

Summer 2019

TOUCHPAPER

The Newsletter of the Royal Gunpowder Mills Friends Association

Industrial Heritage - Gasholders

The Last of the Powder Men! Part One

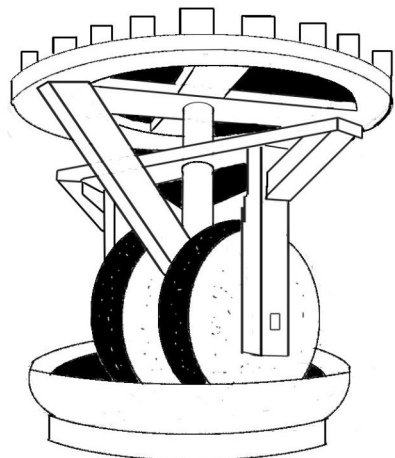
WARGMFA AGM / Reunion - 10th May 2019

Letters

Julie's Nature Column

Obituary:

Jim Hawkins



Summer 2019

Officers of the Friends Association

Chairman

Dave Sims
8 Norman Close
Waltham Abbey
Essex
EN9 1PY

Treasurer

Ron McEvoy
6 Lea View
Waltham Abbey
Essex
EN9 1BJ

Secretary

ronaldmcevoy@btinternet.com

Len Stuart
13 Romeland
Waltham Abbey
Essex
EN9 1QZ

Membership

Friends Association
Royal Gunpowder Mills
Beaulieu Drive
Waltham Abbey EN9 1JY

**All enquiries relating to this newsletter and articles
should be addressed to:**

Brian Clements
56 Park Road
Enfield
EN3 6SR

wargmfa@btinternet.com

Deadline for the next issue is 23rd August 2019

Chairman's Chat

The RGPM started the year on a fairly good note with good attendances over the half term holiday. However, it soon went downhill with the loss of 2 long serving members of staff. Easter came and went with variable attendance and the Friends had considerable difficulty in manning the rocket exhibit. Unless we can get some new younger volunteers we may not be able to keep the rocket exhibition in its present form.

I noted in today's Telegraph that volunteering has gone down by 20% in the last year or two. They put this down to the increase in the retirement age and the fact that the older generation are now having to look after young families more often.

Last week was again half term. Attendance on the Saturdays was poor; it seems on Saturday other things take over.

The little railway has been running OK thanks to John Wilson but the big railway suffered a track failure that has prevented it running recently. Hopefully this will be rectified in time for the summer holidays

One bit of good news is that contractors have started to renew the roofs of the mills buildings on the Queens Mead and two new members of staff have now been appointed.

The AGM followed a slightly different path this year. The main meeting was in the Saltpetre house where a microphone was unnecessary. This was followed by a buffet in the Café which was organised by Daphne Clements and yours truly. We purchased the food from Marks and Spencer and not only was it a lot cheaper and better and we even had some left. Note for next year!

There is little hard news on the future of the site. The Foundation is still wedded to the PGL scheme whereas the Op Co and the Board have put up alternative plans. It seems regrettably that we will have a fight on our hands once again.

Dave Sims

Editorial

This is the second issue this year; I shall have to start thinking about Christmas soon, where does the time go?

We have contributions, and letters, from our regular Les Tucker and the first part of a long article from Mike Evans, a new contributor. The final part of the gunpowder story will appear in the autumn issue. There is a report on the annual social event and Julie's Nature Column makes a welcome return. I already have material held over to the next issue but as usual welcome more as my life is easier with a surplus rather than having to chase people when I realise time is running out and I still have blank pages.

On the back cover is a photo of the early stage of repairs to L148.

Unfortunately we once more have an obituary, for Jim Hawkins, and I have to announce the passing of Bill Coe, a onetime worker at Waltham Abbey and a volunteer for some years on the site. If anyone would like to provide an obituary or even partial notes that could be used in one I would welcome it.

