Belfast Naturalists'

Field Club

Field Reports

2010

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West Fermanagh - Presidential Field Trip

Leader - Claire Foley **15th -16th May 2010**

This area was chosen as the President, Claire Foley, knows it well and the effort of travelling so far was rewarding due to the style of farming here with the good preservation of both archaeological and natural heritage interests.

A select band of members assembled in Belcoo on Saturday morning where we were met by Gaby Burns whose survey work with Jim Nolan has greatly increased our knowledge of archaeology on the karst limestone areas to south of Lough MacNean. We proceeded to Killesher graveyard where we viewed the ruin of the old church on a foundation of St Lassair and discussed the former existence of an ecclesiastical enclosure. Members were much taken by the headstones and flora in the graveyard as well as the many orchids in the adjacent hedgerow.

Onwards to Clyhannagh Dual Court tomb, a fine example of its type and a reminder that this limestone grassland was farmed in the Neolithic. We speculated about the intended connection to the 'underworld' in its siting in front of a natural sink hole at the west end.

Gaby then treated us to a variety of definite and indefinite cup-marks (see opposite) largely on glacial erratics which lie scattered about on the limestone pavement. He showed us the 'pedestals' under each one, which are the preserved original surface of the limestone pavement where rain over many millennia has not reached. He also pointed out the many ancient field walls and house footings which he has plotted and we discussed their possible relative dates.

After a picnic lunch at Crossmurrin nature reserve we arrived at the Marble Arch International Geopark where we were refreshed with tea and biscuits while Martina McGee gave us an excellent talk on the caves and the wider Geopark region. The final treat was a specially laid on tour in 4x4s halfway up Cuilcagh Mountain to view the results of ten years of peat regeneration after extensive cutting in the past. This is not only good as a habitat restoration but the restored peat prevents run-off from the mountain which can affect water levels in the caves.

On Sunday we headed north from Belcoo for the church site at Templenaffrin where we saw the ruined church in its crowded graveyard and the well-preserved ecclesiastical enclosure which surrounds it. A multiple bullaun in an earthfast boulder in the hollow below was much photographed and the landowner David Fawcett showed us a rare plant, *Sambucus ebulus* (Danewort), growing nearby. We learned that the access lane to the church used to be the old coach road and a neat little stone bridge is still extant here. We progressed to the village of Holy Well where we viewed Rushin old church and paid homage to the restoration work done by Canon McKenna and Dorothy Lowry Corry in the 1930s.

The actual holy well is an impressive pool of water fed by a spring with streams flowing away in two directions – it was traditionally known as St Patrick's Tub and also as the coldest bath in Ireland.

continued

West Fermanagh - Presidential Field Trip (contd)

15th May 2010

Further up country we found our way to Aghnaglack Dual Court Tomb built of large limestone slabs and we discussed the uses of the courts at each end for cremations and speculated about the type of people who were buried here while enjoying our picnic lunches. Next stop was the church site at Toneel North, also known as Boho, where an elegant, probably 10th century, cross shaft is the only remnant of St Febhar's Early Christian foundation.

The final push was a pleasant uphill walk to the hillside above the church where at Reyfad a remarkable display of Bronze Age cup and ring decoration is incised across several exposed sheets of limestone (pictured).

As we regrouped to say farewell the first rain of the weekend hurried us on our way and back to the 21st century.

Oldbridge

22nd May 2010

The BNFC met with members of the Dublin Naturalists' Field Club at the Boyne Centre at Oldbridge House (left) for a tour of the Centre and an audio visual display about the battle before moving on to Mornington after a picnic lunch. There is an excellent display which places the battle of the Boyne in its proper historical context as an incident in the wider play of European politics. As described on the Centre website, both kings commanded their armies in person. William had 36,000 men and James had 25,000 - the largest number of troops ever deployed on an Irish battlefield. English, Scottish, Dutch, Danes and Huguenots (French Protestants) made up William's army (Williamites), while James' men (Jacobites) were mainly Irish Catholics, reinforced by 6,500 French troops sent by King Louis XIV. At stake were the British throne, French Dominance in Europe and religious power in Ireland.

William's camp was on the north side of the river, James's was on the south side with the two armies facing each other. William's battle plan was to trap the Jacobite army in a pincer movement. He sent 10,000 men towards Slane which drew the bulk of the Jacobites upstream in response.

With 1,300 Jacobites posted in Drogheda, only 6,000 were left at Oldbridge to confront 26,000 Williamites. All the fighting took place on the south side of the river, as the vastly outnumbered Jacobites defended their position against the advancing Williamites. William himself crossed at Drybridge with 3,500 mounted troops. The pincer movement failed. King James's army retreated across the River Nanny at Duleek and regrouped west of the Shannon to carry on the war.
Approximately 1,500 soldiers were killed at the Boyne.

The audiovisual presentation, with a three dimensional map of the terrain, gives a vivid impression of these events, and the centre contains an excellent display of contemporary artefacts, including cannon drawn up outside.

Liam McCaughey

Mornington Dunes, Drogheda

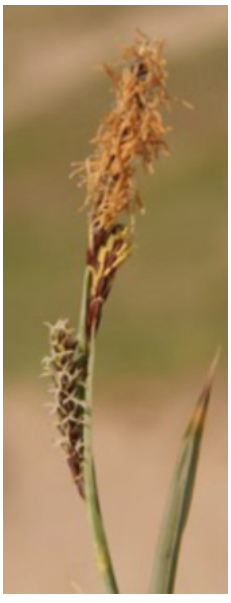
Leader - Declan Doogue **22nd May 2010**

Members of the *Dublin and Belfast Naturalists' Field Clubs* reassembled from various directions at the mouth of the Boyne for an afternoon of sunny botany led by ***Declan Doogue*** of DNFC.

