**Autumn Colours**

**Chlorophyll** is responsible for the green colour of leaves, it is a molecule that absorbs the energy of sunlight to synthesise carbohydrates from carbon dioxide and water. Leaves absorb carbon dioxide from the air and receive water from the roots. Chlorophyll absorbs all the wavelengths of light except those in the blue-green range, the overall effect is that we see the colour green. During spring and summer trees replenish chlorophyll in their leaves but in late summer a layer of cells known as the separation layer begin to form at the leaf bases cutting off nutrient supply and reducing the amount of chlorophyll manufactured.

**Carotenoids** are present in leaves all year round but their orange-yellow colours are masked by chlorophyll. As the amount of chlorophyll reduces the yellow and orange tint of the carotenoids begin to show in the leaves of trees such as, ash, birch and sycamore.

**Anthocyanins** produced towards the end of summer are responsible for the reds and purples in the leaves of certain oak species, cherry and dogwood. Anthocyanins are also responsible for the red colour of apples, plums and strawberries.

The best autumn colours are experienced when there has been a warm, wet spring combined with a summer that has not been too hot or dry and there has been a spell of warm sunny days with cool but not freezing nights in early autumn.

Ron Iremonger
Chairman’s Page

This is another bumper issue of our newsletter thanks to James Holroyd who has updated us on the progress with his bee keeping, Trevor Dennis who has written a fascinating article about the Chester Ravens and Diana Bliss whose art is inspired by the Meadows. Many thanks to them, and our usual contributors Ron Iremonger and Andy Ingham who have provided the front page article and the Meadows Log.

I hope that you enjoy reading it as much as I have!

Our Wine Tasting evening in September was a great success and was enjoyed by a full house of members, their family and friends. Bishop Lloyds Palace was a wonderful venue and Julia Tickridge guided us enthusiastically through a dozen fair trade wines.

We started with a Cape Sparkling Brut followed by 5 white wines from Argentina, Chile and South Africa, including my favourite a Chilean Reserva Sauvignon Blanc from the Curico Valley. Next we tried a Chilean Merlot Rose and then it was on to the 5 red wines finishing with a superb Argentina Reserva Malbec from the Famantina Valley. We tried matching our wines to various food samples and finally attempted to answer a wine quiz.

It was a really good evening and my thanks go to Ruth Davidson for organising the event and to the committee members who helped with pouring the wine.

Included with this newsletter you will also find the Agenda for our Annual General Meeting on Thursday 17 November together with the minutes of last year’s AGM. This will be held at St Mary’s Church Hall starting at 7.30pm and I do hope to see lots of you there.

Peter Hadfield 01244 341378 or peter.j.hadfield@gmail.com

Water Colour Painting

This interesting water colour painting of the Meadows has been donated to FoM and we would like to use it to raise funds to help with a tree planting project. The picture is mounted in a slim gold coloured frame with an overall size of about 23 inches wide by 21 inches high.

I will accept bids until Friday 11 November which can be submitted to me by telephone, e-mail (see above) or by post to 55 Stocks Lane, Chester, CH3 5TE. The picture will be presented, to the person submitting the highest bid, at the Annual General Meeting.
Readers may remember that in the last report I sketched out my early, rather uncertain progress as a bee keeper. No honey in that first year and not a little expense in buying equipment and the colony of bees; but this summer there has been some honey and not a little excitement. My own bees and those of my neighbour Dave swarmed after the hot April weather but we managed to catch both swarms without much difficulty and dropped them into small second hives. Bees in a swarm can appear very daunting but if left alone by the general public are generally docile, most of them semi-comatose in fact, since they have taken the precaution of sating themselves with honey before flying off from the hive. Once they have clustered together round the Queen, they can often be shaken like blobs of jelly into a box – with luck!

By June it was apparent that the Queen which had been reared in my original hive had disappeared – most probably eaten by a bird while out on a mating flight. By now the colony had become very agitated, flying up in swirling clouds when the hive was inspected. This insecurity on their part meant that it was necessary to put on full protection, ensuring that all zips were fully fastened, for one of the bee’s many skills is to find gaps in human clothing. Another Queen arrived in the post and when she was fully installed the colony became calm and contented once more. The transformation was remarkable.

Many people are put off bee keeping by the fear of being stung, yet if the bees are handled with discretion this happens rarely. The moment of particular danger is when the hive is being reassembled after an inspection. A bee that is crushed as one box is laid on another, for example, gives off a pheromone that alerts the rest of the colony to danger. These are moments to take extra care, using smoke or a brush to move them away from the edges. Most of the time, however, the bees are quite happy to have humans working near the hive. They set off enthusiastically to collect pollen or nectar and ignore any one working quietly near their home. They have been quite ready to let me use a spade to remove the grass and weeds growing up in front of the hive entrance, provided I do it from the side and without sudden movements.