Brian Clements

Industrial Heritage - Gasholders

Rise from the Dead

There has been a remarkable shift in opinion amongst professional architects, local authorities and the public, or at least part of it, which now perceives previously unloved gasholders as a legitimate part of industrial heritage preservation. There has been wide interest in a successful incorporation of apartments in the preserved St. Pancras/ Kings Cross 'Triplets' guide frames (Touchpaper Spring 2016) , Historic England have recently listed gasholders and there are two public petitions currently supporting preservation.

[Terminology The term gasholder is generally applied. More accurately what is being preserved is the guide frame for the holder, commonly in the shape of salvaging of the girders and subsequent re-erection. It is at this point that 'creative re-use' can take place. However for general purposes in discussing industrial preservation the use of the term gasholder now seems to be the accepted usage].

The change in view has spread internationally. On first glance at the image overleaf it could be assumed it is a London development jumping on the bandwagon of the success of the St. Pamcras Triplet scheme, but it is in fact in Brisbane Australia with the re-erected guide frame becoming a feature in a new park. The 'purity of form' which has attracted architects is nicely seen against the blue sky – that is if you get colour e-mail Touchpaper.



Brisbane guide frame

Gasholder preservation has been covered in previous Touchpaper articles.

The following terminates the series:

Chelmsford Gasholder

Outline plans by Chelmsford City Council for housing development of the gasworks site near the resplendent Essex Record Office in the old industrial area off Wharf Road were made public in 2018. From the heritage point of view it was very encouraging to see provisions indicative of a supportive attitude.

Two gasholders are involved – the older, No. 114, erected around the beginning of the 20th century, with the second dating from the 1950's.



Chelmsford gasholder No. 114

The plans include provision for preservation of elements of No. 114 as a part of the city's industrial heritage, involving dismantling and re-erection. The 1950's holder is to be demolished.

The No. 114 guide frame has twelve wrought iron lattice girder standards supporting two tiers of horizontal members. Creative re-use is always a useful aspect of the case for preservation and this figures in the No.114 plan in the shape of the proposal that the frame will be divided, with the showpiece part incorporated in the housing development and the remaining part of the dismantled girders incorporated in a new bridge to be built over the River Chelmer to the Baddow Road car park.

Not a spectacular re-use but nice to think, at least for the preservationist, that this functioning reminder survives of a once great British iron and steel industry before a large part was swept away.

This is by no means the first instance of the re-use of quality wrought iron girders. One of the best known is the present Tay Rail Bridge which incorporated girders from the wreckage of the original collapsed Tay Bridge and they are still in use to-day.

The Eye of the Beholder

Industrial heritage can be a contentious subject and the old adage - ‘Beauty lies in the eye of the beholder’ certainly applies. What to one man can be a fascinating piece of industrial past worthy of preservation in some form as part of the nation’s heritage can seem to another to be an ugly reminder of a defunct industry to be swept away.

The enthusiasm of the preservationist can come up against harsh financial reality, as we know at the Mills.

The Chelmsford Council plan is therefore interesting as an indication that at least here official opinion is supporting preservation in a way which would not have been contemplated at one time. Economics of course comes into it. It would have been interesting to have been a fly on the wall at the planning offices when this aspect was being discussed.

The attitude of the developers would have been interesting too. Were they dragged kicking and screaming into what seemed to them an unfortunate intrusion on precious housing (and profit) land or did they scent which way the wind was blowing with the success of the St. Pancras Triplets in mind and supported something which would allow these suited smooth young men from the estate agents to present themselves as virtuous guardians of the nation’s industrial heritage ?

Anyway, like Beaverworld (Touchpaper Autumn 2018) it will be a site to watch.

The St. Pancras Triplets

Work on the apartments being built within the triple gasholders which have been relocated to the north east of St. Pancras station (Touchpaper Spring 2016) is progressing steadily and this is a recent image.



St. Pancras Triplets with apartments in interior

The enthusiasts are delighted. What do the public say ?

