



## Winter 2011

### Chairman's Notes

Nature has a way of ensuring survival. Robins, normally so aggressive, are now positively tolerant during this period of hard weather.

There are eight feeders fixed to the apex of the garage roof. All the tits, nuthatches and woodpeckers take their acrobatic pleasure and, in the process, dispense a plentiful supply of peanut debris to the swept of snow concrete below. It is here that the seven or eight robins display their benign nature, not only to each other but, to the dunnocks, blackbirds, pied wagtails, and the long tailed tits during their twice daily routine visits. Watching through the kitchen window is a great way to waste time. No finches, though; we have not seen a single one feeding in five weeks.

You will have read the tribute to Carol Cooke in the last newsletter. The committee felt a commemorative tree would be a suitable memorial – but which? A ginkgo was suggested. The more it was discussed the more apparent it became that the choice was right. Tall, slim, stately, long-lived, dispensing of benefit to others when tapped, one of a kind. Eminently suitable. A ginkgo biloba was purchased (do read the next article), it is six feet tall, two feet wide and now stands in the protection of a cold greenhouse. There will be a planting ceremony during April in the Tiverton Hospital Wildlife Garden to which all are invited; details nearer the time.

Since the last newsletter there are several new members to whom we extend a very warm welcome, Steve and Penny Hall, Liz Rogers, Claude Berry, Mick and Maggie Jinman. We hope they will find their membership to be both interesting and rewarding.

We are relaxing the schedule for the annual buffet dinner to allow a little more time for people to arrive. Come any time from 6.30pm but we will not start to eat until 7pm. If you have not booked yet ring Doris as soon as possible (01398 351 359).

A Happy New Year to you all!

**David Leader**

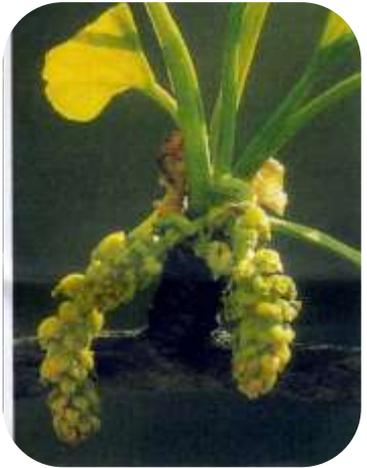
### Features

#### The Ginkgo Tree

There is one tree species that has survived on earth little changed for 200 million years, it is the Ginkgo. It is deciduous and broad leaved – although not remotely related to other broad leaved trees which bear their seeds enclosed in an ovary – Ginkgos produce their seeds unenclosed on the plant surface. There are male and female trees, the females take up to 40 years to become sexually mature, males even longer and there is no way of sexing a tree until it begins to flower. The male flowers are thick yellow catkins while the female grow in pairs on long stalks. Pollen from male flowers is carried on the wind to the small green female flowers in spring but actual fertilisation of the ovules may not occur until autumn, after the seed has been shed. The subsequent fruits are plum shaped and turn yellow when ripe. In the Orient, female trees are more prized than in the West, because the seeds are considered a delicacy. However, the woody seeds are enclosed in a fleshy seedcoat that rots to release a distinct smell of

carrion or vomit, so male trees make better street trees. The scent may have evolved to tempt reptilian carnivores to eat and disperse the seeds, at a time before mammals existed.

The leathery leaves are partially divided in the middle, up to 12 cm long and look like the leaflets of the Maidenhair fern. They are fresh pale green in colour, darken through the summer and turn bright golden yellow in the autumn before being shed. The trees can grow up to 50 metres high. Growth and shape can vary, some are like flagpoles and others are multi-stemmed. They are resistant to pollution, unfussy as to soil type, and are used as street trees in Japan. They have insect resistant wood and one tree, in Nagasaki, only 1.1 km from the centre of the atomic blast, survived and still thrives. There is a



**Male Ginkgo flowers**



**Ginkgo biloba tree with leaves inset**

Ginkgo at Utrecht Botanic Gardens planted in 1734 and the one at Kew was planted in 1761. Fortunately it is no longer necessary to have a large garden for a Ginkgo as there are now dwarf varieties available.

It is almost unnecessary to say that there is no other tree like it.

***Doris Leader***

### **Grass Identification**

In Mid June, Doris Leader and I decided to avail ourselves of a grass identification course run by the Devonshire Association as both of us know very little about grasses. It was held at the Shapwick Centre on the Somerset Levels.

I hadn't got a clue what to expect but Doris had at least gone armed with a couple of magnifying glasses. At first it seemed very high powered but after we had all introduced ourselves and admitted to our proficiency, or lack of it, the course was in fact very interesting and very well run. We were given several handouts with the named parts of the grasses, as much of it is very different to flowers. Some of the parts have really weird names like stolon, tiller, culm, ligule, auricle, lemma, awn, to name but a few! It was then explained to us how to use a key – a vital piece of information. We were also given a list of useful books for grass identification.

