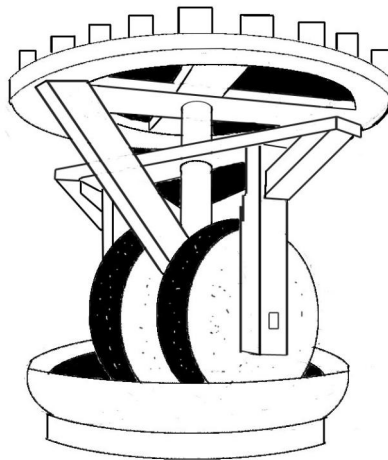
**Industrial Preservation Contd.**

**Flooding at the Mills**

**Julie's Nature Column**

**Obituaries:**

**Peter Hart  
Ron Rapley  
Minnie Fenton  
Gerry Miller**



Spring 2017

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Deadline for the next issue is 26th May 2017

# Chairman's Chat

After a period of cold weather, we are now having a warmer time while I am writing this. Unfortunately just because it is warmer does not mean it is dry. Nothing is perfect!

Two weeks ago I went to the Model Engineering Exhibition at Alexandra Palace. As always there were lots of beautifully made models of boats, ships, aircraft and railways. There were also three dimensional plastic models made using a 3D printer accurately and intricately made. So if Friends would like to make realistic models of rockets, not necessarily using a 3D printer, we could exhibit them in the Rocket Vault.

The Friends Committee are still looking for a new Treasurer so if you know of anyone who might be willing please ask them to give the Treasurer, Chairman or Secretary a ring.

Best wishes to you all.

*John Wright*

# Editorial

Welcome to the first issue this year. Thanks to those who have already renewed their membership, those who have not yet done so will find a renewal form as a gentle reminder! We do need the funds as PGL are appealing against the rejection of their planning application and the Friends are putting together a united objection and may again be paying for advice.

Unfortunately once more there are several obituaries for people who not only were friends but also made valuable contributions to the site and visitor attraction. My thanks to those who contributed to the obituaries.

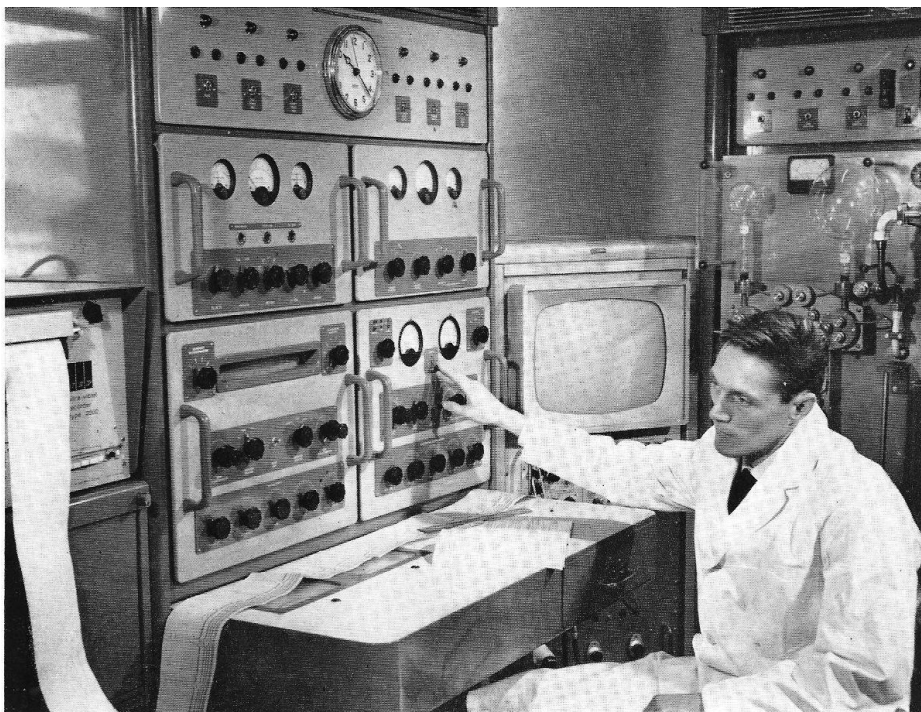
Gerry Miller's contributions are recorded in his obituary. In addition to what is written about Minnie she also did sterling work ensuring that visitors got the most out of their visits. Peter Hart helped to tidy up the area around our first model water wheel by laying block paving and then, when the operating company wanted it moved, he laid a perfect square level base on which we could rebuild. To follow that he supplied and installed a solar panel to power a pump via a control unit and battery, all of which he generously contributed.