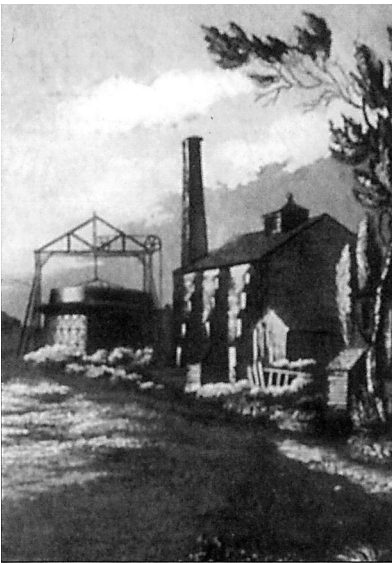
Les Tucker

GASHOLDER Ps

Having just said the gasholder section of the Industrial Heritage series is terminated, I have come across the following information on the demolished Chelmsford Gasworks.

The original Chelmsford Gasworks were founded in 1819 in a bold move by Richard Coates on land adjacent to the Springfield Basin at the head of navigation of the Chelmer and Blackwater Navigation. Coates had been Resident Engineer of the Navigation and was owner of a company formed to trade on it.

Bold because it had the distinction of being the first gasworks to be built inland in Britain.



**Part of engraving of old
Chelmsford Gasworks**

There was a close economic link between the Navigation and the Gasworks and together they formed the starting point for Chelmsford's busy industrial base.

Reputedly it took Chelmsford Council thirteen years of trying before they succeeded in purchasing the Gasworks site.

Les Tucker

The Last of the Powder Men! Part One

Background

Gunpowder was produced in Waltham Abbey from the 1600's until the mid 1940's, when production ceased at the Royal Gunpowder Factory (RGPF) and the site was transformed into a research establishment. But that was not quite the end of the tale. In around 1980 an experimental pilot plant was built with the aim of producing small 20 kg quantities of gunpowder for the MOD.

The MOD had previously purchased gunpowder from ICI Nobel Ardeer, Stevenston, in Scotland, but the maintenance of the massive old gunpowder plant combined with low demand made production uneconomical. The MOD had a problem, because a fuse powder was still needed for a small number of their 'stores'. Other gunpowder sources were investigated. One was in Yugoslavia and quality tests described the material as 'not too bad' but, unfortunately, it was sited within the Soviet Block at the time! Italian gunpowder was also tested, but was described as 'rubbish'!

A Gunpowder Assessment Programme was set up to see what could be done. This involved RARDE Fort Halstead, Waltham Abbey and ROF Chorley. Dr. Chris Evans was given the task of initiating the Waltham Abbey part of programme, which turned out to be by far the largest chunk of the the workload.

The Waltham Abbey Team

Chris was the Section Leader in charge of the project in Waltham Abbey and he and myself carried out the bulk of the effort involved here. Janet Etchells also took part in the early days, but left to join the HSE for more lucrative opportunities. Tony Kosecki joined us for the later stages. Pat Edmunds and John King were our industrial stalwarts, with Stan Berry helping out on the charcoal plant.

One lunchtime a few of us PR scientists went to the Green Dragon for a glass of ale and a sandwich. Janet came along and insisted she bought a round. She opened her handbag, to extract her purse, and a couple of spanners clattered out onto the table! There was a roar of laughter from the boys, but she had shown herself to be a true engineer! She had a moped at the time and kept the spanners for running repairs.

Milling Gunpowder

Gunpowder, once known as Blackpowder, had been traditionally manufactured using an Edge Runner Mill, sometimes called a Muller Mill. These were notoriously dangerous. They were operated remotely, but contained a large batch of gunpowder. When an accident occurred, the mill house was devastated leading to heavy casualties in the surrounding area. The Edge Runner Mill consisted of two very heavy iron wheels, connected by an axle, that were rotated in a circular iron pan. There was a small gap between the wheels and the base of the pan. The pan contained the gunpowder mix, dampened with a little water. The massive weight of the wheels crushed and mixed the ingredient grains, thus milling and mixing them into a damp powder.

The modern choice of mill is the Fluid Energy Mill - commonly known as a Microniser. Rather than having a large quantity of gunpowder in a batch, as with the Edge Runner Mill, the process was continuous, so the dwell time in the Microniser mill is far shorter. This was described as the 'little and often approach'.