The leader, by the name of Liz, had brought a couple of very good visual aids she had made to show us some of the parts of the grasses, as in reality they are so small. They were made from vilene ad wood. In a former life Liz did a lot of sewing and used these skills to make the visual aids!

All over the table, about 18' by 10, were collections of grasses which she proceeded to explain to us how to identify. We were each given a grass from the bunch and were shown exactly how to take it apart in order to find the different parts and to identify it. Several of the participants were well up on grass identification so helped the likes of Doris and I. This part wasn't too bad, but then it came to the actual naming and for whatever reason, I find it very difficult to take on board and remember the latin names. I also find this difficult with flowers as all my life I have learnt the common names. I do realise that it



**Jersey tiger moths on grasses at Somerset Levels** (Photo by Chris Nadin)

Is much better to use the latin names, as on the whole they don't change and are universal.

When we had been through several types of different grasses we went out onto the levels to have our picnic lunches. My mind/brain was really in overload so the rest was very welcome.

After a very pleasant lunch with the sun shining, we ventured into the levels to identify some of the grasses. There were SO many! I decided to learn how to identify three specific ones and ignore the rest, otherwise I felt I would remember nothing. So I think I know how to identify false oat, cocks foot and rye grass.

We had quite a long wander round the levels and found several things of interest apart from grasses – some butterflies and moths, dragon and damsel flies, spiders and several flowers. All in all a very interesting day and I feel that I learnt quite a lot, even if it was only the knowledge of how and where to look things up.

So if you hear of such a course run by the Devon Association next year, then give it a go and see what you can find out.

**Chris Nadin**

### **Exmoor Landrover Safari**

Along with our daughter Dawn, Shelia and I went on a Landrover safari on 3rd October, in the hope of seeing the Red Deer in rut.

We met our driver/guide Duncan from *Barle Landrover Safaris* in the car park at Dulverton and set off promptly at 3pm. Within 2 minutes we were driving on a very steep rutted track out of the valley which was the old coaching road. We then progressed over bridlepaths and private tracks around the southern areas of Exmoor. Our guide was excellent knowing all the history of the area, and it appeared all the local farmers and walkers, though in some places we only saw deer in the distance running away, because of the tramping about of “Johnny Kingdom wannabees”. We saw quite a few Red Deer and heard the stags bellowing, though we didn't witness any other rutting behaviour.



**Mixed group of Red deer on Exmoor**

(Photo by Peter Richardson)

Our trip lasted over three hours and was quite exhilarating as we went up and down some very steep and rugged terrain. We saw parts of Exmoor we would never have managed to walk to, or reach by our own car. We certainly would not have gone across the ford at Tarr Steps with a high water level, which we were able to do in the right vehicle.

We would recommend this trip to anybody who has an interest in the countryside and history of Exmoor.

**Peter Richardson**

### **Wasted Time**

Many, many years ago the exploits of Brer Fox and Squirrel Nutkin were read to us in bed and sometimes, before the end, we were asleep. Sweet dreams. Now, grown up, we have the occasional glimpse of a fox before it imperceptibly disappears into cover, or a grey squirrel sitting on the fence daintily eating a nut just stolen from the bird feeder through a hole it had bitten in the wire with those remarkably sharp teeth. Chicken farmers and foresters don't see through rose coloured glasses any

more though.

While the fox takes his prey on the move the squirrel takes his static. In springtime he will sample one tree after another stripping the bark indiscriminately. Immediately under the outer layer of bark are the phloem and the xylem tissues. These tubular structures are separated by the cambium. The xylem transports water and soluble mineral nutrients from the roots to all parts of the tree; it is a one way system. One year's growth of xylem produces an annual ring. The phloem, by contrast, conducts water, sugars and other food material both from the roots up and from the leaves down. It is the sugars which the squirrel seeks.



In springtime, and at leisure, he will strip bark from one tree after another but while we humans only cut a little bark to tap the juices the squirrel attacks his targets randomly and in numbers. Stripping always starts towards the top of the tree and the leading shoot. If it's

not quite to his liking the tree is abandoned and another sampled. And so it goes on, trying to find the most sugary refreshment that's possible, and we all know how tempting sweet things can be. Some of us have tapped a birch tree and tasted the sap. It is fine and therapeutic and gives miraculous results when used as a base in shampoo, as many ladies will testify. Indeed, in the sunlight, you can even see a squirrel's coat glint!



His favourites are birch, beech and oak and for trees to die or be economically ruined after only 12 to 18 years of growth is not pleasing. To the farmer and the forester, both fox and squirrel are wanton killers - and sweet dreams do turn to nightmares.