*Brian Clements*

## Tony Barratt – 1970's

### My Spectroscopy Years

In previous articles September 2009 and Spring 2012 I covered the start of my career at ERDE in the Internal Combustion Section and the Ballistic Assessment Section. All the work of these sections involved physical measurements. Since during this period I had gained chemistry qualifications on day release courses I requested a transfer to an analytical chemistry section. In 1969 I was included in the annual staff rotation and replaced Gordon Bromberger running the infra red analysis lab in the Spectroscopy Section (Building L145). On my first visit I was introduced to Norman Paul who was sitting at the Mass Spectrometer just as in the well known photograph.



My desk was in the middle of a sample preparation lab and on my first day Norman was working in an armoured fume cupboard next to my left ear. The desk was quickly relocated when I discovered he was making a special isotope labelled nitro-glycerine!

The infra red analysis covered a wide range of subjects including measuring polymer cross linking reaction rates where the reactants were in heated cells in the spectrophotometer. The fillings of a large artillery shell which had been cut longitudinally were sampled - very carefully using wooden scrapers. Samples from a project investigating explosive production waste disposal procedures were extremely sensitive but infra red analysis only required milligrams. Brian Clements had the same samples for x-ray crystallography. For these samples rubber spatulas were used but some samples were too sensitive to isolate. On one occasion I was to collect samples from John Jenkins but was told that the microscopic crystals were detonating in the test tube as they were formed.

By 1979 the establishment was starting to be run down so I transferred to the Explosives Section of the Health and Safety Laboratory and, after a year travelling to Woolwich Arsenal to learn the job, moved to Buxton, Derbyshire. Two others from building L145, Ron Rapley and Mike Bagley, also moved to the same section at HSL.

**Tony Barratt**

## Some Riddles for you to Decipher

1. I have many teeth, but I never could bite. Used early in the day and rarely at night. What am I?
2. I widen my jaws; two fingers operate me, I cut through my prey so easily. What am I?
3. I'm red, blue, purple and green. I can never be caught and only sometimes be seen. What am I?
4. I hold with great strength for something so light. After I enter a hole everything becomes tight. What am I?
5. I always make a noise but never talk. I always run but never walk, I have a bed but I never sleep. I have a mouth but never speak. What am I?
6. Although I have eyes I never use them to see. I live in the dark with my kin, until you have use of me.
7. Pick me up and scratch my head, now I am black where I once was red.
8. With pointed fangs and in plain sight, my bloodless victims are bound by my bite.
9. I stare at you and you stare back at me. I have three bright eyes but I cannot see every time that I blink, I give you commands. You do what you're told with your feet and hands. What am I?
10. I always work with something in my eye, but never will you see me cry.
11. I am heavy forward, I weigh a lot. But when I am backwards I'm certainly not.
12. Locked away in a wooden cage, my teachings are often erased from page.

**Bryan Howard**

# Waltham Abbey Royal Gunpowder Mills Friends Association 2017 AGM/Reunion

The event will be on site on Friday May 5th at the Café, Waltham Abbey RGM. The timetable is below:

10.30	Tea and Coffee
11.00	AGM
12.00	Reunion
12.30	Lunch
13.45	Group Photograph
14.00	Land Train

Price for lunch        £9.00

Please use the form provided to book your place and send with payment to :-

Treasurer,     John Cook  
                      63 Lakenheath  
                      Southgate  
                      London  
                      N14 4RR

[rgm.fa@virginmedia.com](mailto:rgm.fa@virginmedia.com)



As you may know, PGL are appealing the decision by the Planning Committee regarding the proposed development of the site for a children's holiday camp. We are assured that the Site will remain open for the 2017 season but further than that we do not know.