One of the great wonders of Nature is the behaviour of bees, whose brain is the size of a pin head: how they manage to fly off to forage, sometimes miles away, returning unerringly to their starting point. Even more extraordinary: if a worker finds a good new source of nectar she will return to perform the round dance, running round in a circle until she attracts recruits to work the new food source. If the nectar source is further afield, she will need to give more precise information, so she runs a short distance backwards and forwards over the comb, wagging her tail – the waggle dance. It is said that the direction of her run is linked to the position of the sun at the time. For example, if her run is directly up the comb, then the bees need to fly out directly into the sun. If the direction is 30° to the left of vertical then the bees must fly thirty degrees to the left of the sun to find the food.
There is much to look for when going through the hive on a weekly or ten day basis in the summer. Is the Queen present? (Spotting the Queen is a skill in itself!). Is she laying correctly and are there any indications of disease? So if any readers of Friends of the Meadows are tempted to take up bee keeping, it is highly recommended that they join the local bee-keepers association and try to find a friend to work with them. Two pairs of eyes and hands are most definitely better than one.

But what of the ultimate purpose of keeping bees, the honey they produce? There are many who say that honey produced in small apiaries, extracted cold, unlike the heat- treated variety sold by some large honey producers, contains the proteins and enzymes to counter small infections like sore throats. Some people take locally produced honey as an antidote to hay fever, although its effectiveness is unproven. A friend even cured a deep wound on her cat, which refused to heal, (when the vet had despaired of a solution,) with applications of honey (Manuka) and the ingenious use of a babygrow.

Right now, at the end of August, we have had our second harvest of honey this year, a deeply caramel tinted honey, probably from the flowers of horse chestnut; quite different from the light yellow-green honey bottled earlier, mostly from lime blossom. As I write, the bees are returning from foraging flights covered with pollen from the balsam growing along the banks of the Dee, as last year, and busily building up stores for the winter. If all goes to plan, with a little help in the form of some sugar solution, a good ten per cent of them will survive to next spring, when Dave and I will be ready to don our bee suits once again, light our smokers and check that our insect charges are in good shape for the season ahead.

James Holroyd
The Chester Ravens

In late October last year, 2010, my wife Caroline and I were working in our garden in Anne’s Way when I heard some distinctive clicks above us. I knew that sound at once. Ravens! I looked up to see a pair of them flying above us at little more than tree-top height, heading towards the centre of the city. The next day I met someone who told me they had watched two ravens flying round the tower of the Cathedral earlier that week. Not since 2003 had they nested on the Cathedral. Did they still regard it as their territory? It seems they did; I had seen them visit it in the autumns of the intervening years as well.

Caroline and I retired to Queen’s Park in July 2010. Before that I was on the staff of the Cathedral and we lived beside it in Abbey Street. We were in a prime position when a pair of ravens suddenly appeared in the middle of the city in January 1996 and began building a nest. This was an event of considerable importance in the national bird world. The ravens of the Tower of London are an artificially sustained group. Before Chester only one other pair of wild urban ravens had been recorded in the UK in the whole of the twentieth century, on the Guildhall in Swansea in 1974 and 1975. Once, like red kites, they had been common in our towns and cities, but persecution had driven them not only out into the countryside, but into its more remote places, mountains and wild sea cliffs. I was familiar with them there, but not in Chester. Nobody in January 1996 was familiar with urban ravens.

They tried building their nest on two sides of the Cathedral tower, but in the end they opted for a niche on the east face of the Town Hall tower instead. They laid three eggs, all hatched, and all three birds fledged. That was an achievement for the parent birds, since they were clearly new to the business. They took some of their nesting material from the tree opposite our house at the bottom of Abbey Street, snapping twigs with an audible crack. But as they flew out of the tree with the twigs in the great bills, the longer ones would often catch on a branch and drop to the ground. Next year, when they returned for twigs to the same tree, they were much more adept at dancing sideways along branches until they found a clear flight path.

To my delight in 1997 they elected to nest on the east side of the Cathedral tower, near its north east corner, and I was able to keep a telescope trained on the nest in my study window. I didn’t have nearly as much time to watch them as I would have liked, but I saw some wonderful things and caught some moments in the lives of these birds and their young which I will never forget. I have watched birds since my mid-twenties, but never before had I had the chance to get to know a particular pair of birds over a period of years. To my astonishment and even greater delight, they got to know me, too.