The general idea behind the microniser is to blast compressed air through nozzles, producing high velocity jets, into a chamber into which the gunpowder is fed. The impact of grains of gunpowder ingredients hitting the wall of the chamber, and colliding with themselves, smashed them into fine particles. There are two basic designs of microniser: the 'Loop' type, suitable for large outputs, in which the material re-circulated, and the 'Plate' type, which is a single pass method and is suitable for lower outputs - even very

small ones are obtainable for use on a 'laboratory scale' (50 mm diameter).

In the 1970's, a large 'loop' gunpowder facility had been constructed in Indiana in the United States, however this had been mothballed. Another plant was built in Norway and had proved operationally successful. Unfortunately, two maintenance men had been killed in separate explosions whilst working near the plant. Ironically, it was not the microniser that caused the explosion, but poor general housekeeping. Boxes of micronised gunpowder had been stacked outside the plant, instead of being taken to a magazine. Two lives were lost, so the operation was deemed unsafe and production terminated.

For the proposed experimental work at Waltham Abbey, Chris purchased a small Plate Microniser of 100 mm in diameter. This had an ideal throughput of 100 grams per minute, bearing in mind that the explosive limit on the facility was just 10 pounds (4.5 kg). The plate microniser was shaped as an enclosed disc and constructed of stainless steel. It had a circular recess inside, into which a solid metal ring was seated. The ring had numerous angular nozzles drilled around it. Compressed air was blasted into the outer circular ring, resulting in high velocity jets in the inner chamber that formed a powerful vortex. The ingredients were blasted into this inner chamber, again using compressed air. Here the grinding process took place.

An additional characteristic of the microniser was that the rotational flow of material in the vortex of the inner chamber acted as a particle size separator. The heavier grains remained trapped inside the chamber, flung to the walls for further milling, whilst the finer particles were entrained in the exiting compressed air, via a central outlet. The micronised product fell into a removable container below, whilst the spent air escaped above through a large, tall, cloth filter bag. A small amount of superfine particles settled on the surface of the bag and were removed as 'waste' afterwards.

Safety Aspects

I heard I was to be part of the team, probably because I had some previous experience with micronisers. Later that day I visited the Powdermill Club for the usual refreshments. At the bar was Bob McGuigan who looked at me and started chuckling, and said, “I hear you’ll be working on the gunpowder job. You know the two most dangerous explosives operations are gunpowder and nitroglycerine?” He thought it was most amusing! However, I think this was Bob’s way of saying ‘be careful’. Or probably it was more than likely that he didn’t want to lose a regular from the club bar! Whichever way, I never cease to wonder at the speed at which news travelled on the 'Waltham Abbey grapevine'. It was like greased lightning - super speed broadband, eat your heart out!

The building used for the experimental work was a ‘remote controlled facility’ on Process Research Section and was locally known as the ‘10lb Facility’. It consisted of two explosives cells separated by a small service bay set in the middle, where electrical ancillary electrical equipment could be isolated. The area was mounded. On the other side of the mound was the control room.

Considerable safety aspects associated with the gunpowder work were addressed before starting and are summarised as follows;

Smooth Walls

The concrete walls of the explosives cells were puckered with round crevices, left from bubbles in the original concrete mix. Here, gunpowder dust could very easily have settled. So the walls were screeded smooth and painted. Smooth walls are an essential starting point in any dusty process, and the microniser produced a very fine dust - something like ‘talcum powder’ and even finer.

Electrical Earthing

All equipment was bonded to earth to remove static. Many plant items needed sturdy support, especially the heavy hydraulic press, the rotating cone blenders and a solid base to attach the microniser to. Hence I used heavy steel work benches; the surfaces and edges of the benches were clad in brass sheet and earthed. Significant static is generated in the tall microniser dust bag by the exiting decompressed air, so the filter bag was earthed by hanging numerous ribbons of conducting plastic around its circumference, each suspended from a brass earthed disc attached to the ceiling.

Humidity of Air in the Cells

Humid air prevents the build-up of static. Static charge is generated by process plant and by people moving about. To counteract this hazard, a very fine mist spray was blown high up into the cell, using filtered compressed air, and this quickly raised the relative humidity to a satisfactory level of 80%.