Therefore, this may well be the last AGM/Reunion held at the Royal Gunpowder Mills site and I urge you to visit this year, whilst you can.

If there is a particular area you would like to see it would be helpful if you let me know and I will see what can be arranged.

There is parking for blue badge holders but please let me know in advance so that I can advise the Site Staff.

Looking forward to seeing as many of you as possible

Best Wishes

Daphne Clements

WARGMFA Committee

01992 717816

# **Industrial Preservation / Heritage Contd.**

## **- Success, A Threat, Failure or Opportunity?**

As mentioned previously, industrial heritage is a continuing battleground, with successes, ongoing battles and failures.

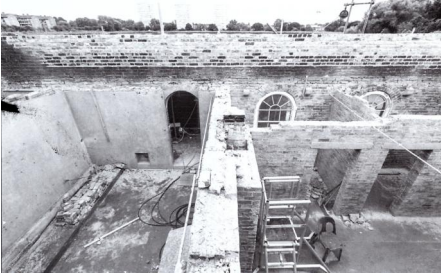
Recently there was news of a success.

### **Success – Woodberry Wetlands The Coal House**

What is now called the Woodberry Wetlands in the Hackney area started life 200 years ago as a reservoir, with an associated building, the Gas House, now known as the Coal House. When the reservoir fell into disuse the Coal House was listed Grade II and later was placed on the At Risk Register. In recent years the importance of areas of water as nature reserves and flood relief zones has become increasingly recognised and a scheme was initiated to transform the derelict reservoir. At the same time a search was made for finance to enable restoration of the Coal House. Both plans have succeeded – with the Coal House restoration being substantially aided by a grant from the AIA. What was an area of stagnant water and overgrown vegetation is now a major nature reserve and ‘outdoor visitor and learning centre’, including a restored Coal House.

## The Coal House

Before



After



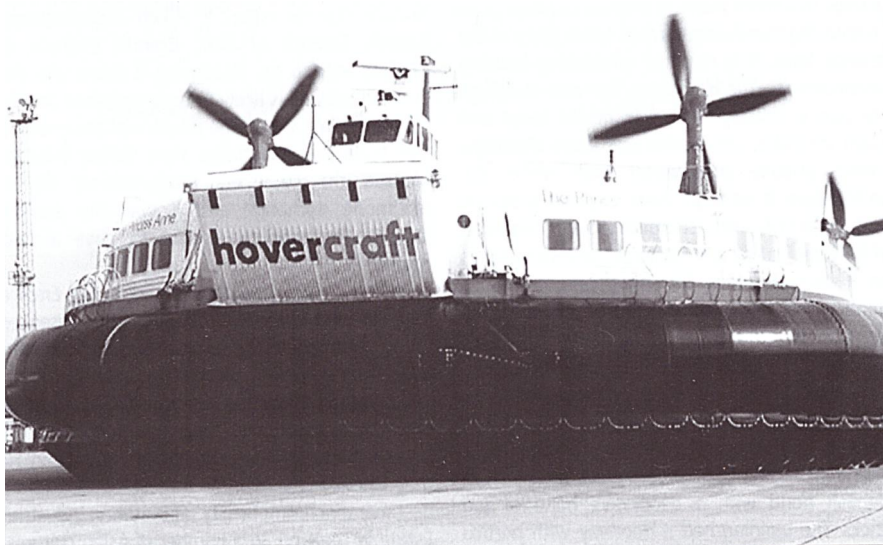
Somewhere in the country at any one time some preservation group is engaged in an endeavour to save a building or artefact from destruction.