**David Leader**

### **Glossy Ibis (*Plegadis falcinellus*)**

2010 has been a great year for Glossy Ibis sightings in the United Kingdom, particularly on our local Devon patch. While there have been occasional UK sightings for the past 20 years they have in the main been solitary birds or at most in twos or threes although there has been an increasing frequency to the visits.

Sometime in the sixties there was a stray flock of about 20 birds in the Bristol area, but we have done even better with confirmed sightings of 25 at Budleigh Salterton, and birders estimates going up to 30. Devon sightings started in mid September 2010 and birds were certainly being seen to the end of October when this article is being written. There have been sightings from South Devon to Exminster marshes, Bowling Green Marsh, Budleigh Salterton, The Axe estuary and Beer Head.



**Glossy Ibis at Budleigh Salterton**

(Photo by Peter Richardson)

What is so unusual about this big influx is that there has been a steady decline in this species throughout its Southern European, Balkan and North African Range. And also it is a migratory bird that travels south in Winter to Southern Africa , with some birds going through Southern Asia, south-east as far as Australia. Why are so many going in the wrong direction?

As a point of interest, this is one of the few species represented in both the old and new worlds with birds present from Maine USA down to the West Indies.

I was fortunate enough to see the birds twice at Budleigh and a photograph can be seen with this article.

What of the future? Several birders I have spoken to have voiced the thought that the pattern of sightings is very similar to that when Little egrets finally gained a foothold here, so keep your fingers crossed that this lovely bird may soon be a resident.

**Peter Richardson**

## Mycology Report 2010

Exciting finds started early with the mycorrhizal *Suillus grevellii* (larch bolete) and *Suillus granulatus* (weeping bolete) under larch and scots pine. This was in late July and early August and they have both reappeared on several occasions.

We have had all sorts of *Russulas* (brittle gills) *Lactarius* (milk caps) *Hygrocybe* (waxcaps) and many other families as well. An early chance visit to Ashclyst Forest (mainly for butterflies) yielded three large and colourful *Boletes* (*appendiculatus*, *rhodopurpurius* and *legaliae*), all in good condition. It's finds like these that whet the mycologist's appetite (though not for eating\*) but for further exploration! I have made over 2000 records this season. The records are placed on two websites – the Association of British Fungus Groups' and the British Mycological Association's. Currently I submit my records at the end of each season.

Highlights of the year are *Volvariella surrecta*, found at Rosemoor; this species is a parasite on another fungus, *Clitocybe nebularis*, the clouded funnel. This was a new species for me and there are only a very few records for this country. *Coltricia perennis* (tiger's eye) found at Bystock Pools, *Gomphidius maculata* (the larch spike) on Witheridge Moor, *Suillus viscidus* (the sticky bolete) and *Boletus legaliae*, both at Knightshayes Court and *Stropharia albonitem* at Offwell. These are just a few of the many interesting species found this year.



***Volvariella surrecta***

(Photo by Jeff Benn)

Now that frosts and cold weather are with us, few fungi will appear or be found. This is a good time for the mycologist to start culturing fresh wild animal dung to observe what different fungi appear. Last year a friend and I put about eight of each roe deer and hare droppings in to two moist petri dishes. These were placed on a window sill. Even after only 24 hours fungi started to appear. We stopped after about four weeks. During this time 18 species had grown on the roe deer dung and 22 species on the hare dung.

These fungi are small (max 5mm) and others microscopic, found with stereomicroscopes at up to 30x magnification. It is great fun identifying them using high power microscopes to measure spores and compare their forms with the aid of specialised reference books. It's a very pleasant way to spend time when the weather is inclement. 2010 was enjoyable and many of us increased our knowledge of fungi. Let's hope that 2011 will be even better.

## Edible Fungi

Over the year, two species stood out from the common edible fungi as perhaps being a little more prolific than usual. Chanterelles and parasols were found on most forays with the Cep/Penny Bun, Bay bolete and field mushrooms cropping up fairly frequently. All of these species are easily recognised once their distinguishing features are known, and indeed *it is very important to learn these features if you are a determined eater!*

The only way to learn is to attend a fungus foray sponsored by a responsible organisation, e.g. Devon Fungus Group, National Trust and Devon Wildlife Trust, or knowledgeable private forays with leaders such as David Allen (East Devon) Nigel Pinhorn (Devon Nature Walks).

If you want to know what the various good edibles taste like (without risking your health) you could do no worse than asking Doris and David Leader. They are great consumers and had a profusion of parasols on their land this year. They simply love them.

