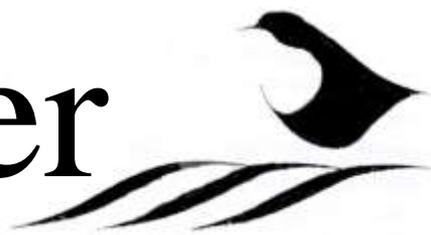




# Newsletter



Rivelin Valley Conservation Group

**Spring 2011 no78**

## **Through The Chair**

Welcome to the RVCG Summer newsletter. I'm glad to see the kinder weather has allowed many trees and shrubs to flower prolifically and to give the insects an abundance of food to help them build up their numbers and prepare for some of the unusual weather patterns we are experience around the world at the moment. The RVCG has had quite a busy spring and thank you to everyone who supported our summer visits and walks and family events. We had a very successful litter pick although generally speaking there seemed to be less litter around.

Whether people are getting the message or whether it's down to a few conscientious individuals who regularly litter pick the valley I don't know but good news anyway. The Revelling In Rivelin event was not very well attended but was potentially a wonderful family day out. Thanks to Joan Buckland and the woodlands officer Catherine Nuttgens with her wigwam yurt for providing such educational and interesting activities. Rivelin Mill is not easy to get to without a car so we are thinking of moving it closer to Rivelin Park next year but the concept is superb. We also had a successful Crosspool summer fayre where Keith Kendall attended with the RVCG stall at Coldwell Lane and offered suggestions to the organisers for improvements in the future. Our final event of the summer is our 20<sup>th</sup>

anniversary barbecue on the 31<sup>st</sup> July. Please let Margaret know if you would like to attend as soon as possible please. I hope you find the Autumn programme interesting enough to support our events. We will be holding some open meetings at Knowle Top Stannington and Wood Lane to give people the opportunity to attend who find Crosspool difficult to get to. If you have any suggestion for presenters of our meetings or visits that would interest our members then please let me know. Hope you enjoy the summer holidays and look forward to seeing to in the Autumn if not at the barbecue.

Graham

Appleby

## **Donations**

Many thanks to the following for your valuable donations received through membership renewal. Aizlewood, Beardshaw, Boddington, Brazil, Cooper, Culmer, Dakin, Davidson, Dean, Drinkwater, Emsley, Farrelly, Fletcher, Goulding, Grace, Hague, Hanson, Harrison, Heller, Henderson, Horsefield, Humphries, Keen, King, Kitchen, Lampeter, Lawrence, Leek, Lewis, Liddell, Lyon, Mason, Morrell, Morton, Ollin, Owen, Purdey, Purslow, Pyatt, Richards, Roe, Saunders, Seaman, Shail, Sharpe, Shaw, Tann, Tetchner, Toseland, Trickey, White, White, Whiteley, Willdig, Woodhouse.

All this has amounted to £489 and will help with our work. Many thanks for your generosity.

## **Task team News**

**Sunday 27<sup>th</sup> March 2011**

This Sunday, we returned to the Packhorse Bridge where last month we had started to widen a short length of footpath that was beginning to fall away. This was complicated by the fact that an eight foot section of the wall at Rails Road was beginning to fall into the dam. The council contacted me on the Wednesday to ask if we could repair it as the budget for 2010/11 had been spent.

This meant that I had to rush around in an already busy week to buy the sand, cement and concrete to enable us to repair it. It also meant that I had to split the team with Graham taking five other brave souls to stand in the water and re-build the wall whilst the remainder of us set about the footpath, digging out a little more and placing four sleepers in to retain the bank, along with a new edging board to the riverside and a truck full of topping to re-surface the path. All in all a very successful if not rushed Sunday. Many thanks to all the team who turn up month after month and get stuck in no matter what the job.

Thanks also to Ranger Chris for collecting the sleepers and the use of the truck to collect the topping (Good luck with the job mate).

Keith Kendal

### **Rivelin Water Treatment Works**

The Rivelin Water Treatment Works together with Redmires, Bradfield, Morehall and Langsett were originally built by Sheffield Corporation Works to supply Sheffield with drinking water. All the works treat Pennine waters from peaty catchments which are typically acidic and coloured, containing iron, aluminium and manganese associated with the peat. These can only be removed by chemical treatment and the old single stage filtration systems could not meet the new exacting E.U. drinking water standards hence the need to rebuild all the works.