That second year they laid four eggs, hatched three, and brought them to fledging. In 1998 they returned to the Town Hall, laid seven, of which five hatched (it is quite normal among ravens and other birds that some eggs prove to be infertile). But at the end of March it was discovered that the young had all died in the nest. An urban myth quickly got around that the parent birds had deserted the nest, because someone had been fixing a CCTV camera above it. People had seen the man dangling from his ropes and going to the nest, while the parents flew around in alarm, and had drawn their own conclusions. That myth has proved annoyingly persistent. I have heard it repeated many times and there are probably some out there who still believe it. In fact, a camera had been fixed above the Cathedral nest the previous year, and had proved a great success. People had been able to watch the birds’ activities on monitors in the Town Hall Information Centre and the Cathedral Refectory. Ravens are much better parents than the myth-makers would suggest, and would never desert their young so easily. The man on the ropes in 1998 did not scare off the birds. He was the one who discovered the young had all died. Two local ornithologists, John Lawton-Roberts and Mike Jones, who were studying ravens across the Welsh borders, told me that many raven nests in their patch failed that year.

The Chester ravens quickly became celebrities, appearing not only in the Chester newspapers, but also on local television, on national as well as local radio, and in several of the national newspapers. The Chester RSPB Members Group set up a raven watch on several weekends, when the young were near fledging and clambering about the nest, and the parents were bringing
food in at frequent intervals. I remember showing the birds to the Cathedral choristers and a party of Japanese tourists.

After the disaster of 1998 they nested on the Cathedral every year till 2003. They had chosen a difficult site, though one that would avoid the worst of the weather. They built a large platform of twigs on a narrow, flat-planed (and winged!) gargoyle at the base of the parapet, and bridged a gap to a narrow ledge nearer the corner of the tower. Part of the nest was over thin air. They nest early do ravens, and in 1997 I watched them go about their labours during three weeks in February while the tower was being continually buffeted by high winds. How they managed it, I don’t know, but the finished platform was rock solid, with the most beautiful round nest-bowl in the middle of it, decorated with long, interwoven strands of willow, taken from the weeping willow in the Bishop’s garden at the top end of the street, and lined with sheep’s wool they had brought in from the fields beyond the city. Where their main feeding grounds were, we did not discover.

Ravens are the largest of the crow family, and among the most intelligent of all birds. Like their rarer and more local cousins, the choughs, they are extremely acrobatic in flight, and also extremely vocal. They play wonderful tricks with the air. Once on a warm summer’s day in Pembrokeshire I watched a pair spiralling up on a thermal. On each turn the slightly larger male flipped over on his back and then righted himself, without losing any height, and each time the female, one circle beneath him, would copy him. On a few occasions I have seen a raven complete the roll a full 360 degrees. The Chester pair would sometimes fly in tandem, wing-tip to wing-tip, suddenly tumbling together, or going on big-dipper rides. Once in 1997 I saw the male bird flying above the Cathedral in large circles with rapid, very shallow wing-beats, as if using just the tips of his wings, while making a call that sounded somewhere between a jackdaw and a duck. The adult ravens, and even the young birds a few days after leaving the nest, would show the local crows no mercy, swooping on them at great speed, calling loudly and aggressively. When the female was first sitting on eggs, she would call with a piercing falsetto call, very like that of the young birds in the nest when they were hungry. She was making sure the male knew he had to bring her food. One year, when the young were nearly full grown, she was perched on one of the pinnacles making a sound I hadn’t heard before, a soft, dry, wooden rattle. ‘We have a couple of ravens who make that call,’ John and Mike told me. ‘We don’t know what it means.’ Then there were the clicks I might hear when they flew low over our garden. Sometimes I would be woken at 5.00am or earlier by their louder cries. I don’t think the vergers, living even closer to the nest, appreciated it. I never minded. One of my treasured memories is that of taking an early morning service in the Cathedral, when all was still, both inside and outside, and all I could hear was the gentle honking of ravens. For me the birds both enlarged and enlivened the holiness of the place.

One quiet Sunday morning in May 1997 I was gathering my things together in my study, before leaving to preach at a church in the Wirral. The last of the young birds had flown the nest the previous day, but they were still around. I looked out of the window, and there was one of them walking around on the Cathedral lawns. I could hardly tear myself away, but I had to go and pack my robes. I collected the car keys, said goodbye to Caroline, and opened the front door. The
doorstep was the same level as the pavement, and at that very moment the young raven was walking across it. The bird took no notice of me, but continued to walk down the pavement, even when I walked round it to get to the car in its garage round the corner. That April I had gone up the tower with one of the vergers who was raising the flag (we had checked with the RSPB that they could continue to do that without unduly disturbing the birds), and had peeped over the parapet. The young birds were keeping very still, and had flattened themselves right down in the nest-bowl. A beady eye looked up at me from just a few feet below.