Another way to forage and taste in pleasant and different surroundings would be to join a Clifford Williams' Brittany Break in October. Clifford drives 14 people from Tiverton to his Mill in Guerlesquin (45 mins. from Roscoff) where he accommodates, hosts and cooks for the group creating a relaxing and amusing atmosphere for all over four days. Originally I was invited to identify the fungi, and loved

doing it, but time and anno domini have made me call a halt. David Allen has now stepped in as the expert with satisfactory results all round. Contact Clifford at Brittany Breaks for more details or to book a place in advance

**Jeff Benn**

Here is a photo of some of the parasols in the field. There were about 60 in this field. I could not get them all into one photo. I needed only two mushrooms to make a meal for the two of us. The deer were also very keen on eating them. Never seen parasols in such abundance before - let's hope they will be there again next year. There were similar numbers in the other field.



**Doris Leader**

### **Whale watching trips**

One of the greatest and most spectacular nature watching trips you can do is a three or four day mini cruise across to Bilbao in Spain. There are several ferries running either from Portsmouth or Plymouth and included is a four hour stop at Santander. They are not expensive, starting at about £250 per person. Many of the trips can be organised through Whale Watching groups who usually have access to a viewing deck not open to the general public and of course offer the expertise of experienced guides.

One trip is on the P & O ferry the Pride of Bilbao organised by the "Company of Whales".

I took my family on this trip 26<sup>th</sup>-29<sup>th</sup> July 2003 and can do no better than to list what we saw:-  
2 Harbour porpoises, 151 Bottlenose dolphins, 617 Common dolphins, 66 Striped dolphins, 5 Risso's dolphins, 78 Pilot whales, 7 Cuvier's beaked whales, 3 Sperm whales, 5 Long-finned Fin whales, 15



Orca, 5 unidentified whales and 15 unidentified dolphins, making a total of 969 cetaceans encountered. In addition 5 Ocean Sun fish, 1 unidentified shark and hundreds of Tuna were seen.

Birds seen from the ship included 4 Cory's shearwaters, 1 Great shearwater, 6 Storm petrels, 2 Great skua, 70 Dunlin, 12 Whimbrel, Common terns and a Guillemot. We also noted several migrant Hummingbird hawk moths from the vessel.



### **Common dolphins**

We had to leave the Ferry in Spain for 4 hours and took the option of a guided walk into the foothills of the Pyrenees. During the walk we recorded 45 species of birds, included 4 Griffon vultures, 1 Booted eagle, 2 Kestrels, 1 Hobby, several wall lizards, Hummingbird Hawk Moth, Jersey Tiger moth and 16 butterfly species. We also saw many Bush crickets including Great green Bush cricket, some spectacular spiders, several rats and a mouse.

(Photos by Peter Richardson)

You might be forgiven for thinking that we were very lucky in how much we saw. However, my daughter Dawn has joined the Whale preservation group "ORCA" and did her training trip on the same ferry on the same route between 24<sup>th</sup>-27<sup>th</sup> June 2010. I can do no better than quote the official sightings report from the Company of Whales website, that they have kindly allowed me to use.

*"A superb start to the mini cruise season with an excellent total of 10 species of cetacean recorded! We saw 1 Fin whale, 2 Minke whale, 1 Sperm Whale, 1 Cuvier's beaked Whale, 27 Bottlenose dolphins,*

195 Common dolphins, 125 Striped dolphins, 4 Long-finned Pilot whales, 5 Orcas and 4 Harbour porpoises. We also recorded 190 Dolphins that were common or striped plus 190 unidentified dolphins and 1 unidentified small Cetacean. We noted 48 Sun fish during our northbound voyage. Birds recorded from the ship included a small passage of Common Swifts making an early return south, Northern fulmars, Manx Shearwater, Gannets, Shag, Great Skua, Kittiwakes, Common terns and a Guillemot. We also noted several migrant Hummingbird Hawk moths from the Vessel.

*In Spain the highlights were 2 singing Wrynecks, Tree pipit, White wagtails, 2 Sardinian warblers, singing Grasshopper warbler, singing Cetti's warblers, 2 Melodious warblers and 6 Serins. Small numbers of butterflies which included Green-veined white, Clouded yellow, Adonis blue, Red admiral, Painted lady, Marbled white, Wall Brown, Speckled Wood and Large skipper. Several species of moth were seen and included several Hummingbird Hawk moths and Magpie moth. A European wall lizard was also spotted."*

Our Photographs leave a lot to be desired, mainly because you get so excited at the sightings that photos are a bit of an afterthought, but if you want to see better ones, you can do no better than to Look at the 'Company of Whales' website.

**Peter Richardson**

### **Kingfishers and Pellets**

It is well known that owls produce pellets which are the regurgitated remains of that part of the diet that is indigestible. Less well known is the fact that numerous other birds produce pellets in a similar way to owls. Depending on species, pellets may contain fur, feathers, insect chitin, bones and plant material. Some pellets of birds of prey have been found to contain the identification ring from the leg of their latest meal! The pellets of barn owls have proved to be useful as an indirect method to survey for harvest mice.