Declan showed us 2 precious books - a 1726 edition of *Caleb Threlkeld's Flora* and a facsimile of another edition (see left) – both mentioned finds of Sea-rocket *(Cakile maritima)* and the parasite Dodder *(Cuscuta epithymum)*, used "to purge melancholy", being found at the *Maiden Tower*, a reputedly Elizabethan light-house, where we had met. We saw neither of these plants but we did see many others and learnt a great deal from Declan about the nature of sand dunes, appropriately on World Bio-diversity Day.

We watched *Little Terns* diving into the estuary from their nest site on the northern shore. Declan explained that sea walls had been built along the estuary to improve navigation and, as at Bull Island in Dublin Bay, dunes and sea marshes had formed.

These dunes were on ridges of gravel so did not have moist slacks. Sand Sedge *(Carex arenaria)* with its far-creeping rooting stems helped to anchor the sand. Plants of the Pea family fixed nitrogen in the sandy soil and we identified 6 in one small area – beautiful swathes of Birdsfoot Trefoil *(Lotus corniculatus)*, Lesser Trefoil *(Trifolium dubium)*, worn as Shamrock, "Common" Vetch *(Vicia sativa ssp angustifolia)*, Kidney Vetch *(Anthyllis vulneraria)* and the more familiar Red and White Clovers *(Trifolium pratense and repens)*.



A diversion was made to investigate a tall plant at the edge of the dune area – it was a Hellebore in seed, presumably a garden escape.

A plant new to many northerners was Field Mouse-ear *(Cerastium arvense)* similar to Snow-in-summer *(Cerastium tomentosum)*.

continued

Mornington Dunes, Drogheda (contd)

22nd May 2010

Wild Pansy

On other parts of the dune area we found Weld (Reseda luteola), maritime Wild Pansy (Viola tricolor ssp.curtisii), Common Milkwort (Polygala vulgaris) and Bulbous Buttercup (Ranunculus bulbosus) with its turned-down sepals as well as 2 other members of the Pea family – Black Medick (Medicago lupulina) and Rest-harrow (Ononis repens) which "arrests harrows" with its woody tough stems. The photographers were busy when we were shown 2 beautiful small grasses - Sand Catstail (Phleum arenarium) and Crested Hair-grass (Koeleria cristata).

On the shore Lyme Grass, brought in to stabilise sand, was becoming dominant and creating steps up from the shore. Decaying seaweed provided nutrients on the shore so that Oraches (Atriplices) and Sea Sandwort (Honkenya peploides) could become established. So valuable had seaweed been that in the past there were seaweed wars at Rush and Malahide.

We made our way back past human bodies being toasted in the hot sun while listening to the deafening noise of car radios to make a brief visit to the unspoilt tidal mud flats and salt marsh.

Declan was thanked for giving us a most informative and entertaining afternoon and we said good- bye to the Dubliners after a pleasant day beside the Boyne.

Margaret Marshall

Ranunculus bulbosus

Balloo, Ulster Wildlife Trust

Leader - Willy McNamara **25th May 2010**

The evening proved sunny and pleasant although a cool wind meant that warm layers and coats were needed by all! A good number of Field Club members turned out to hear Willie McNamara tell us about the site, it's function and the way it was managed.

It is a managed wetland and woodland site which the Ulster Wildlife Trust took over in two parts. The woodland was purchased in 1995 from the Nicolson Estate. The wetland was only taken over in 2006 when the Trust started to manage it for the Down County Council in 2008. This part is a relatively new project, whose aim is to create an environmental haven in the middle of an industrial estate.

UWT drained part of the area to create a pond and made an island in the centre. The aim was to create live feeds from bird boxes placed on the island with cameras powered by solar cells. Unfortunately the trees blocked the signal to the factories nearby where the computers could pick them up. A great idea which just needs more work!

The area has become a focus for many of the local residents who help by watching the area and reporting any changes or problems. A small group of 8 to 12 volunteers, ranging in age, meet on a Friday and carry out a variety of tasks including everything from biological recording to tree planting and grass cutting.

The Club had planned to pond dip during the evening but Willie explained that there had been two major pollution leaks into the water. One was raw sewage, the NI Water board test showed it was five times more toxic than a septic tank! Another, some type of green chemical pollution which as yet has not been identified.

However the walk round the ponds was very rewarding as we saw Herons, a moorhen and some mallard in the water. The ponds are surrounded by reeds (Phragmites australis). The board walks make all parts of the area accessible along with a bird hide, information panels and picnic areas.

We saw a buzzard, house martins, herring gulls, lesser black backed gulls, black headed gulls and hooded crows in flight.

The area has a rich variety of plants supporting the wildlife including Kneegrass, (Alopecurus geniculatus), Lesser trefoil (Trifolium dubium), Germander speedwell (Veronica chaemaedrys) and Brooklime (V.beccabunga), Meadow-sweet (Filipendula ulmaria), Epilobium hirsutum, Mentha aqua, Greater Stitchwort (Stella Major) and Pineappleweed (Matricaria discoidea).

continued

Balloo, Ulster Wildlife Trust (contd)

29th May 2010

We then moved to the Woodland Nature Reserve, an oasis for wildlife and people in the heart of the Balloo Industrial Estate. Unlike the wetland, which is newly created, the woodland at Balloo has been there for a long time. What is now called Balloo Woodland was previously the grounds of Balloo House, home of the Steele-Nicholson family since the early 1700s.