### **An ongoing Battle - Hovercraft Museum**

The all volunteer Hovercraft Museum in Lee-on-the-Solent holds the two remaining examples of a 1970's British technology – the SRN4 Hovercraft - the Princess Margaret and Princess Anne. Replaced in 2000 by a catamaran service, in their heyday the 250 ton gas turbine craft arose on their skirts like marine behemoths from their lairs at Dover and Pegwell Bay to carry 400 passengers and 55 cars across the Channel inside a sometimes bumpy half an hour.

The site is not owned by the Museum and the owner now wants to demolish, including break up of the hovercraft, which are caught in the middle of a complex legal battle in an endeavour to work out some arrangement which will save at least one of the craft – the Princess Anne, which is in better condition.

## Princess Anne Hovercraft



A recent announcement has turned what seemed to be a high profile failure into a potentially very Interesting if somewhat startling opportunity.

### **Failure or Opportunity - Firepower**

Sadly, the Royal Artillery Museum at Woolwich – Firepower, with origins stemming back to the Royal Military Repository founded in 1778, closed in July of 2016 after failing to meet its target of 200,000visitors per year. Most of the Royal Artillery Collection housed in the Museum was transferred to the Science Museum storage facility at Wroughton in Wiltshire and the Woolwich site was finally vacated at the end of the year.

And there the story might have ended, with the Collection being visited by a few die hard enthusiasts when permitted by the Science Museum. However, a very imaginative plan for its future has been unveiled. With the global firm of Arup acting as overall controller of construction etc., it is proposed that a Salisbury Plain Heritage Centre will be built at Larkhill, the Royal Artillery complex near

Stonehenge. The Royal Artillery Collection telling the story of the Royal Artillery will form the nucleus of a broader coverage encompassing as well as the military the archaeological, ecological and social heritage of the Plain. Most of the Plain has been Army property since the beginning of the 20th. century and, although military encampments have been built, over a large area the rich archaeological resource and the ecology have survived intact.

But will it succeed ? The questions are legion. Presumably it is intended to attract the visitors to Stonehenge, but Wiltshire tends to be a ' passing through ' area on the way to the further West Country rather than a specific destination, apart from the attractions of Salisbury – can the speeding A303 traffic be persuaded to divert to this isolated location ? How far is funding assured ? Are they depending on the Heritage Lottery ? And so on.

It is certainly a bold plan to turn failure into opportunity. Assuming the plan comes to fruition and the Centre is built, it will be a fascinating heritage case study.

## Artist's impression of the Salisbury Plain Heritage Centre



Les Tucker

## Pastor's Business Card

A new pastor was visiting in the homes of his parishioners.

At one house it seemed obvious that someone was at home, but no answer came to his repeated knocks at the door.

Therefore, he took out a business card and wrote 'Revelation 3:20' on the back of it and stuck it in the door.

When the offering was processed the following Sunday, he found that his card had been returned. Added to it was this cryptic message, 'Genesis 3:10.'

Reaching for his Bible to check out the citation, he broke up in gales of laughter. Revelation 3:20 begins 'Behold, I stand at the door and knock.' Genesis 3:10 reads, 'I heard your voice in the garden and I was afraid for I was naked.'

Remember when the funniest jokes were the clean ones?

They still are! Pass it on

'A cheerful heart is good medicine' (Prov. 17:22)

## 2016 evaluation

Our Phones	Wireless
Cooking	Fireless
Cars	Keyless
Food	Fatless
Tires	Tubeless
Dress	Sleeveless
Youth	Jobless
Leaders	Shameless
Relationships	Meaningless
Attitudes	Careless
Babies	Fatherless
Feelings	Heartless
Education	Valueless
Children	Mannerless
Country	Godless
We are	Speechless
Government	Clueless
And our Politicians are Worthless	

And I'm scared - Shitless!