Birds of prey other than owls (eg buzzards and kestrels) tend not to eat their prey whole and, in doing so, avoid eating large pieces of bone. It is said that their digestive juices can dissolve pieces of bone so, unlike owls, their pellets contain very little bone.

Kingfishers produce pellets containing the undigested bones that remain of their diet of fish. These pellets may be expelled whilst sat at a perch or in the nest where, as with owls, they can line a nest in which no other material is used.

In the following series, taken as "frame grabs" from a CCTV video, one can see a kingfisher expelling a pellet.



**Stephen Powles**

### **Night-time filming wildlife.**

With the advent of Camcorders capable of recording video in total darkness by using infra red illumination I seized the opportunity some years ago to attempt recording some of our more secretive fauna. Over time this has enabled the observation of badgers, field voles, woodmice, dormice, otters, bats, barn owls, toads, newts, etc. The range of subjects is considerable, as many creatures are most active at night and only seldom seen otherwise. As cheap security cameras became widely available offering round the clock day and night recording it became easier to chart an animal's routine and so determine the best time to attempt a better quality recording using a night shot enabled camcorder. The limitations of most security cameras is their fixed focus and lack of sound and not all record in exact realtime so images may be jerky and soft focussed, but they are more easily protected against weather. Camcorders are vulnerable in wet conditions unless protected by special housings.

Recently thanks to some valuable surveillance recording by Stephen Powles which provided data as to the time and frequency of the otters visits I have had the opportunity to video otters at night. The freezing conditions in late November did not make for a comfortable experience for me, but the 2 camcorders and

the otters performed well. In total darkness of course one can only see the otter via the monitor of the infra red camcorder but at least I was only a few yards away from the action.

In September/October thanks to some helpful observations by friends it was somewhat easier to night film local dormice visiting a birdfeeder, and Brown long eared bats in the loft of an old house. By early November both were hibernating. The bats had vacated the loft area, so it seems this is a summer maternity roost numbering at least 17 some of which appear to be juveniles. Mating takes place in the Autumn or anytime during the winter in hibernacula and although we observed some close interactions between one or two pairs mating was not recorded. My intention is to set up surveillance in the Spring/Summer to see if we can record births etc. My thanks to Vicki Biggs for her help and enthusiasm.

**Alan Hopkins**

### **The Grey Seals of Godrevy, Cornwall**

In 2009 Margaret and Jim Grose described a visit to Godrevy Point in west Cornwall together with a photo showing some 60 or more Grey seals on the beach of a small cove on the headland. As we have always been very fond of seals we thought we would pay a visit ourselves therefore at the end of August, when on a family holiday in Cornwall, we made a day trip there.

The beach concerned is known as Mutton Cove and although not impossible it is pretty inaccessible from the land but in any case members of the public are not permitted to go on to the beach. The National Trust have erected notices asking members not to step beyond the small fence they have placed around the cliff edge, to make as little noise as possible and to keep dogs under control. The seals are easily panicked and are liable to stampede into the sea which could lead to injuries in extreme cases. The height of the cliff around Mutton Cove we would estimate as varying between about 100 to 130 feet.

On arrival we parked in the National Trust car park and walked up the cliff path to the location from which these fascinating creatures can be viewed. However we were disappointed to find that there were no seals at all in the cove. It didn't help much when we were told by another visitor that there had been about 70 seals on the beach earlier in the day. Perhaps they had had one of their panics?



**The bull seal with one of the pups**

(Photo by Malcolm Randle)

After we had had our picnic lunch, sat near the car park enjoying the beautiful coastal scenery on a perfect day, we decided to have another look before we left. We were rewarded by seeing two female Grey seals come swimming into the cove. One swam up and settled on the beach but the other one turned and swam back out to sea. After a short while it left and also disappeared out to sea. We got some nice photos but that was all we saw of any seals that day despite remaining for some time looking for more.

We decided to return to Godrevy in the Autumn in the hope that we might also see some seal pups so on Sunday 10<sup>th</sup> October, another superb sunny day, we set out with our daughter Janet for Godrevy. When we arrived, at around midday, our initial impression was that there were no seals there at all, so well camouflaged were they. However we saw a movement and realised that there was in fact several Grey seals on the beach. A count revealed, at that time, about 14 in total including five pups of varying ages. Most were just lazing in the sun, occasionally waving a flipper, as they do, and generally looking very contented. As far as we could see all the adults were females.