An oasis for wildlife and people in the heart of the Balloo Industrial Estate, it is full of mature native (and some exotic) trees and woodland plant life, with a small pond to provide a home to some watery wildlife too! There are terrapins in the pond competing with herons to feed on the frogs.

Claire Foley, the president, and Alastair McIlwain take time to tree hug

The House was demolished in the mid 1900s but the remains of the family mausoleum built in 1792 (known locally as Nicky's tomb) still exist on the eastern edge of the wood. North Down Borough Council bought the woodland in 1995 and stopped it from being built upon. They also built a windmill which helps to power the recycling plant.

Here we found well established oaks, as well as woodland plants such as *Conopodium majus* (Pignut), *Ranunculus ficaria* (Celandine), *Sanicula europaea* (Wood sanicle), *Silene dioica* (Red campion), *Viburnum opulus* (Guelder rose) and *Prunus padus* (Bird Cherry).

There is an active campaign to eliminate the invasive *Fallopia japonica* (Japanese knotweed) which is proving to have some success. Well done to all the staff and volunteers involved! (Full species list supplied in the archives).

Pamela Thomlinson

Green Island, black stones and red rocks

Leader - Peter Millar **1st June 2010**

Peter Miller explains

Carrickfergus Castle

After hearing a summary of the geological history of the last 500 million years, and in particular the events at the end of the Silurian period when there was a collision between the northern and southern continents which squeezed the "Iapetus" ocean out of existence, we descended to the beach and examined the rocks at *Macedon Point* - the *Sherwood Sandstone, Mercia Mudstone*, and intruded basaltic dykes.

This ancient ocean was orientated northeast - southwest and this is still reflected in the grain of counties Down and Donegal – and even in the orientation of Belfast Lough itself.

We descended to the beach and examined the Mercia Mudstone at Macedon Point. This was formed in the *Triassic period* – a period when there was one enormous continent and the local area had a semi-arid climate. As these red sediments are clay-grade they have a slippery feel between the fingers. Here we are well below the level of the *Palaeogene Antrim Basalts* but there is plenty of evidence of the way in which the magma reached the surface, in the form of dykes - vertical cracks in the Mudstone filled with Basalt. Being harder than the Mudstone these stand up from the shore as long straight reefs. The majority run north-northwest to south-southeast. Macedon Point owes its existence to a particularly thick dyke. In 1899/1900 a member of the Field Club, *Miss Sydney M. Thompson,* published a paper on this locality describing a possible occurrence of "White Lias" – now known as the "Penarth Group". There is now no sign of this in the area.

We walked about 700 metres northeast to the next headland. Here we saw several more dykes and the Sherwood Sandstone which underlies the Mudstone and which has here been brought above sea level along this stretch by a gentle fold. This rock is quite fine-grained but feels distinctly grittier in the fingers than the Mudstone.

In *Hazelbank Park,* as at many places along this coast, there is a bench a few metres above sea level, backed by a steep slope. This is a raised beach which was cut after the Ice Age, during the *Flandrian Transgression* about 8500 years ago. The *Estuarine Clay* or "Sleech" which underlies central Belfast was also deposited at that time. Members admired a fine display of wild flowers growing on the slope.

We drove to *Shorelands* half a mile northeast of the University entrance and examined a ruined tower-house, *Castle Lug.* More Mudstone and dykes can be seen on the shore by crossing the main road here but as time was short and the traffic rather intimidating we continued to *Carrickfergus*.

At Carrick after evading a circus which was being set up in the car park we examined the rock on which the castle is built. This is another dyke, and a really large one. We discussed the conspicuous yellow *Magnesian Limestone* which is used extensively in the castle. This outcrops at *Cultra* and doubtless was brought across the Lough by the Normans when they were building the castle.

The limestone was formed in the *Permian period* by an incursion of the sea. Indeed both in the Permian and Triassic periods shallow inlets of the sea often formed and evaporation of these gave beds of *gypsum* and of course the famous *Carrickfergus salt*.

continued

Green Island, black stones and red rocks (contd)

1st June 2010

Greenisland Island

The greatest mass extinction of all time happened 250 million years ago in the late Permian. What caused this is not known. Had it something to do with this single great arid continent?

Our final stop was at *Island Park* which is a short side road about halfway between Carrickfergus and Jordanstown. This allowed us access to the tiny island which gave *Greenisland* its name.

The island is formed from a sill – a horizontal sheet of basalt – and typically of a sill, it has distinctive vertical jointing. This site is also of archaeological interest because in the 1930s *Nora Fisher McMillan* found a Mesolithic occupation level on the islet with a layer of charcoal and two implements.

The evening was steadily improving but as it was now 9 pm we decided to call a halt, having at last seen the real Green Island!

Peter Millar

Castlerock

5th June 2010

Hezlett House

The excursion to Castlerock was a partial reenactment of a BNFC excursion in 1910. Like our forefathers we travelled by train to Castlerock, the journey in 2010 being a mere 15 minutes shorter than the 1910 one. On arrival we walked to *Hezlett House* where there was promise of tea or coffee before the tour of the house.
Hezlett House has a thatched cottage exterior, which hides a fascinating early timber frame dating from 1690, making it one of the oldest vernacular domestic buildings in Northern Ireland. It became home to the Hezlett's in 1766 and stayed within the family for the next 200 years until the *National Trust* acquired it in 1976.