Clothing

Clothing manufactured from manmade polymer fibres generate considerable static electricity and hence produces sparks, so is clearly dangerous when handling gunpowder. Remember those original nylon shirts way back in the distant past, that hung to the body like cling film on a very dry day?

We managed to acquire some antistatic cotton overalls that were used by RAF personnel when refuelling aircraft - very smart! These, in conjunction with antistatic shoes, fitted the bill. The floors were also damped down to complete the draining of static. Finally each person entering the cell would touch the earthed benches to rid themselves of any static charge.

One of our industrials, who was a large strong man, wore the standard white antistatic rubber boots that were absolutely shapeless, so he wrote on each boot with a permanent marker: a large L for left and a large R for right. It gave him some clue as to which foot to put in them. I remember we had some visitors to the establishment who glanced at the boots with glazed looks on their faces, but were too polite to say anything. I think they got the impression that us lot at Waltham Abbey were a right load of 'loons' - but of course we weren't. Far from it - I think!

Power for Driving the Plant

Electricity was banned from the cells. The only exception was the building's integral lighting that was dust-proof. All plant items were driven by compressed air motors and the exhaust air was piped outside the building to remove any trace of lubricating oil. Copper tubing replaced all the old nylon tubing for piping compressed air and this was earthed. The copper oven, needed for drying the 'gunpowder biscuits', was heated by a warm water jacket. The warm water supply came from an electrical unit outside the explosives cell in the service bay.

Hand Tools

Non-sparking hand tools were needed to avoid 'sparks' that could evidently be caused using steel. As in the old days of gunpowder, I chose phosphor bronze, but getting my hands on them proved difficult. Apparently, at the time, North Sea oil was booming and there was an insatiable demand for non-sparking tools by the oil companies!

Gunpowder Charcoal

Two of the ingredients needed for the gunpowder process: Potassium Nitrate and Sulphur, were readily available at the purity required. Obtaining a suitable Charcoal was an entirely different story - as one would have expected. Barbeque charcoal was definitely off the menu. Gunpowder charcoal needed a specific

carbon content with the balance consisting of residues of tar. The choice of wood was critical. Dogwood, alder and willow charcoals were traditionally used in gunpowder manufacture.

We obtained a copy of a wonderful book from the Waltham Abbey site library, that I believe was called 'The Manufacture of Gunpowder'. This old account described the production of gunpowder at Waltham Abbey in the 1800's. It was written by a Captain Smith. He described the plant and process he used at the time in considerable detail. He clearly had a wide practical knowledge and experience of gunpowder. He described how he manufactured gunpowders made with different charcoals, prepared from dogwood, alder and willow woods. He then made charges using each gunpowder of exactly the same weight. They were fired in a cannon and the distance the cannon ball landed from the firing position was measured. The dogwood charcoal gunpowder reached the greatest distance, proving it to be the most powerful gunpowder and, thus, dogwood the best wood for manufacturing gunpowder. This was because gunpowder made from dogwood charcoal was the fastest burning.

Dogwood probably got its name from its use in making 'dogs', which were wooden skewers used for cooking meat. Dogwood is also known as Alder Buckthorn, but its true botanical name is *Frangula Alnus*. Confused? So were we at the time!

Chris discovered that a National Trust wetland at Wicken Fen, in Cambridgeshire, was the best candidate for sourcing dogwood. Dogwood is a pretty insignificant bushy tree that is very difficult to identify by the layman, but for the skilled staff of the National Trust there was no problem. We paid a visit to Wicken Fen on a beautiful sunny day. The local staff were helpful and took us on a walk through the fens where dogwood is found - I thought, "Am I actually being paid for this?" The day was successful, as they agreed to supply us with 'bundles of dogwood, one inch diameter', which was the size we asked for.