The beginning of May 1999 saw five well grown young in the nest. They had been vigorously exercising their wings during the previous days, strengthening the muscles for flight, and sometimes flapping a wing in the face of one of their siblings. One afternoon I was at my desk when I was distracted by the young calling loudly, screaming for food. The female adult was circling between the tower and the pinnacles at the eastern end of the building, as if she was trying to put ideas in the heads of her offspring. When she flew to the nest, the young opened wide their gapes for food. She put her bill inside the gape of one of the young, as if to feed it, but then suddenly withdrew, jumping back off the nest. The young bird, still wanting food, lunged forward, and found itself in mid-air. Its first flight! The two of them flew off together, their wings almost touching.

But for me the greatest privilege was to hear the soft greeting they often gave me, as I walked across to the Cathedral at 7.20 of a morning for the early service. They recognised me! At first I thought that was fanciful, but John and Mike confirmed that their observations had led them to think ravens could recognise individuals, and I a few years later I met someone on the Isle of Man who fed wild ravens each morning when he walked his dogs. The birds recognised both him and his dogs and even his car, and would come flying in to meet him when he arrived. I accompanied him one morning, and six ravens came flying low out of the mist before we had gone fifty yards.

In both 1999 and 2000 they fledged five young, and in 2001 three more. By now it was clear they were starting a trend. Liverpool Anglican Cathedral had a pair in 2000 and the docks in Liverpool in 2002. Stanlow oil refinery and the gasometer at Southport were two further urban or industrial sites to be used in 2003, and there may have been others I didn’t hear about.

2002 in Chester was a curious year. The annual rebuilding of the nest on the Cathedral began very late, on March 10, a full five weeks later than the start date the previous year. The nest bowl was not so deep, and the eggs were rather small, with markings we hadn’t seen before. I took John and Mike on their annual climb up the tower to record the clutch. ‘They look almost like rooks’ eggs,’ they said. The birds were generally less noisy than in previous years, and putting all this evidence together we concluded the male had probably had to find a new female after his first mate had died.

That winter the nest was reduced to a shallow mound of mud, with a few sticks poking out, but the birds still managed to construct the most beautiful nest for their 2003 clutch. The female laid five, though only three hatched, and one of those died before it flew. The Song School was being built beneath the tower, but the birds seemed entirely untroubled by it. However, the storms of early winter in 2003/4 brought down the nest entirely. The birds were going to have to start from scratch. They began snapping twigs off the tree near our house in mid-January 2004, and they continued to make some attempts to build a nest until the middle of February. Then they stopped. With the nest platform gone, were the difficulties presented by the site too great for this second female and her mate? I don’t know, but they have not nested on either the Cathedral or the Town Hall since. Yet, as we have already seen, they have continued to demonstrate some ownership of the site. In the autumn of 2006 my heart leaped as one day I saw the pair fly up to the gargoyle of the old nest and settle down on it. They remained there for some time, but soon after they had gone, a young peregrine had the temerity to land on the same spot. Almost at once I heard the male raven complaining very loudly. He was flying fast towards the gargoyle, his feathers bristling. The falcon jumped into the air, and the raven took back the gargoyle for his own. But the peregrine, being a peregrine, proceeded to do three tight circuits of the tower, swooping on the raven each time and forcing it to duck its head, before it left him in peace. Another bright memory for me to treasure.

I like ravens.

Trevor Dennis, September 2011
July 2011

Birds
16/07 Linnets with their pink breasts make an attractive addition to the fauna of the Meadow. Boosted by a successful breeding season this year, adults and their young appear to be popping up out of every gorse bush on the Meadow.

Mammals
16/07 A Seal was spotted swimming by the Motor Boat Club on Sandy Lane having wandered up a swollen River Dee. (TF) A colony of around of 500 Grey Seals loaf around off a sandbank in the mouth of the estuary. I make that about 25 miles from where this Seal should have been swimming.

Butterflies
With the weather having taken a turn for the worse butterflies were few and far between. It was a pleasure to find a Red Admiral on a Buddleia in Cross Hey.

Flora
Meadow Cranesbill is an attractive flower (see photo) which can occasionally be seen flowering on the Meadow. This year Cranesbill was flowering by the track which cuts through the centre of the Meadow (see photo) and also at the lower end of Bottom Lane track.