Talking to the Head Gardener, Downhill Domain

Much is documented about the members of the Hezlett family who lived there, and for that reason we are able to learn today what farm life was like 200 years ago. When the BNFC visited Castlerock in 1910 this building was still the Hezlett family home. The farmyard houses the *Downhill Marbles* collection and viewing these gave us a taster for our visit to Downhill Demesne.

The more energetic members of our club followed in the footsteps of the 1910 members and walked to *Downhill* where we entered by the *Bishop's Gate*, which has a lovely Gothic gate lodge. After a picnic lunch we were met by the Head Gardener of the estate who was very keen to tell us about the restoration of the *Bog Garden* which is beside the Bishop's Gate. The garden was first created by *Lady Bruce* in 1910 but had been neglected over the past 10 years so is now being restored to its former glory. We were also conducted through the *Black Glen* which is a small arboretum that's home to many different trees.

The warm, sunny weather made the walk to the ruins of Downhill a delightful experience. Downhill had a three storey front, facing south and with two long wings at the back of this. Originally these wings terminated in domes topped with ornamental chimney-pots. The wings were continued in ranges of outbuildings, forming inner and outer yards and ending towards the sea in two immense curving bastions of basalt.
It required a lot of imagination to picture the house in all its glory when it had been built for the Earl Bishop.

Our walk back to Castlerock took us past *Mussenden Temple* and along the cliff path where there was plenty to interest the botanists and the zoologists.

On our return to Castlerock there was time for afternoon tea and very scrumptious cake before our return train journey to Belfast.

Joan Semple

Peatlands Park

Leader - Trevor Boyd **12th June 2010**

Large Heath

We were fortunate with the weather for this butterfly outing and an enthusiastic group of Club members set off on a 3 mile route round the area. We were not to be disappointed and were soon able to spot several Speckled wood *(Pararge Aegaria)*, Green-veined whites *(Pieris napi)* and an Orange Tip butterfly *(Anthocharis cardamines)* in the wooded area and the sunny spots of grasslands near Mullenakill National Nature Reserve.

We also saw Brown Silver-line *(Petrophora chlorosata)* and Clouded border *(Lomaspili marginata)* moths here.

We then headed across Derryhubbert Bog where we first saw the Large Heath butterflies *(Coenonympha tullia)*, at least 10, as well as Brown Hawker dragonflies *(Aeshna grandis)*, red and blue Damselflies and more Green-veined Whites. More day flying moths including Common Heath and Silver Y. There are many interesting plants too Yellow Pimpernel *(Lysimachia nummularia)*, Wood avens *(Geum sp)*, Bog cotton *(Eriophorum angustifolium)* and Sundew *(Drosera rotundifolia)*.

Pamela Thomlinson and Trevor Boyd

The outing was particularly enjoyable as our leader, Trevor Boyd, took time to capture a variety of specimens and show use the main ways to identify them. He also explained details of their life cycles and distribution a wonderful way to learn about the species found here.

Male Northern damselfly

Sundew

Carnmoney Hill

Leader - Gregor Fulton **15th June 2010**

Yellow rattle

On a lovely June evening, members assembled at the *Knocknenagh Avenue* entrance to *Carnmoney Hill*. Our leader, ***Gregor Fulton***, site manager for the Woodland Trust's N.Ireland woods, explained that Newtownabbey Borough Council and the Woodland Trust had formed a partnership in 2003 to preserve the hill and its mixture of habitats for future generations. Over 57,000 native trees have been planted to bolster the ancient woodland. Local volunteers help keep this Local Nature Reserve in order.

At the entrance we looked at a pond with young *Tufted* and *Mallard* ducks and then contoured round and up the hill. Our President, the archaeologist *Claire Foley,* discussed the remains of old farmsteads, field boundaries, raths and souterrains. The last thatched cottage had been inhabited until a fire in the 1970s.

By a small pond and damp area were lovely clumps of Flag Irises *(Iris pseudacorus)*, Ragged Robin *(Lychnis flos-cuculi)* - flos-cuculi because it flowers when we should be hearing the cuckoo, and Common Spotted Orchids *(Dactylorhiza fuchsii)*.

The *Field of Flowers project* aims to turn a one hectare field into a wild-flower meadow with 25 oak trees dispersed among it. Yellow Rattle *(Rhinantus minor)*, a hemi-parasite on grass, will gradually weaken the grasses and already Red Campion *(Silene dioica)* was established.

We climbed higher for magnificent views over Belfast, *Belfast Lough* glinting in the sunlight, the *Mourne Mountains* and out to sea as far as Scotland. Our return route was thought the ancient woodland where formerly coppiced hazel trees provided shade for Bluebells *(Hyacinthoides non-scriptus)*, Wood Anemones *(Anemone nemorosa)* and Wood Sanicle *(Sanicula europaea)* an umbellifer which is an indicator of ancient woodland.

A Victorian well, restored with sculptures of local wild life as a Millennium project, was admired.

Our leader was thanked by the President for introducing us to an area rich in wildlife and history so near to Belfast but new to many of the group.

Margaret Marshall

Gibson's Quarry, Moy Road, Portadown

Leader - Leslie Whortley **26th June 2010**

There are three main exposed rock types in *Gibson's quarry*, the *Ulster White Limestone* (Chalk), the *Clay–with-Flints* which is overlain by the *Antrim Lava group*. At the top of the succession is *glacial till*.