We watched for around half an hour then had our picnic lunch back at the car park before returning for another session. By this time a few more females had come in and there were one or two to be seen out

at sea. Before long a large bull seal came ashore and flopped around annoying some of the females although some seemed a bit flirty. He would then go back into the sea and swim out before returning after 10 or 15 minutes and going through the whole routine again. Some of the pups would look on either with interest or maybe alarm at all the activity. When this was going on there was always quite a bit of noise but in particular we could hear the evocative singing sound that they make.

We watched for about an hour and a half, during which time we were also treated to the sight of a female Kestrel hovering nearby, sometimes only a few feet away and occasionally landing for a rest on the cliff edge. Reluctantly we dragged ourselves away to return home after a very satisfying and enjoyable day out. We shall definitely return again next year as the two hour journey is well worth the effort.

**Malcolm and Brenda Randle**

## Meeting and Event Reports

### Grand Western Canal Evening walk – Friday 13<sup>th</sup> August

We met up at the Ducks Ditty floating cafe at the Tiverton canal basin at 6pm for a leisurely stroll beside the canal. It was a very sociable if not exciting walk, the evening being cool and breezy with a lot of cloud cover virtually precluding seeing Butterflies and Dragonflies which we had hoped for. The flora was not exceptional, although we did notice Fleabane and Perforate St John's Wort, and the hedgerows were enlivened by regular bright red splashes of colour from the Cuckoo Pint berries.

One less usual sight along the canal was a large number of Grey squirrels due to the heavy crops of Acorns and Hazel nuts. At least 23 species of birds were seen, including, Rook, Jackdaw, Crow, Magpies, Wood pigeon, Buzzards, Swallows, House martins, Black-headed gull, Herring gull, Mallard, House sparrows, Nuthatch, Chaffinch, Greenfinch, Robin, Blue tit, Great tit, Long-tailed tit, Dunnock, and Blackbird.

Having reached the car park at Manley Bridge, we turned about and headed back to our start point. It was nearing sunset so we decided to pause at a suitable spot to watch for bats to emerge. Whilst waiting we were entertained by 2 Sedge warblers flitting about in the reeds and 2 young Moorhens who decided to laboriously climb the trees opposite us.

Being Friday the 13<sup>th</sup>, the clouds piled up, and a number of people dashed for the car park to try and beat the rain, it turned out to be a pointless exercise as we all received a drenching. Those of us who remained a little longer were able to witness the first bats appearing and were able to identify Noctules, Pippistrelle and Daubentons bats. Also because of the downpour, the return path was busy with frogs, lots of toads and hordes of snails and slugs, which at least added to our wildlife count.



**Sunset at Manley Bridge 13<sup>th</sup> August**

(photo by Malcolm Randle)

**Peter Richardson**

### Rainham Marshes 17<sup>th</sup> September 2010. - Steve Hall

Steve Hall was our speaker and introduced us to this area with a little background history. A former schoolteacher with some previous experience of working on wildlife reserves he was attracted to this area when the RSPB took over the site in 2000, becoming the warden there. From 1912 the site had been owned by the MOD as a firing range but it had also been used by dog walkers, off road motorcyclists, illegal wildfowling etc., and part landfill site, so there was a fair degree of degradation. In spite of its close proximity to central London and the surrounding urban sprawl its location on the Essex side of the Thames Estuary showed that as a surviving part of a once more extensive marshland it offered an opportunity for the creation of an educational wildlife reserve. The past 10 years have transformed it and it is now a prime location for many rare and unusual species.

About 150 feral cattle once roamed the area. Today the numbers are controlled but they still contribute to the management. The landfill site was covered with a butyl liner and then overfilled with clays and subsoils and replanted. In places the liner has sagged modifying the original design with unexpected benefits. Many ditches throughout the marsh are now fenced to prevent trampling by cattle and to protect the water vole habitat for which the site is renowned. A first class visitor centre has been built. This is a prime example of habitat restoration and positive management.

Steve has a particular interest in invertebrates so the rest of his presentation focussed primarily on these. Yellow meadow ants occupy some areas evidenced by numerous anthills which attract stonechats and wheatears. A few Lapwings nest but the nearby rubbish tips attract foxes and gulls so predation is common. *Bombus humilis* (Brown banded carder bee) an endangered species, is common here and the predatory damsel bug (habits reminiscent of a preying mantis) likes the long rough grass. Where the sea wall faces south is a good place for basking butterflies. The Essex skipper occurs here and there are many spiders and numerous dragonfly species: Emperor, Golden-ringed, Southern hawker, Common hawker, Common darter, Red darter, Four spot chaser, Common chaser, Black tailed skimmer, were all illustrated with excellent photographs and explanations of mating behaviour and life cycles.