Charcoal Manufacturing Plant

The next step was to manufacture dogwood charcoal on a pilot plant scale for the micronising work. Constructing a plant in-house was not feasible, as it was felt that some direct experience was needed. As a result, Chris and I visited a small manufacturer of barbeque charcoal in Worksop. Here we were met by the managing director, who was a dapper little man in a black suit and white shirt - I felt sure he had a bowler hat and umbrella in his cupboard! He and his production engineer were the only management staff. They took us on a tour of their charcoal plant. They said they used any wood available to make their charcoal, including old fence posts and waste wood. They described how nails and the like could be found in the charcoal and also stones that had become embedded in the bark. Of course their charcoal was totally unsuitable for gunpowder! They agreed to design and produce a charcoal pilot plant for us and these two knowledgeable characters, with charcoal running through their veins, produced just the pilot plant we needed.

The charcoal plant arrived at Waltham Abbey and was housed in an empty building, next to the south site canteen (N513). It was about 6' high, 4' wide and 6' long and mounted on sturdy legs. A door at the front gave access to nine bins, each 12" square and 18" high. Here the dogwood would be placed and converted to charcoal. It was electrically heated.

I had a temperature controller fitted to ramp the temperature up at a suitable rate to drive off residual moisture present in the wood (100 degrees C), then raise it to the carbonising temperature, where it was held steady over a period of time (280 degrees C). The temperature controller was of the 'rotating cam' type, popular at the time. So once the aluminium cam was cut to produce a specific heating cycle, this could be repeated exactly for all subsequent charcoal batches.

The dogwood sticks were debarked before carbonizing, as it was an 'inferior material', and it could also contain grit. The charcoal plant

was, in effect, a retort, where the wood went through a process of destructive distillation. The distillate, of gaseous tarry products, was carried away in a pipe to the outside of the building and burned off. These tarry wastes were, to say the least, nasty, so I thought burning them off completely was the best solution - after all it was next door to the canteen!

Thus we successfully produced one inch sticks of dogwood charcoal. These sticks then needed to be crunched up and mechanically milled and sieved, to produce a consistent grain size ready for feeding into the microniser. We purchased a dedicated plant for this purpose from a company called Alpine; the plant was installed adjacent to the charcoal plant. I remember it was around Christmas time, so I went off on leave. When I got back, the boys from the tea club informed me that the Alpine rep had called and had left me a bottle of whisky. I asked where the whisky was and they said, "Oh, we drank it!". Ah well, I never was that fond of whisky, much preferred a glass of gin.

Mike Evans

To be continued.

Letters

Open Day - with a difference - A pre digital troll

The informative letters from Mike Bagley and Chris Evans on whiskers and the mention of the Open Day 51 years ago in 1968 reminded me of an item , in manuscript, which fell out of a book in the Archive.

Open Day was generally regarded as a success, but for any event there's always some wag who decides to lighten the solemnity of the proceedings – in this case a spoof Building guide.

Perhaps we can now smile at what in its day might have been regarded as subversive.

Les Tucker

Open Day June 1968

"On entering Building L149 visitors will be greeted by Mr. H A Dunwoody, the well known GOA, in morning dress and wearing a sash prominently displaying a Union Jack, who, with his pleasant easy going manner, will make our visitors feel at home.

Passing through the ante room with its unique collection of photographic journals displayed on shelves, visitors enter Room 14 where the full panorama of SC Tests spreads itself before their eyes. We are much indebted to Dr J R Hughes for information on what is required of the well intentioned citizen to become a Special Constable. In a corner of the room will be sitting the presiding genius SE himself benevolently regarding everything that is going on, and with a kindly word for everyone.

A perilous ascent (mind the doors please) leads to the next room where on one side are displayed high speed cameras whose function is to monitor the collection of Mr. R Pape. On the other side of the room HSP will be displayed. The nature of this material is subject to security classification, but we can vouch that it is not related to LSD.

Passing to Bay 6 visitors will have their departure speeded by the Bolter waiting in occupation there, and will be summarily ejected on to the verandah."

Arctic Scrap

Re Bryan's letter I didn't realise his work at the fishery research centre included Arctic voyages – fascinating if not too comfortable – not quite Saga then.

The photograph of the once mighty Tirpitz now a heap of scrap metal in the water – wonder if Steptoe offered to take it away for a fiver.

Put me in mind of a story I once heard about the Chernobyl nuclear accident. According to this the radiation affected large tracts to the point where the raw material for steel making was affected to some degree. Not enough to impede normal manufacture, but there was one exception – surgical steel.