The Ulster White Limestone represents a period when Ireland was covered by warm, clear, shallow seas. The composite thickness of the formation is approx. 133 m and at least 38 m have removed by erosion. This limestone is much harder than the English Chalk group. Fossils to be found in Gibson's Quarry include *Crinoids and Belemnites*.

The clay-with-flints is part of the 10million year gap between the limestone and the earliest Basalt lavas. This deposit is thought to have been formed as a fossil soil combining the weathering products of limestone and flint, an aeolian component and alluvium from the overlying basalt lavas. Contemporaneous volcanism contributed much of the clay fraction. The clay with flints comprises a soft, highly-weathered clay matrix consisting of fine quartz clay minerals, opaque oxides and *haematite*. Flints range from grey to white, fawn purplish to deep reddish brown. A cataclysmic volcanic explosion produced ash at a minimum of 750ºC. which along with the haematite changed the flints from grey to an intensely coloured jasper.

The K-T Boundary (Cretaceous/Tertiary)

The basalt lava flows cover the Clay-with-Flints (over 50mil years ago). It has been estimated that up to 1000m of basalt lava has been eroded indicating that the lavas extended far beyond their present outcrop. In the quarry the depth of the basalts varies from 5 to 20m.

This is a working quarry with mobile crushing and screening plant producing mainly road metal. Near the surface the basalt is rubbly producing a very poor stone the use of which is limited to infill. As depth increases it becomes massive giving a very good aggregate.

Fossil echinoid (Sea urchin)

The Glacial Till is not consolidated and is relatively soft and contributes to modern soils. As glacial deposits cover most of the older rocks in Ulster we can see the importance of quarries to geologists both professional and amateur.

All and all a very interesting quarry and as several people remarked, they have lived and worked in the Portadown area, unaware that such a geological gem existed.

James Rutherford (Geology Section Sec.)

Craigavon Lakes

26th June 2010

Pink Centaury

Mating Damselflies

In June 2006 we had found several hundred Bee Orchids *(Ophrys apifera)* at this site between the *North Balancing Lake* and the railway line. This year we found just 2 growing in the shelter of a gorse bush and only because *Pamela Thomlinson* was photographing a *Common Blue butterfly* there! Unlike most orchids, the Bee Orchid produces a rosette of basal leaves in the autumn which is photosynthetically active during the winter. We speculated whether the long harsh winter might have damaged these leaves. However Bee Orchids are notorious for the fluctuation in their numbers at any particular site.

We did find about 50 Common Twayblades *(Listera ovata)* and hundreds of Common Spotted Orchids *(Dactylorhiza fuchsii)* in varying sizes and colours from almost pure white to purple.

On a lovely sunny afternoon many *Common Blue* and *Meadow butterflies* were in flight as well as red and black *Cinnabar* and *Five-spot Burnet* moths.

Purple Knapweed *(Centaurea nigra)*, pink Centaury *(Centaurium erythraea)*, violet Tufted Vetch *(Vicia cracca)*, white Ox-eye Daisies *(Leucanthemum vulgare)*, yellow Meadow Vetchling *(Lathyrus pratensis)*, Birdsfoot Trefoil *(Lotus corniculatus)* and Mouse-ear Hawkweed *(Pilosella officinarum)* gave a rich variety of colour to the site.

Margaret Marshall

Dumfries and Galloway - Long Field Trip

Introduction **4th-7th July 2010**

Portpatrick

Our long field trip this year was to *Dumfries and Galloway*, which we had last visited in 1994 and once again we were based in The *Creebridge House Hotel, Newtown Stewart*.

The excursion secretary is indebted to *Philip Doughty* who planned and delivered the extensive, informative and interesting geological aspect of the trip. The botanical sectional secretary, *Margaret Marshall* was well prepared and knowledgeable about the local flora and she has written a separate botanical report.

We travelled by ferry to Stranraer where we were met by the coach which was to be are method of transport for the four day excursion. Our first stop was *Portpatrick* where not only did we learn about the geology of the place but those people who didn't move quickly enough, got drenched by a huge wave at the slipway. We had an opportunity to view the memorial to those who lost their lives on the *Princess Victoria* on 31st January 1953. *Marion Allen* provided us with the information about the disaster.

On the way to the hotel we stopped at the coastal area of *Glen of Luce/Auchenmaig* for a spot of botany.

Cairnholy

Monday 5th July

There was a brief geological stop at *Creetown* before travelling the short distance to *Creetown Gemrock Museum*. After our tour of the museum there was time for some retail therapy in the gemstone shop. After lunch at the museum we visited *Cairnholy* where there are the remains of two remarkably complete Neolithic burial cairns, of the *Clyde group* of long cairns.

Neilson's Monument

Our final visit of the day was to *Barstobrick Visitor Centre* which is part of the *Red Kite Trail* where the more active members of the party walked to *Neilson's Monument* (see left) from where there is a panoramic view and they were rewarded with sightings of the Red Kite *(Milvus milvus)*.

For those who did not wish to do the walk there were several short, easy walks around the ponds near the car park and there was a wealth of botany here. The icing on the cake was a flying display by the red kites which everyone was able to witness from the visitors centre before we departed.

Back at the hotel in the evening our President rounded off a perfect day by entertaining us with her piano playing and singing.

continued

Dumfries and Galloway - Long Field Trip (contd)

4th-7th July 2010

Caerlaverock Castle

The Latinus Stone

The Osprey's nest

Red Kite

Tuesday 6th July

We travelled south today to the Dumfries area and our first visit was to *Locharbriggs quarry* where among the interesting things we saw the preparation of sandstone to repair the façade of *Belfast Central Library*. It was difficult to drag ourselves away from the quarry but soup and sandwiches at *Caerlaverock Castle* beckoned.