Langsett was rebuilt in 1985 and Bradfield and Morehall were replaced with new treatment works at Loxley and Ewden respectively in the mid 1990's together with a new works at Rivelin. The new Rivelin works was built on the same site as the old filter station but had to be completed and commissioned with the old works still operating to maintain supplies of drinking water and went into supply in late 1995. The Redmires filter station was closed in 2001 and water from the three Redmires reservoirs is now mainly used for increased compensation flows in Wyming Brook and the River Rivelin as part of an agreement between Yorkshire Water and the Environment Agency.

The new Rivelin Works is the largest of the works and when commissioned was capable of treating 75,000 cubic metres (16.5 million gallons) per day supplying much of South West Sheffield and beyond.

All the treatment works have their own independent catchment areas and reservoirs but Rivelin is unique in that the bulk of the raw water treated is obtained from the Derwent Valley operated by Severn Trent Plc. The water

flows under gravity via a tunnel under Bamford Edge to the Lower Reservoir and is piped either directly or via the reservoir to treatment works. The new Rivelin works was designed as a two stage plant using the Sirofloc clarification process originally developed in Australia and introduced into the UK by Davy International Ltd, it was further developed by Yorkshire Water in cooperation with the Water Research Centre. The process was initially used at Redmires works as an additional stage of treatment.

The process uses magnetite (a magnetic iron oxide) which is mixed with incoming raw water and under acidic conditions attracts the colour, turbidity, iron and aluminium in the water onto the surface of the magnetite. The loaded magnetite and water then pass between the poles of large magnets which induces a charge on the magnetite particles causing them to bind together and settle out in the next clarification stage.

The partially treated water is now chlorinated with sodium hypochlorite which is either generated on site or tankered to site and sodium hydroxide is added to increase the pH of the water. Under these conditions the manganese remaining in the water is converted to a form that can be removed by the next stage of treatment – rapid gravity filters. After filtration the water is pumped to the treated water reservoir located on the opposite side of Manchester Rd prior to distribution which now also includes the old Redmires distribution network.

The rapid gravity filters are regularly back-washed to clean them and maintain optimum efficiency. After settlement of solid material in the washwater recovery tanks, the backwash water is returned to the start of the treatment process. The loaded magnetite is recovered from the base of the clarifiers by scrapers and pumped into the regeneration system where it is washed under alkaline conditions releasing the impurities and regenerated magnetite can be returned to the start of the treatment process. The effluent from the process was initially treated on site but is now neutralised and pumped to Blackburn Meadows Sewage Works for disposal, a more cost effective route. I understand that due to on-going deterioration of raw water quality brought about by changes in weather patterns, the single stage of filtration is no longer adequate. If iron is not completely removed at the clarification stage and is carried over to the manganese stage it will redissolve in the water leading to higher than accepted levels of iron in the treated water. Attempts to adjust the treatment

process to minimise this can then result in incomplete manganese removal.

Any iron and manganese that is not removed by the treatment process will be carried into the distribution system and re deposited in the water mains leading to discoloured water which can result in stained washing and sanitary ware. These elevated levels have resulted in water samples failing to meet the Drinking Water Standards and Yorkshire Water Services were then served with an enforcement notice by the Drinking Water Inspectorate to carry out improvements – these are time limited and in this case must be completed by December 2012. To meet these requirements Yorkshire Water are carrying out a programme of distribution/ replacement to remove the deposits in the mains together with treatment improvements at the Rivelin works.

It is interesting to note that in the last few years a further bank of filters had to be added at the Langsett works and at Ewden a further a further treatment stage was required to maintain water quality.

The programme of improvements at the works is in two phases, the initial work within the existing buildings will replace much of the chemical dosing systems together with the associated control systems. This phase is due to start now and will be completed in September 2012 Phase 2 is scheduled to start in June 2011 and will involve the construction of a new filter building for manganese removal, allowing the existing filters to be optimised for iron removal and is scheduled for completion in December 2012. The consultants/contractors are Mott MacDonald Bentley and we understand the total cost of the scheme will be in the order of £10M. Planning permission for the filter building has just been submitted to Sheffield Council.