For obvious reasons steel was now out of the question for surgical instruments. However it was realised that steel from underwater wrecks was not affected and since then all surgical instruments are made from raised sunken ships.

Does anyone know if there any truth in this?

Les Tucker

Obituary

Jim Hawkins 1929 - 2019



Stanley James Hawkins, or 'Jim' to all who knew him was born in Hampstead, Camden on 2nd March 1929. A half-sister and 2 half-brothers that were considerably older than him were from his Father's first marriage. His Father, James, was a 'Fly Proprietor' - owner of a horse drawn taxi company in London who died in 1943 when Jim was only 14 years of age.

Jim's childhood was largely dominated by the outbreak of the Second World War. In later years, despite the effects of vascular dementia he could always recall some of the horrors of the Blitz, including two attacks that both nearly accounted for him:

After the war ended and Jim had returned to London he undertook national service as a wireless operator in the RAF. He was kept on after his compulsory period finished as there was a shortage of suitable qualified wireless operators in the years after WW2.

After National Service, Jim found himself briefly unemployed whilst looking for suitable employment around his main interests, chemistry and electronics. Luckily for him, he heard on a radio advertisement that the Chemical Inspectorate of the Ministry of Supply was looking for staff for the electronics laboratory in the Royal Arsenal at Woolwich.

“The pay was good, the prospects seemed excellent, and the work interesting, and so I joined the civil service as a temporary Assistant Experimental Officer, arriving for my first day’s gainful employment on the 28th December 1949.”

Jim’s career flourished at the Royal Woolwich Arsenal, Jim’s lifelong ability to avoid disaster by a hair’s breadth also thrived:

In 1957, after completing the graduateship of the Institute of Physics, Jim received promotion to Experimental Officer and embarked on another posting, this time to the Explosives Research & Development Establishment (ERDE) at Waltham Abbey. Jim worked at ERDE for the next 25 years until taking early retirement in 1982.

Jim’s second marriage was to Thelma, who he had met whilst on a holiday to the Isle of Man. They married on 10th June 1972 and had a son, Jamie. Thelma had three daughters and a son from her previous marriage, Wendy, Amanda, Jon and Anna.

Thelma and her children came to England and lived with Jim, initially in Churchfields, Broxbourne, eventually settling in Waltham Abbey, where Jim still worked at ERDE.

The family were fortunate enough to be housed within the grounds of the old Gunpowder Mills establishment in Waltham Abbey in a building that had been the women’s annex of the Gunpowder Mills hospital. It came with plenty of space allowing the children a safe expanse of large garden to play in.

One particular memory the family has is of a summer in the late 1970s when a rather large underground wasp's nest had materialised in the large garden the children played in. Instead of arranging for pest control to come and deal with the nest, Jim was sure he could rid the garden of the wasps nest himself by detonating a small explosive charge in the nest. Thelma was, of course horrified at the prospect of an explosive detonation in the family garden so after failing to persuade Jim of the foolhardiness of his scheme, ushered the children inside the house. After a couple of minutes a muffled explosion was quickly followed by a large swarm of angry wasps enveloping the house...

In 1982, as part of Ministry of Defence rationalisation, Jim was offered premature retirement. This he readily accepted and the family moved back to the Isle of Man.

Jim settled quickly into island life and continued to run his own private business, Piezotechnics, making underwater transducers for his old employers, the Ministry of Defence. Alongside this Jim also taught himself several computer programming languages and took employment at the Island Computer Centre.

Advancing age began to take a toll on Jim, especially suffering from arthritic knees and failing eyesight. However bilateral knee replacements and intra-ocular lens replacements gave Jim a new lease of life for quite some time

Unfortunately, having been diagnosed with vascular dementia, Jim's mental health noticeably began to deteriorate in 2014, and after nine months in hospital, he moved to Castle View Nursing Home in October 2017.

There he died peacefully on the 19th of February, which was the date of his Mother's birthday.