There has been defensive building on this site since 950 AD. Around 1220, *Alexander II of Scotland* granted the estate to his chamberlain, *Sir John de Maccuswell* (Maxwell). Sir John built the 'old' castle and over the centuries it was extended and improved. Caerlaverock's triangular shape is unique among British castles. Why it was built this way is not known. There was much to see at the castle including zoology and botany. As this was our last evening after dinner we had a mini conversazione and as usual the range and quality of displays was excellent.

Wednesday 7th July

Wigton, famous for its second hand bookshops was our first stop today and the excursion secretary had planned a short visit of 20 minutes but she had not reckoned on the live cam of an *Osprey's nest*. The result was that the ornotholigists and bibliphiles had a heyday.

The next port of call was *Whithorn* where we were expected for a tour of the priory and the adjoining museum. Whithorn's history as an Early Christian centre cannot be doubted. Archaeologists have uncovered clues from the earliest settlement in the 5th century. The people were trading and importing luxury goods from the Mediterranean and were working the land to produce food together. *The Latinus Stone*, which is the earliest Christian monument in Scotland shows that the community was Christian. Historically we do know that from the 7th century people have made a pilgrimage to visit the shrine of *St Ninian in Whithorn* believing in his power to cure illness and perform miracles.

Carved headstones and crosses from the 10th and 11th century that were excavated at *St Ninian's Cave* which is a small sea cave, only 7km from *Whithorn Abbey* are now displayed in the *Priory Museum* at Whithorn. Local tradition says that St. Ninian used this quiet and secluded spot as a place of solitude and retreat. The cave was used by pilgrims since the early middle ages. We were to visit St Ninian's Cave but because of the stormy weather and high seas most people opted to spend more time in Whithorn so only an intrepid few braved the elements on the coast.

Thankfully the weather calmed down for our sea trip back to Belfast and we arrived back safely vowing to return to this beautiful and interesting part of Scotland.

continued

Joan Semple, Excursion Secretary.

Dumfries and Galloway - Long Field Trip (contd)

Geology Notes

4th-7th July 2010

Philip Doughty

Day 1. Portpatrick

The Death of an Ocean.

Around 400 million years ago the great *Iapetus Ocean* was crushed out of existence. Two continents, *Laurentia* astride the equator and *Avalonia* drifting north, finally collided and the ocean was no more. The sea floor was driven beneath Laurentia in a subduction zone (where the southern slab of oceanic crust of the colliding plates was dragged down by convection currents in the Earth's mantle) but in this process its smothering blanket of sediments was scraped off in a series of slices driven one beneath the other. The rocks in *Portpatrick harbour* exhibit the results of this gargantuan event.

The coach drove onto the car park at the southern end of the harbour which occupies and old, disused quarry. Here the intensely crumpled, fractured and faulted rocks, the sediments of the Iapetus Ocean floor, can be seen and the forces that created them can be appreciated.

Portpatrick Formation

The rocks form part of the *Portpatrick Formation* which is part of the *Ordovician period*: they are mainly *greywackes*, tough rocks caused by the mixing of sediments as turbidity currents slid off the continental shelf and mixed as they plunged into the deep abyss. *Shales* between the greywackes contain the pencil like traces of *graptolite fossils* used for fine dating the otherwise almost identical sequences although we will be lucky to find any. We saw faults, folds and a variety of features associated with turbidite rocks. The rocks get progressively younger to the north.

Creetown Square

Above the car park on the cliff top are the remains of *Dunskey Castle*, built around 1510 on the site of an earlier stronghold by *Adair of Kilhilt*. The masonry is of local greywackes with quoins of red sandstone probably brought from Dumfries. It was described as ruinous in 1684 and has remained so ever since.

At the southern end of the harbour are the *Steps of Time,* a surprising and original idea whose origins remain something of a mystery. They explain geological events through time, although in reverse order, the lower steps, which should represent the earliest times, in fact record the most the Ice Age and what followed.

continued

Dumfries and Galloway - Long Field Trip (contd)

Geology Notes (contd)

4th-7th July 2010

Day 2.

Granites and Gem Rocks.

After driving into *Creetown* we paused briefly in *Adamson Square* where a bold and imaginative redevelopment of a prominent public space can be appreciated. Here a huge granite sphere can be seen incorporating scenes of local events and interest etched into its surface. It is the work of a Japanese sculptor, *Hideo Furuta* (1949–2007) who made his home in the village.

There is also a series of beautifully sinuous steps providing an arresting plinth for the globe and a pair of granite seats completing a strikingly original setting. The work was sponsored by a range of charitable trusts and organisations including *Forward Scotland*, the *Scottish Arts Council*, the *National Lottery*, the *Dumfries and Galloway Community Regeneration Project* and the local council all of whom should be applauded.

Creetown village owes its origin to "granite" working (in fact the local rock is a *granodiorite*) and was created to provide paviours, mostly setts, for the road surfaces of Liverpool. The granodiorite is of late *Silurian* or early *Devonian* age and forms the western fringe of the *Cairnsmore of Fleet pluton*. The local quarries are abandoned and there is now no working of the *granodiorites* in the area.

Back on the coach we ascended the hill to the *Gemrock Museum*, a surprising establishment to find in such a relatively remote rural setting.