## Flooding at the Mills

From the start in the 1660s the gunpowder millers must have been quite susceptible to the weather. A reasonable but not excessive water flow rate was what they wanted but did not always get. Parts of the site such as Queen's Mead were likely to flood particularly in the winter. Process buildings such as the steam powered mills on the east side of Queen's Mead, the Main Lab and parts of the railway system were built at a higher level to minimise flooding and this was very necessary. I remember the cold weather of the 1947-48 winter when our road in Lincolnshire was 50 mm(2 inches) or more deep in hard packed snow. When the weather warmed up significant flooding occurred including I understand Queen's Mead. I was still at school then but much later Jean Squire who had worked in the Main Lab in 1948 told me about going to work in a boat because of the flooding

Such flooding also occurred in other winters but I do not know whether boats were used then to ensure staff got to work at a reasonable time. On at least one occasion flooding was caused by the modern sluice to the west of the site failing to open properly.





What is now known as the flood relief channel to the west of the site used to be before 1968 inside our boundary and was a meandering stream with willows dipping into the water. When contractors were deepening and widening the stream they came across a substantial amount of purple earth which we analysed in the Main Lab as a complex of a nitromethylaniline with something more energetic. This had to be taken away and dumped somewhere else. None of the staff working there then knew anything about who had dumped the purple earth in the stream. Surprise surprise!

The contractors also nearly lost a lorry in the stream when it reversed too far and most of the back went into the water. With some difficulty it was towed out and bump started. The stream is now of course much wider and deeper and has a big sluice across it.

John Wright

Photo by Lynne Lenard, taken in 2004 when the automatic sluice gates on the flood relief channel by 83B failed.

This also appeared in the 2016 Spring issue but I could not resist using it again. Ed.

# **PGL - Public Enquiry for Children's Holiday Camp Plans**

Volunteers and local residents have reacted with anger at the news that PGL Ltd. is appealing against Epping Forest District Council's decision to reject its redevelopment plans for the Mills. PGL's decision seems to have been made at the last minute – just days before the Council's deadline.

Many Touchpaper readers will be aware of the scale of the plans and the threat they represent to long established activities such as the award winning 'Royal Gunpowder Mills' visitor attraction and the much acclaimed education programme that has proved so popular with local schools. If PGL's appeal is successful, the 1000 bed holiday camp will swallow up Queens Mead and all the serviceable buildings around it. The Mills will lose its most popular attractions – the 'Mad Lab' and 'Rocket Vault' housed in L168 as well as the café (L176). Although there are no plans to demolish these and other protected buildings, they will be converted for use by PGL's customers and staff but paid for, perhaps ironically, by a multi-million pound 'enterprise' grant from the National Heritage Lottery Fund. In general, public access will be curtailed completely or, exceptionally, in the case of L157 the Grade I listed 'Group C' Steam Powered Incorporating Mill built in 1861, limited to visits by special interest groups. Sadly, this is completely at odds with the aims of those who have worked tirelessly, whether in an official capacity or not, to conserve the Mills' heritage and explain its historical significance.

The Friends Association has long recognised the need for private investment in the Mills' site to augment the very large sums of money, from the public purse, spent on decontamination, and restoration, of the site's buildings and infrastructure. In our response

to PGL's original planning application we urged Epping Forest District Council to recognise the commercial potential of the derelict, but structurally sound, buildings on the site's eastern flank. These were built between 1915 and 1917 for cordite processing to alleviate the shortage of munitions that, at the time, was blamed for the failure of the Western Front offensive. After the Second World War, as some Touchpaper readers will recall, the buildings were converted, some would say hastily, for re-use as laboratories. Shrouded in official secrecy for many years, and overlooked by surveys that focussed on pre-war use, only very recently has the historic significance of the work carried out in these labs been revealed in the public domain.

PGL's proposed demolition of most of the eastern flank buildings proved to be a major stumbling block for their planning application. They failed to convince Epping Forest District Council of the case for replacement with new buildings, of little architectural merit, which would be unsympathetic with the adjacent listed steam incorporating mills and the protected water meadows in the Lee valley Park on the other side of the site's boundary fence. The Council urged PGL to revise their proposal and submit a new planning application that would address its concerns. This suggestion has been rejected. An appeal has now been made by PGL to the Planning Inspectorate on the basis of the original development proposals. The Friends Association, along with the RGM operating company, volunteers and local residents have all made submissions to the Planning Inspectorate supporting the Council's decision to refuse planning permission. A public enquiry will be held later this year before a final decision is made on the Mill's future.