David Lyon

### **Planning**

The Government has announced radical changes planning system. In future there will be a presumption in favour of sustainable development if it would support job creation and growth. It would seem that the Green Belt and National Parks will continue to be protected but as with everything the devil will be in the detail. We'll have to wait for the new National Planning Framework to find out exactly what will happen; this is due to be published in the near future.

### **More Ramblings with Frank**

**26<sup>th</sup> Oct 1981**

Weather promising 9.25am – bus to Bakewell –

arrive Bakewell 10.30am, cross over bridge, turned right, found footpath over golf course and up through Manners Wood and over Carlton Pastures, across to Swiss Cottage but turned back by estate worker's wife and took footpath to right, down by rhododendron bushes then turned right at bottom, crossed meadowland down to bridge in Chatsworth – crossed over bridge and first turn left on road up to Beeley Top Farm – about  $\frac{3}{4}$  mile off the road is a footpath leading to Emperor Lakes. We kept to this path (sign posted Robin Hood Inn). A bite to eat then off again on a footpath leading on to Brown Edge, then descended to road which dissects path leading from Wellington's Monument and up onto Curbar Edge and Froggatt Edge. Up the road past The Grouse and left through Longshaw Estate, back to Fox House. A grand walk and weather just the job. Silver birch looked a riot of colour. Thanks to Mary Brazil for saving her husband's accounts of his hikes.

### **Information Wanted**

Last quarter's information in the newsletter about the WW1 York and Lancs training camp at Wyming Brook provoked much interest, also for the later WW2 prisoner of war camp which housed Italians and Germans. Several people have recounted stories of both these camps and if any of you have memories or stories, I would like to include them in the next newsletter. Please contact M Sanderson. (See contacts list)

### **Wadsley and Loxley Commoner Events**

21<sup>st</sup> May

Dawn Chorus Walk. Meet at 5am at Rural Lane Car Park

25<sup>th</sup> May

Malcolm Nunn Round Walk on Loxley Common. Meet 7pm Rural Lane Car Park, return around 9pm.

29<sup>th</sup> May

Kite flying on the Common 11.30am - meet at old playing fields and bring kite and picnic.

**For enquiries ring 2335331**

### **Some Recent RVCG Events**

**8<sup>th</sup> February Simon Wright of the National Trust Peak District**

Simon has spent 23 years in the Peak District and loves every minute of it. He recounted the story how Octavia Hill, one of the founders of the National Trust was keen to get people out of cities and to protect the natural environment for the benefit of the nation. He ranged from the enormous variety of habitats, the conservation of its wildlife, minimising the effects of pollution and ensuring access for all. This included having to tackle the consequences of a rave!

**8<sup>th</sup> March Roger Kite An Armchair Walk along the Rivelin Valley**

This event was at Stannington and was very well attended in the attractive venue of Knowle Top

Chapel. We took our journey up the Rivelin from Malin Bridge, past the paddling pool and the Pudding Ladies' café to Rails Road where RVCG has done so much work restoring the dam. We took in its industrial heritage, the wildlife and the fact that this is an excellent recreational area for Sheffield and how it was appreciated by hikers in the foot and mouth troubles.

#### **5<sup>th</sup> April 20<sup>th</sup> Anniversary AGM**

Our 20<sup>th</sup> AGM at Stephen Hill was very well appreciated by members. Next year we will be 21 years old so can we have another celebration please? Our thanks to everyone concerned in its arrangement.

#### **A Rivelin Story**

The old stone inn sign carved with a grouse and three trout, to be seen by the road near Redmires is all that is left of the 'Grouse and Trout Inn'. It was known as the 'Eyes and Ears' to the Irish navvies who were constructing Redmires Dams because of the damage inflicted on each other in drunken fights. Its licence was taken away in 1913 by its owner William Wilson of Beauchief who thought that the new motor bus running to Lodge Moor would encourage people to spoil his grouse shooting on the moors.