**Golden-ringed dragonfly (*Cordulegaster boltonii*)**

Photo by Malcolm Randle

Among the spiders *Segestria florentina* is particularly interesting in that the male is partial to capturing bees from his hole in a wall hideaway which he presents to his prospective mate. *Tegenaria agrestis*, a southerly species in the UK, occurs in more stony areas and seems harmless enough here but in colder parts of the USA where it was accidentally introduced it invades houses and has a reputation as aggressive, biting with little provocation. Also shown were the Velvet orb weaving spider and the Wasp spider.

This was a fascinating introduction to a new wetland reserve in an urban setting; a must see I suspect.

**Alan Hopkins.**

### **October 15<sup>th</sup> 2010 - Bumble Bees:- An indispensable species - Richard Ball**

Our speaker started by explaining the economic importance of bumble bees. In the UK their value in 2002 was estimated at £120-150 million, due to their role as major pollinators in agriculture and horticulture; red clover, lucerne [alfalfa], tomatoes, beans, flowers etc. They complement the work of commercial honey bees being able to fertilise those crops which honey bees with their shorter tongues are poorly adapted to. World wide some 250 species are known. Of 25 in the UK six are now considered extinct and many others endangered, only six being common. Of the latter the Buff-tailed, Red-tailed and Common Carder are among the most frequently noticed and easily distinguished. Richard recommended two good identification guides:- *Field Guide of Bumble Bees* by Edwards and Jenner and *Bumble Bees* by Jones and Corbet. There are also some good internet sites which include charts and photographs. (see *Bumble Bee Conservation Trust*).

**Life Cycle:** Only Queens (fertilised females) survive the winter by hibernating, preferably in a north facing bank, emerging in spring to seek suitable nest sites, (vacant rodent holes, compost heaps, bird boxes, rough grassy areas etc). Having found a suitable site she builds wax cups in which the eggs are placed and provisions a small cluster with pollen and nectar. Queen bumble bees are large and any seen carrying a pollen ball under her abdomen will be starting a colony, usually close by. At this stage she is both parent and worker so a nearby source of pollen and nectar is important.

**Stages:** Eggs 3-4days Larvae 10-20days Pupae 14 days during which time the Queen must obtain enough energy to maintain the nest temperature. Once the first workers hatch (these are smaller sterile females but similar in appearance to the queen), the colony can develop as they take over the rearing of future broods.

Compared with honey bees the colony is small, a few hundred at best and often less, and the nest is a very ramshackle jumble of cells. As the season progresses some of the larvae which are better fed develop into new virgin queens and finally the old queen produces unfertilised eggs which become males (drones). Not all Bumble bee species emerge from hibernation at the same time so some have completed their annual cycle whilst others like the common carder are still fully active.



**White-tailed bumblebee**  
(Photo by Malcolm Randle)

Tongue length in particular determines feeding/pollination characteristics and this limits competition between species. Cuckoo bees resemble true bumble bees whose nests the female invades, killing or evicting the resident queen, and laying her own eggs which the true workers then care for. The waxmoth is a more serious parasite of bumble bee nests, its larvae destroying the whole colony. Other enemies include parasitic mites, spiders, and foraging badgers, plus bacterial and viral diseases.

Commercially bred bumble bees (Buff tailed) are often used in glass houses to pollinate tomatoes and peppers etc. They are destroyed at the end of the season. This commercial use sometimes has had a downside when bees escape into the wild which may result in the transmission of disease, or result in hybridisation with native species.

Bumble bees needs:- Food i.e. flower gardens/meadows, hedgerows, forage crops, trees (willows and parkland are particularly good), nesting and hibernation sites. Finally Richard demonstrated a Bumble bee box rounding off this entertaining and informative presentation.