**John Cook**

# Obituaries

## Peter Hart 1942 - 2017



Following education at the Royal Masonic School, Bushey, Peter joined Waltham Abbey in 1960. Entrants into the Experimental Officer Class were encouraged to take up a day release course of study and he chose Chemistry at Enfield Technical College. ERDE, as it was in the sixties, was to

provide him with a long and rewarding career and he worked in many sections, in particular with Dr Uri on autoxidation and later in Sensitivity and Hazards with Ken Bascombe. Studies of energetic materials often required an engineering input and Peter, with his practical workshop skills, enjoyed projects that gave him such opportunities. Twenty years would pass before disruptive changes began. In that time Waltham was a very agreeable place to be and I recollect sports days where teams assembled from the various Superintendencies to compete in such things as bike races and other physical challenges on Long Walk. If Peter was in your team you were lucky as he was a fine athlete.

When the decision came to close Waltham, he chose to move to London joining the Ordnance Board and finally completed 40 years of service at Abbey Wood, Bristol.

Peter was a man of quiet temperament who never married. Outside of work, as a young man, he played rugby for Mill Hill and enthusiasm for the game remained undiminished all his life. Friends, together with neighbours in Oakwood where he spent his home life,

all knew Peter as "Mr Fix it", always available to consult and help them with a practical problem.

He died on February 7th of complications from Motor Neurone Disease that he had borne bravely for more than a year.

### **David Debenham**

Peter Hart transferred from Waltham Abbey to the Ordnance Board in London to work for Roy Stenson and, later, myself. Both moved with the OB to Bristol in 1996. As part of the Support Division he was an adviser on explosives and propellants to the military staff at the OB.

Finding good restaurants in London and Bristol and playing bowls in the OB competition were two of his non-work skills.

After he and I retired Peter organised an annual lunch for 6 or 7 of us at a very nice restaurant in St Johns Wood.

### **John Wright**

Peter Hart was a popular and likeable scientist with a sharp mind and a waspish sense of humour, working first of all in the Sensitiveness and Hazards section in Explosives Branch at ERDE, and then in the Scientific Support Division of the Ordnance Board in London. In the latter role he forged a very effective link between scientists in the research establishments and the military officers on the Board. He was tenacious, not stopping until he had found a solution to a problem. On one occasion he was faced with the problem that some pieces of military hardware appeared to be ageing prematurely, but we were all baffled as to the cause. Peter eventually found the clue to the answer in a chemical journal written in German in, I think, 1903. That spoke a lot for his determination not to be beaten by a problem.

### **Geoff Hooper**

## Ron Rapley MBE 1941 – 2016



Ron died on 11th December 2016 following the development of brain tumours. He joined ERDE in 1959 and worked there until 1978 when he and Tony Barratt joined HSE. He then worked at Woolwich Arsenal for two years before moving to HSL Buxton. He was responsible for monitoring and assessing all imported and UK produced commercial explosives including fireworks. He was chairman of C11/47, the committee that was responsible for BS7114 the standard for fireworks in the UK and UK delegate leader to CEN/TC 212, the committee that was responsible for the proposed European Standards on Fireworks and chairman of the Explosives Industry Group Working Committee on Transport of Explosives. He gave lectures all over Europe and presented papers in USA and Canada.

In 1992 he retired from Buxton (his photo is from that occasion) and joined Standard Fireworks as Technical Director for 14 years. In 2005 he was awarded an MBE in the Queen's Birthday Honours list in recognition of a long career dealing with explosives, particularly fireworks.

Whilst a Director at Standard Fireworks he donated some firework manufacturing machinery which was, for a while, displayed in the Spinks Gallery. During his time at Waltham Abbey he lived on the estate and Richard Penfold remembers him 'as a fit and talented sportsman and a good next-door neighbour'.