*From More of Mayfield Valley, Muriel Hall 1974*

#### **Membership renewal**

Many of you have renewed your 2011 RVCG Membership. If you haven't, don't worry – it is not too late. If you can't find the form from the last newsletter, just send your details and £3 to M Sanderson, 35 Den Bank Cresc Sheffield S10 5PB. Please make cheques payable to Rivelin Valley Conservation Group

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#### **The Recorder**

I am writing this at the end of March on a bright, sunny, windy day. The blossom is glorious and the spring flowers are at their best; everything is as it should be. Yet only three weeks ago my pond was frozen over. March has been a dry month with 23 days over 7 degrees (the temperature required for plants to grow) in my garden. Normally the slugs eat most of the daffodil flowers but this year not one has been munched – probably because of the dry weather and the cold nights. I was blaming slugs for eating the flower buds on my Pulmonaria until I saw a squirrel bite through the stalk and gobble up the flowers. It has now

turned its attention to the fresh growth on the Clematis montana. Queen Buff-tailed Bumble Bees are building themselves up with nectar and looking for nesting sites. Birds are nest building and mating, and protecting their territories. Two of my male blackbirds were fighting ferociously – one pinned the other down and was pecking its head. They calmed down after a while and both walked cautiously away from each other and flew off. I am still getting three pairs in so they must have sorted the pecking order out, or one of the blackbirds fighting could have been an intruder who had to be taught a lesson. Overwintering butterflies are also on the move. I have seen Peacock and Comma and am looking out for Brimstone and Orange-tip.

Most people, with ponds, to whom I have spoken, have got frogspawn. I was very concerned about my pond as it was frozen for several weeks. When eventually it thawed I found 14 dead frogs, which was very upsetting. Last year I had a few dead frogs and newts. In the 25 years we have lived here these are the only winters this has happened. Obviously frogs that hibernated deep down in the stone walls coped better and I now have a pond full of frogspawn. This is 3 weeks later than my neighbours whose pond is in a sunnier position. I have put a small amount of spawn in a tank to protect it from the palmate newts which are having a feast.

If your outdoor pot plants are looking a bit sluggish tip them out and check the soil for the white, comma-shaped grubs of the vine weevil (*Otiorhynchus sulcatus*). This is a good time to curb an infestation. Although I hate killing anything these pests do a lot of damage to flowering plants, thus reducing the amount of pollen and nectar available for such insects as bees and hover flies.

Things to look out for and record:-

Overwintering butterflies, bats, hedgehogs, bees. Number of nests in garden and successful broods. Arrival of summer migrants – will we get a cuckoo this year?

Thank you to all the people who have submitted records.

Between the 18<sup>th</sup> and 30<sup>th</sup> January there was a mass movement of Pink-footed Geese. According to the RSPB they were on their way to the Solway Firth to feed before flying on to

their breeding grounds in Iceland or Greenland. Interestingly these days were fine and sunny and are known as "blue sky geese days". Other than myself the following people sent in sightings of skeins of geese - Keith Kendall and Mary Brazil.

Sue Beardshaw – regular garden visitors on various feeders – robins, sparrows, starlings, blackbirds, magpies, collared doves, wood pigeons, blue tits, great tits, wrens, rooks, crows, coal tits, thrushes and jays. Occasionally – goldfinch, tree creeper and squirrels. Lots of activity there! Sue also saw 2 buzzards over Clough Fields on 20.1.2011.

Mary Brazil – 16.1.11 – 2 redwings regular visitors to garden always accompanied by 6 blackbirds.  
16.2.11 – Tawny Owl hooting for 15 minutes in trees in garden. (Den Bank)  
22.3.11 – Between Hind Wheel and Glen Bridge – Celandines and frogspawn, and a weasel in Hagg Woods.

Gillian and John Drinkwater – 29.11.10 – Yellow wagtail – Tapton Hill Rd.  
16.2.11 – Heard and seen woodpeckers behind Crookes Cemetery and in valley.  
1.2.11 – first snowdrops opened in garden and heard male and female tawny owls calling sporadically all night and subsequently only males calling nightly in March.  
23.3.11 – 1 bat.  
Mid March – Rivelin Valley – bees making nests in the sandy soil of footpath.  
Gillian also saw a peacock and a comma butterfly near Sandygate Rd.