Skeleton of a Cave Bear

It houses a superb collection of minerals and gemstones, (see opposite) a veritable treasure house, compiled by three generations of the *Stephenson* family who still run the enterprise. It incorporates a number of separate collections and some unique and exceptional items: of particular interest are the *Wilson Collection*, the *British fluorites collection*, *carved malachite and lapis ornaments*, *the quartz collection*, a spectacular sheet of native copper and an arresting exhibit of man-made crystals as well as a complete mounted skeleton of a cave bear. We were shown round by *Tim Stephenson*, the owner and current manager.

continued

Dumfries and Galloway - Long Field Trip (contd)

4th-7th July 2010

Day 3.

Burning Deserts and Beautiful Buildings.

After the drive to the Dumfries area we went to the nearby town of *Locharbriggs* where we visited the *Locharbriggs Quarry* (now part of the *Stancliffe Stone Group*), noted for the exceptional quality and consistency of the finely bedded red sandstone extracted here.

A small slice of Belfast city centre has its origins in this quarry. It has supplied some of the finest building stones in Scotland and many of the Scottish-founded enterprises in Belfast in the late 19th and early 20th centuries imported stone for the construction of prestige buildings from here. The *Richardson Sons and Owden's Seed Warehouse*, now *Marks and Spencer*, the *Ocean Building* and the *Scottish Temperance Building*, all in Donegall Square are only some examples to be seen in Belfast.

The sandstone is part of the *Locharbriggs Sandstone Formation* and is *Permian* in age and was formed in a desert environment. We were conducted through the quarry by the works manager *Craig Lauder*, who explained the unique method of working dimension stone as opposed to standard stone aggregates. We were also able to see the stone works where the raw bedrock is dressed for a variety of uses.

On our way south through Dumfries we called briefly at *Castledykes Park* where we saw a *Permian desert breccia*, the *Doweel Breccia Formation* and its relationship to the Locharbriggs Sandstone formation, in the sunken rose garden, an inventive use for the old quarry that formerly occupied the site.

continued

Philip Doughty

Dumfries and Galloway - Long Field Trip (contd)

Some Galloway Botanical Highlights

4th-7th July 2010

Foxglove

My memory will be of road verges thick with deep red-purple Foxgloves (*Digitalis purpurea*), Red Campion (*Silene dioica*), much commoner than the few miles "across the water", and white Mayweed (*Tripleurospermum inodorum*)

At Auchenmalg on a shingly shore, we found a large colony of Oysterplant (*Mertensia maritima)*, a northern plant rare in Ireland. Some of us tasted the leaves but could not detect the oyster taste which gives it its name.

A ditch beside Cairnholy was full of bright yellow Monkey-flowers (*Mimulus guttatus*), a North American native, and *Brooklime*, a Speedwell, (*Veronica beccabunga*) which bungs up becks. Vivian spotted our first "Scottish Bluebell" – the Harebell (*Campanula rotundifolia*).

Barstobrick Visitors Centre has a delightful range of habitats. Near the pond area was a large patch of the emblem flower of Kirkcudbrightshire, Ragged Robin (*Lychnis flos-cuculi*). Lychnis means a lamp and its thick leaves were used as wicks in oil lamps, flos-cuculi as it flowers when the cuckoo is here. While not looking up at Red Kites, many members found and identified a plant that does not occur in Ireland - Dyer's Greenweed (*Genista tinctoria*). It was used as a yellow dye and when mixed with *Woad* produced *Kendal Green*. Max remembered seeing it years before near a former dye-works on the Isle of Wight.

Common Spotted (*Dactylorhiza fuchsia*), Heath Spotted (*Dactylorhiza maculata*) and Fragrant Orchids (*Gymnadenia conopsea*) were examined. Three Bedstraws, Lady's, Heath and Marsh (*Galium verum, saxatile palustre*) were compared.

Dyer's greenweed

Common spotted orchid

We braved a brief shower at *Powillimount* near *Southerness* to find a good selection of sea marsh plants such as Sea Arrow-grass (*Triglochin maritima*) and Sea Milkwort (*Glaux maritima*).

A different looking thistle was probably Welted Thistle (*Carduus crispus*).

Our final walk was to St Ninian's Cave through woodland which had been full of Bluebells and Wild Garlic. Nearer the shore was Sand Leek (*Allium scorodoprasum*) with purple bulbils. *Blackthorn* with sloes and *Hawthorn* were growing prostrate on the stony shore, reminding us of the Burren.

continued

Dumfries and Galloway - Long Field Trip (contd)

4th-7th July 2010

Sea kale

We were pleased to find Rock Samphire (*Crithmum maritimum*) and many clumps of Sea Kale (*Crambe maritima*), a rare plant only recently reported to be on the Antrim Coast near Garron Point.

Margaret Marshall

Fragrant orchid

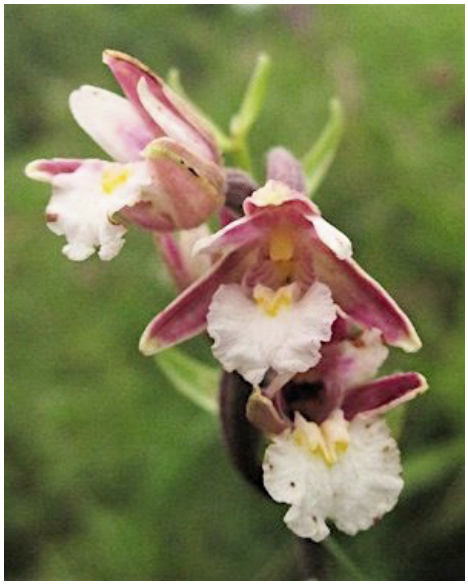
Oysterplant

Ragged Robin

Milford Cutting and Gosford Forest Park

Leader - Margaret Marshall **7th August 2010**

We met at 11.00am in the village of Milford, just outside Armagh city. There was a group of 16, which included what must be two of our youngest members (Arthur, aged nearly 3 and Eva, aged 1¼)! The day was still cloudy at this stage as we walked up a lane towards Milford Cutting, spotting a buzzard and a heron flying overhead.