Salsify is a striking flower growing on tall stems and is very similar in structure to the yellow Goats Beard. A fine specimen was growing in the long grass below the Handbridge Allotments (see Photo).

Operations
16/07/11 Having not had any grazing on the Meadow for over 2 years 14 cattle were released to feast on the excess vegetation. Further cattle of varying sizes were added over the next few days to take the total to 30. This is the maximum amount allowed to graze the Meadow.

August

Mammals
Polecats by and large are nocturnal, have a liking for wet areas and will occasionally live close to human habitation. It is extremely unlikely you will find Polecats out in daylight hours and living in the middle of Chester. However, a pair of animals with markings very close to a wild Polecat have indeed set up home and successfully raised a family underneath a shed in Eccleston Avenue. CS It is more likely these animals are Ferrets, or possibly a hybrid of both, but whatever their identity they have provided Chris with excellent armchair entertainment and endless photographic opportunities. See photo on the next page. What a cracker!
Birds
14/08 7 Swifts were catching flies high above the Meadow possibly for the last time this summer. They were joined by about 40 House Martins & 12 Swallows building up reserves for their long migration south.
16/08 The alarm calls of approximately 50 Swallows above the Handbridge marsh drew attention to a passing Kestrel. It showed no interest in the Swallows and headed over to the other side of the river.
On the Meadow approximately 50 Goldfinch flew down on to the Meadow to feed on the seed heads of Knapweed.

Butterflies
06/08 Gatekeeper butterflies seem to like bramble. Numbers peaked at 27 on the embankment either side of Bottoms Lane track where there is plenty of bramble.
14/08 At the bottom of Gorsty Bank a Gatekeeper shared the same Bramble leaf as a Holly Blue while nearby a Small Copper flitted by.

September

Birds
24/09 The Peregrine Falcon returned to sit on top of the Lead Shot tower. With terrific eyesight it will have been fully aware of the 30 or so Wood Pigeon mulling around on the Meadow. Only 4 Swallow remained above the Meadow. I imagine every Swallow will have taken advantage of the exceptional weather at the end of September and headed south. So if you see one above the Meadow in October you are doing very well indeed.

Butterflies
A single white butterfly flew past the landing stage and landed in the grass. The identification of the butterfly was confirmed by the green veins on the underside of its wing as a Green Veined White. Possibly the last one on the Meadow this year, unless you know different?

Operations
The Green Space Ranger and his team were forced to remove a Hawthorn & a Horse Chestnut by the entrance to the Meadow. Both were chopped down on safety grounds and to stop the spread of disease to neighbouring trees. The Hawthorn had perished some time ago and the Horse Chestnut was suffering from both Bleeding Canker and Honey Fungus. JD
It is not all bad news though as it is our intention to replace these and add more trees to the Meadow this winter.

Andy Ingham
Meadows Log Recorder
01244 677135
Fine Art and the Meadows

During the flooding in February an afternoon’s walk along the river inspired a series of photographs that were the basis for abstract interpretations of the landscape.

As an artist who works with textile, stitch and paint I use photographs to record walks I make. I take hundreds of images recording the changing colour of the season, the fleeting effects of light and the rhythmic patterns of our beautiful riverbank and meadows.

I use the repetitive movement of stitch to describe the motion of walking.

The body of work that I put together for a Graduate Show in a gallery in Shoreditch, London earlier this summer focussed on a whole series of walks along the River Dee between Chester and Farndon. The artworks used a combination of stitch and paint on sheer silk fabric to describe how we look at a landscape. I made some large panoramic works that dealt with a sweeping single image of the landscape. These were displayed next to a long 8 metre wall piece that was seen through a series of glass frames, and highlighted the details of colour and texture in the landscape. The long thin format was reminiscent of celluloid film and the frames gave the appearance of a series of snapshots or blinks in vision. I like to celebrate the soft flow and movement of fabric in the furling of the fabric. When seen in the glass frame, the fabric can be moved along in the same way a walk moves along the riverbank. We think of a landscape as rolling, folded and being wrapped up in it, and these qualities relate directly to textile and that is probably how the two have become inextricably bound together in my mind.

Colour is probably the most important part of the image for me. I use watercolour in thin washes and also the denser pigments of acrylic paint. The stitch is sometimes made first and sometimes after the paint layer. This makes a very rich textural surface brought to life by delicate and sensuous colours and marks.

contact: dianabliss@btinternet.com

New Members

 Anyone wishing to join Friends of the Meadows, please contact the Membership Secretary Clive Gregory, 6 Victoria Pathway, Queens Park, Chester, CH4 7AG, Telephone 01244 680242.

 Please let us know who introduced you if appropriate.