WARGMFA AGM / Reunion

10th May 2019

After a chilly and wet week we were very fortunate to have a dry day for our AGM and Reunion. This year the AGM was held in the Saltpetre House because of the better acoustics but the Reunion was in the Café because of the catering facilities.

At the AGM the Committee were all re-elected.

Chairman: David Sims

Secretary: Len Stuart

Treasurer: Ron McEvoy

Committee members Derek Back, Daphne Clements, John Cook, Geoffrey Hooper, Bryan Howard, Richard Penfold, John Wilson and John Wright.

The number of guests booking places this year was 37. A delicious lunch was enjoyed as we chatted to friends, some of whom had travelled a considerable distance.

At 14.00 we assembled outside for the traditional photograph but some guests managed to avoid participating. Check the photograph to see how we look now!

John Wilson kindly ran his mini railway to take guests down to the Green Hut where the gunpowder boat, fire alarm system and 3 clocking-in clocks can be seen.

I hope everyone enjoyed their day.

Daphne Clements



Photo by Ian MacFarlane

Reunion 2019



- | | | | | | |
|----|----------------|----|-----------------|----|-----------------|
| 1 | David Cole | 11 | Martin Gough | 21 | Brian Clements |
| 2 | Dave Hewkin | 12 | Michael Seymour | 22 | Daphne Clements |
| 3 | David Steel | 13 | Ron McEvoy | 23 | John Wright |
| 4 | Anne Steel | 14 | Geoff Hooper | 24 | Margaret Lee |
| 5 | John Wilson | 15 | Dave Sims | 25 | Sheila Cooke |
| 6 | Sheilagh Owens | 16 | Mike Bagley | 26 | Geoff Colley |
| 7 | Bryan Howard | 17 | Diane Howse | 27 | Harry Edwards |
| 8 | Les Tucker | 18 | Len Stuart | 28 | Jean Church |
| 9 | David Manners | 19 | Richard Penfold | 29 | Ann Wright |
| 10 | Linda Gough | 20 | Les Bates | 30 | MC Black |

Julie's Nature Column

What great time of year the Spring is for wildlife at the Mills. Some of my focus on wildlife has been around the southern end of the site where it's most active with people, events and numerous activities. This doesn't seem to deter the wildlife too much. We have a new pair of swans that nested in the usual place which makes me wonder how many different pairs have used the nest over the years. The new pair only had two cygnets, but it's so nice to have some cygnets back after a few barren years. On their first journey out mum seemed to get herself a bit muddy, perhaps took a bath in too shallow water, but it didn't stop a cygnet wanting a ride.



Grey Wagtails are on the red list which shows increasing concern for breeding numbers and loss of habitat. I have spotted a few Grey Wagtails

on site and I'm hoping this means that they have been breeding. They flit up and down the canals, open waters and run along the rooftops of our buildings.

I watched this one running along the road catching insects.



The deer have been a bit quiet lately, only allowing a few glimpses here and there. They have just cast their antlers and new ones are growing fast. This is the time for the Does to have their fawns and I'll be keeping my eyes peeled for a photo opportunity in the weeks to come.

We will soon be having our Barn Owl box checked for eggs or chicks. Fingers crossed that it will be successful again. Any chicks in there will be ringed. Our latest addition to nesting birds on site is a pair of Red Kites. They nest high in the treetop and are spending a lot of time doing aerial battle with the crows which constantly mob them every time they fly to and from the nest. The nest is being checked soon and any chicks will be tagged by professionals from Lee Valley. I managed to get a few photos, here's one sitting on a tree after being mobbed by the crows.



I seem to be going with a bird theme this time as there is so much bird activity going on around me. We've had Great Spotted Woodpeckers nesting in a tree behind the Saltpetre and the constant calling of the chick gave the location away. As it got bigger you could see it popping its head out of the tree waiting for more food.



I'm sure there are still lots to come; I'm waiting to see if Orchids appear again this year in the car park and I'm still hoping for a daylight photo of an Otter which is still visiting.

Our resident Robins have had two broods and hopefully they will match last year and have a third. I'm looking forward to reporting more next time which will hopefully include a positive update on our Barn Owls and Red Kites.

Julie Matthews

Mills Nature Conservationist



L148 repairs