**Alan Hopkins**

### **19<sup>th</sup> November 2010 - The Barn Owl - David Ramsden (The Barn Owl Trust)**

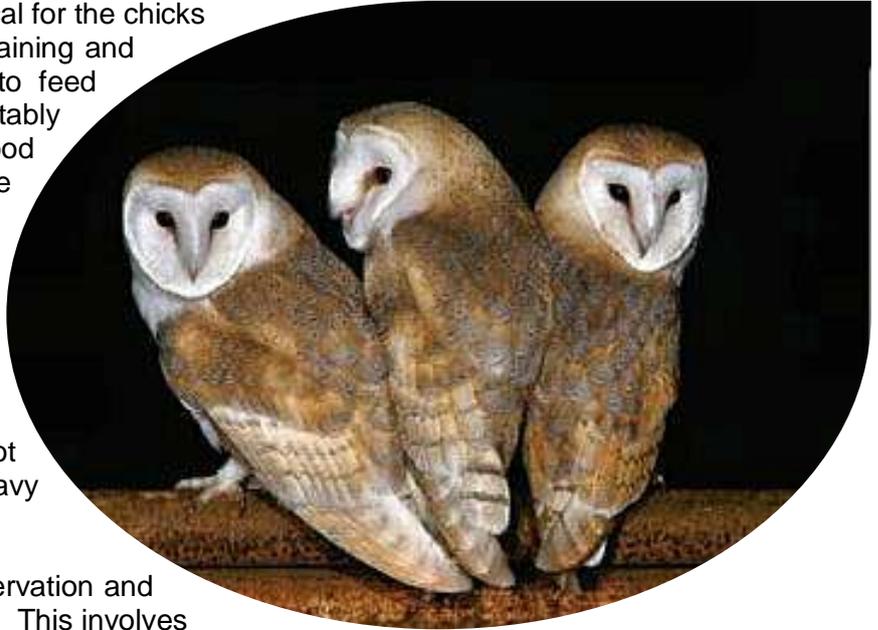
Any meeting featuring an iconic species seldom fails to attract a large attendance and this was no exception. Sub-titled "Restoring the balance" David first introduced us to the three best known UK owls:- Barn, Tawny, and Little, including their calls. The main focus was to be the once common Barn Owl and the reasons for its decline, which led to him setting up the Barn Owl trust.

During the breeding season it is important to have a rodent productive home range of about one Km radius as the demands of the young will be substantial. The number of chicks reared to fledging will largely depend on this and the availability of a suitable nest site. Prey consists mainly of voles, Woodmice, shrews, and small rats, plus the occasional frog or small bird, most readily found in rough damp pastures. The amount of this unimproved pasture and uncultivated land in the lowlands is limited (Barn owls are not an upland species). During hard winters owl mortality can be high as vole populations plummet and food becomes scarce, so the owls must hunt a larger area. Woodmice and rats seek refuge in farm yards and buildings. However this may not alleviate the situation as farmers must control the rodent population in order to prevent disease and contamination of animal feeds as well as damage to electrics. This means the inevitable use of potent rodenticides. 63% of barn owl casualties have traces of these toxins in their tissues which if not the cause of death may have affected their breeding potential.

These mainly anticoagulant poisons must have been acquired by eating moribund rodents which are very easily caught. Disposal of dead and dying rodents is therefore essential. Road kill is also a significant cause of mortality. A dead owl is not an uncommon sight especially on motorways and major trunk roads with wide verges and embankments which are often productive hunting grounds.

Barn owls usually lay eggs in April/May having found a suitable site, often in a building or hollow tree. Pairs normally stay together but the female only permits mating if fed regularly by the male, so he may stash surplus food at the nest (a bare space surrounded by drying regurgitated pellets) even before the eggs are laid. Depending on the abundance of food up to seven white eggs will be incubated and the majority hatch, but because incubation starts soon after the first egg is laid the chicks are unequal in size, and the smallest (youngest) inevitably succumb to starvation even to be eaten by their larger

siblings. The average brood size at fledging (about nine weeks) is three whilst four is good and two not unusual. The next four weeks is critical for the chicks as the parents provide no hunt training and become less and less inclined to feed them. Hunting is instinctive and inevitably some are unsuccessful and die. If food is plentiful a second brood may be attempted. As the young disperse they must find a new home range or replace adults that die. Many die at dispersal or during the winter which is a challenging time of diminishing supplies and adverse weather. Owls soft plumage, designed for silent flight, is not waterproof so they avoid flying in heavy rain.



David went on to describe the conservation and educational work done by the Trust. This involves erecting nest boxes, surveying habitats, recording numbers and breeding success rates as well as rescuing and rehabilitating weak and injured owls of all species and talking to groups, especially in schools, to raise awareness of the issues affecting owls and the environment. He is immensely proud of the acquisition of a 20 acre field adjoining the Trust HQ (made possible by a supporters legacy) now transformed by judicious management into a barn owl heaven, for their benefit and the supporting cast of flora and fauna.

**Photo courtesy of the Barn Owl Trust**

Of the rescued owls about 50% are released in the area where they were found using custom made mobile release aviaries. These birds are BTO ringed. Birds unsuitable for release (wing fractures are a common injury) and dependant on captive support are placed with experienced owners and may also be used for educational purposes. Captive breeding is possible but the release of captive bred young is now regarded as unhelpful to the long term benefit of the wild population, the creation of a suitable environment being a more important priority.

***Alan Hopkins.***

## **Programme Notes**

The new year is full of promise and kicks off with our annual buffet dinner. In February, Ralph is in charge of the always enjoyable 'Reflections' evening. Don't just think of the AGM in March but of the irrepressible Rod Lawrence and 'Beyond Old Harry'. Our winter indoor programme finishes in April and there is no finer way to do it than an evening with Professor Bryony Coles.

In between these dates we will squeeze in a few visits for wintering birds. Announcements will be made on the website and at meetings.

***David Leader***