Dan Briggs – 18.2.11 – Glen Cottages, Rivelin Valley – pair of tawny owls calling every night. Also had a male pheasant eating bread with wood pigeons.

Joyce Green, Stannington – 4.2.11 – Curlew at Strines.  
6.3.11 – 2 buzzards – High Riggs Rd., 2 lapwings at Mosca Top, mistle thrush on wires and 2 robins and 2 goldfinch in garden.

Roger Kite – 24.2.11 – frogspawn in garden pond and tadpoles on 2.3.11.  
19.2.11 – 5 waxwings in cherry tree.

Mark Bateman, Stannington – 30.3.11 – Frogspawn in garden pond. (even later than mine).

Sue Shaw – 16.2.11 – Actually saw a tawny owl Joan Buckland  
RVCG Recorder

### Beekkeeping

Following a recent drive by the government to encourage new beekeepers, I took up the offer and joined the Barnsley Beekeeping Association Sep 2009. The BYBKA are a wonderful group of beekeepers who were anxious about the serious decline in bee populations which has mystified bee experts world wide. One very visible but tiny pest is the varroa mite (*varroa Jacobsoni*). It lives and feeds on the bodily fluids of adult bees, larvae and pupae through which it can pass various diseases sometimes leading to colony collapse and the bees seem to be unable to deal with it. There are a worrying number of diseases to deter new beekeepers but it is important to recognize various conditions when doing a hive inspection so that effective action can be taken quickly. BYBKA are very fortunate to have Ivor Flatman as chairman and who is the regional bee inspector. Ivor works for the National Bee Unit that is part of Fera (Food and Environment Research Agency) a government sponsored body that provides a number of important roles not only for the beekeeper but for the nations health as a whole with the testing of new substances such as fertilizers as bees are particularly sensitive to environmental changes.

Having overcome the possible difficulties facing a beekeeper, I purchased my first hive and a box of bees in Spring 2010. Initial setup cost me about £500 although it can be done cheaper. I chose the WBC hive that looks like the typical beehive that we all readily recognize. A simpler and more common hive is the National. All beehives have a large brood box where the queen is encouraged to lay her eggs and a number of 'supers' where bees are encouraged to keep their honey stores. All the boxes have 'frames' of wax, which the bees turn into honeycomb to store, eggs, brood, pollen and honey. The frames make it easy for the beekeeper to inspect the bees and access the honey crop. I spun off 32 pounds of honey in my first year, which was an unexpected bonus as bees take time to get established.

The biggest challenge facing any beekeeper (other than disease) is swarming. Bees naturally divide themselves when the queen lays eggs in special queen cells and then flies off taking 20,000 or so flying bees with her. They settle on a nearby branch or obstacle after having scared the living daylight out of the neighbours and a local registered beekeeper should be called to deal with it. Bees are not particularly dangerous when swarming. They are full of honey to keep themselves alive for a few days and desperately looking for a new home. Still bees can sting and should be treated with respect and given an appropriate distance.

I am pleased to report that recently the new Sheffield Beekeepers Association was formed and can be contacted via their website <http://www.sheffieldbeekeepers.org.uk/>

Graham Appleby

I the previous week perched in a tree at daybreak on Walkley Bank Road. Sue says "What a treat – such a beautiful bird".

Philip Walshaw – Cairns Rd – Over the Christmas period Philip had sparrows and blackbirds enjoying cold baths; regular visits by nuthatches, bullfinches, goldfinches, tits, thrushes, fieldfares, magpies, and woodpigeons. Also on 3.1.11 a greater spotted woodpecker. One day a sparrowhawk swooped down and flew off with a well-fed sparrow. He comments "such is nature".

Margaret Sanderson – 10 am, tawny owl in garden trees causing commotion amongst birds. 2.3.11 – 2 spot ladybird.

Joan Buckland – Feb./Mar. occasionally in garden – greenfinch, siskin, male and female sparrowhawk, coal tit, jay. 16.3.11 – 5 magpies. Regularly – sparrow, blackbird, dunnock, wren, great tit, blue tit, long tailed tit, goldfinch, chaffinch, robin, collared dove, wood pigeon, squirrel and fox. Rare visitors – 9.2.11 – goldcrest in Norway spruce; 14.2.11 – redwing.