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## Minnie Fenton



It is with great sadness that I learned of the death of Minnie Fenton on 7th January 2017. Minnie was a dedicated volunteer and was a great asset to the RGM. She was always enthusiastic when greeting visitors on the Island site. I believe she was one of the first female volunteers over sixteen years ago when the RGM opened later than expected due to the outbreak of foot and mouth.

I joined as a volunteer some time afterwards and together we enjoyed some good times on the site. We cleaned, swept and dusted various buildings and later on we were involved with children's projects with the Education department including screen printing and rocket making.

I telephoned Minnie last Christmas time when she spoke of her loneliness in Cambridge and was hoping to move back to Waltham Abbey and to drop in and see us again.

Just a few weeks before her death BBC2 repeated a series "The History of our Streets" first shown on 11 July 2011. Minnie is shown opening the door to her old childhood home, a flat in Arnold Circus E2. This was the first inner city estate built in 1898 after slum clearance. Her grandfather, a tailor, was the very first tenant, followed later on by her father. Rent was 50/- (£2.50) per week; no bath, only a cold water tap but did have a flushing WC. No war damage occurred and today 1,500 people live and work in this very impressive group of buildings.

As Liz Went has suggested, I am sure a memorial such as a bench would be very appropriate in keeping her memory alive.

I miss you Minnie.

**Suzanne Leeson.**



## Gerry Miller 1936 – 2017



Gerry signed on for an extra year in the army after his National Service and was making good progress finishing up in Cyprus. Unfortunately he found himself under a bad CO which convinced him that the Artillery was not so good after all. On discharge he was with Walls as an ice cream salesman. He then eventually found the CAA (Civil Aviation Authority) fire service spending time at Heathrow and the Training school at Teeside.

Later he was Officer i/c at Farnborough which within PE (Procurement Executive) was the top station post because of the involvement of the airshow. At some stage he passed his Institute of Fire Engineers Membership exam which helped his progress.

From Farnborough he joined S S O (PE), Safety Services Organisation, at St Mary Cray with the Fire Group retiring after 15 years as the one in charge.

During his time at S S O he worked very hard to try and improve the PE fireman's lot in relation to prospects and training with some

success. He was also well known for 4 page minutes and long notes on files which were always interesting.

Out of work hours, he was a keen member of various gun clubs, mainly rifle shooting; also he participated in medieval games at various venues.

He was also a member of the MoD HQ “retired drinkers” group in London until he moved north.

Gerry visited the Mills, which he had known from his duties in S S O, after retiring, saw the Tangye cordite press and decided it needed some TLC. He became a volunteer and then commuted from Tunbridge Wells to remove rust and apply layers of paint. Having completed that task he then went on to build two carriages for cannons that lay on the grass near Walton house, this occupied him for three years, his task was completed in 2007. During this time a group of Friends were restoring the Siemens telegraphic fire alarm system and he helped by writing to Siemens UK. This resulted in some information and a visit by a Siemens manager and the editor of their staff magazine. An article appeared in the Siemens newsletter that was circulated in the UK and abroad.

He also cleaned up a four-man manual fire pump and several other minor jobs. Occasionally he slept in the Friends workshop (those were the days when we had our own place and could work without annoying others!) to let him put in two days work for the ‘price’ of one journey.

Naturally during his visits there would be coffee breaks and conversations to enjoy. It was a sad time when he decided to move north to Cumbria.

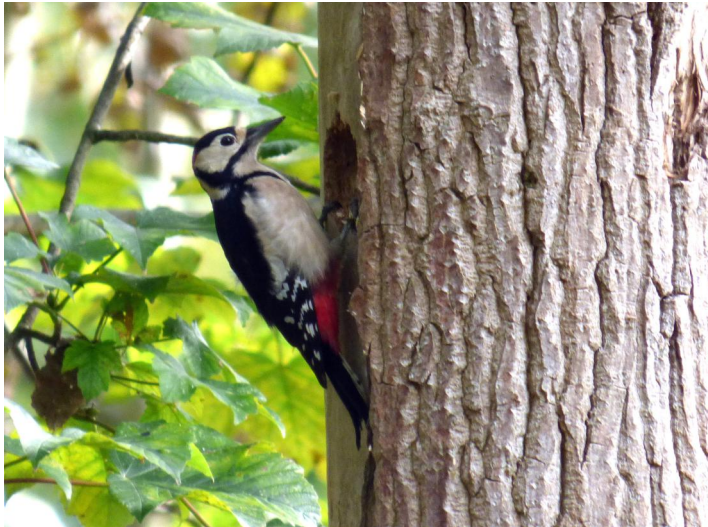
The photo of Gerry was taken in the Friends workshop shortly before he moved to Cumbria.

## Riddle Answers

1. A comb
2. Scissors
3. Rainbow
4. A screw
5. A river
6. A potato
7. A match
8. A stapler
9. Traffic lights
10. A needle
11. A ton
12. Pencil lead

## Julie's Nature Column

Although it's been a bit chilly, spring is definitely in the air. Herons are quite active now and I have seen swans regularly flying over, possibly searching for a territory before breeding season. I have already heard Great Spotted Woodpeckers drumming and just the other day I saw a pair in a tree behind the Saltpetre House. Woodpeckers have got wise to drumming on metal which is much louder than a tree, therefore the sound is carried much further. Our lampposts and the end of the Petrel rocket launcher have become favourites.



The Fallow deer have been rather relaxed, not seeming to mind too much that filming has been going on at the Mills and they even took to eating some potted plants in the night that were part of a film scene. This made the film makers rethink and they had to install some artificial plants instead. Our deer are quite inquisitive and not much goes unnoticed by them. When not investigating what's going on around the site they quite often pop into the buildings.

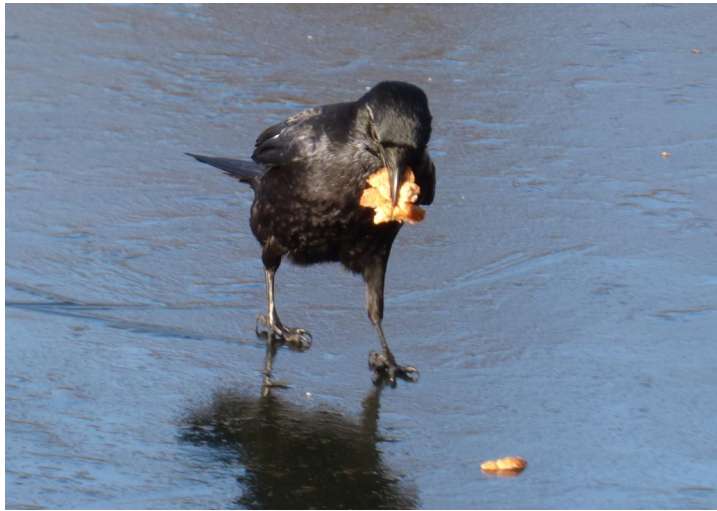


Spring is one of my favourite times of the year and I'm looking forward to seeing the rich wildlife at its most active again. Grass snakes will be out of hibernation as will newts, toads and frogs. The sound of the Cuckoo's arrival is heard every year along with Reed warblers arriving at the north end of the site. Both of these birds migrate from Africa and one of the cuckoo's preferences is a reed warbler nest to lay its egg in!

Robins seem abundant at the Mills, they come to the bird feeders on the window sills of Walton House. Here's a recent photo of one that's puffed up to keep warm.



Sticking with the bird theme a little more...I thought I'd feed the ducks on the frozen water, but this cheeky crow had no fear of thin ice and beat the ducks to it.



I'm hoping to get some more photo opportunities to share with you all soon, I'm always on the look-out, i just have to be lucky at the right time and place. Let's hope that the wildlife put on a good show this year.

**Julie Matthews**  
**Mills nature conservationist**





**Swim ended boats behind boiler house  
photographed in 2007 by Dave Gibbs**