Marsh Helleborine

Milford Cutting, now a nature reserve managed by the Ulster Wildlife Trust, was part of the Armagh City to Castleblaney railway which opened in 1909 and then closed in 1957. Apparently the Milford platform was the longest of the GNR.

In particular we were here to see the quite rare Marsh Helleborine *(Epipactis palustris)* and the Fragrant Orchid *(Gymnadenia conopsea)* – which we did. The Marsh Helleborine (opposite) has an exquisite little flower when viewed close up.

We were also hoping to see butterflies, particularly the Silver-washed fritillary, but the lack of sunshine made that unlikely at first. However shortly after arriving at the Cutting the sun broke through, and although we didn't see the Silver-washed fritillary, we did see several Speckled wood, Small white, Large white and a Common blue.

There were lots of other flowers to enjoy, including:- Angelica *(Angelica sylvestris)*, Tufted Vetch *(Vicia cracca)*, Knapweed *(Centaurea nigra)*, Lady's Bedstraw *(Galium verum)*, Square-stalked St. John's Wort *(Hypericum tetrapterum)*, Great Willowherb *(Epilobium hirsutum)*, Agrimony *(Agrimonia eupatoria)*, Brooklime *(Veronica beccabunga)*, Common Spotted Orchid *(Dactylorhiza fuchsii*), Enchanter's Nightshade *(Circaea lutetiana)*, Herb Bennett *(Geum urbanum)*, Nipplewort *(Lapsana communis)*, Marsh Woundwort *(Stachys palustris)* and Meadowsweet *(Filipendula ulmaria)*.

Speckled Wood

We understood that there should be about 11 of the rare Irish Whitebeam tree *(Sorbus hibernica)* in the area, however we only managed to find one of them!

We then drove over to Gosford Forest Park, near Markethill, and had our picnic before embarking on a walk round the Arboretum.

continued

Milford Cutting and Gosford Castle

7th August 2010

Beech leaves in Spring

There was a lovely Walnut tree *(Juglans regia)* in the car park area and then in the Arboretum a great number of trees (deciduous and conifer) from all over the world, many having reached over 150 years of age. Most of them were very helpfully labelled.

Trees seen included:- Common/English Oak *(Quercus robur)*, Sessile Oak *(Quercus petraea)*, Red Oak *(Quercus rubra)*, Copper beech *(Fagus sylvatica 'purpurea')*, Southern Beech *(Nothofagus)*, Tulip tree *(Liriodendron tulipifera)*, Silver Birch *(Betula Pendula)*, Cut-leaved Beech *(Fagus sylvatica 'laciniata')*, Cypresses, Wellingtonia *(Sequoiadendron giganteum)*, Giant Redwood *(Sequoia sempervirens)*, Monkey Puzzle *(Araucaria imbricata*), Yew *(Taxus baccata)*, Cedar of Lebanon *(Cedrus libani)*, Atlas Cedar *(Cedrus atlantica)*, Douglas Fir *(Pseudotsuga menziesii)*, Western Hemlock *(Tsuga heterophylla),* Bhutan Pine *(Pinus wallichiana)*, Armands Pine *(Pinus armandii)*, West Himalayan Spruce *(Picea smithiana)*. There were far too many to name them all, and lots of beautiful specimens. We also saw Broad-leaved Helleborines *(Epipactis helleborine)*, and a number of fungi.

The trip may have finished with afternoon tea at the Cafe in Gosford Forest Park – but it was closed.

Maureen Carswell

Heron

Brown's Bay, Skernaghan Point, Islandmagee

Leader - David McNeill **10th August 2010**

Knapweed

Members assembled at Brown's Bay carpark on a dry but chilly August evening. Our leader, David Mc Neill, Botanical Society of the British Isles Recorder for Co Antrim, had spotted the heart-shaped basal leaves of Grass of Parnassus *(Parnassia palustris)* - left and below, when we had visited the area in May 2009 and so we had arranged a return visit for August when this beautiful plant flowers.

After walking along the beach we climbed up onto the grassy Skernaghan headland. The National Trust owns 90 acres of open access grassland and rocky shore here. The Rocking Stone, a well-known local landmark, no longer rocks as it has been secured to a concrete plinth and sadly is defaced with graffiti. We walked over grassy slopes with Knapweed *(Centaurea nigra)* and Bulbous Buttercup *(Ranunculus bulbosus)* in flower until we reached an area of coastal flush where we were rewarded with the sight of many flowering specimens of Grass of Parnassus; it is probably extinct in its one County Down site, Aughnadarragh Lough, but does occur in several coastal marshy areas of County Antrim.

On our return walk, we encountered a bull among his harem of cows and our leader disappeared rapidly through gorse bushes down to the rocky shore. However the bull seemed to be more interested in his cows than in a group of botanists and we passed unscathed. Craig Somerville of the National Trust promised to ensure that the bull would be removed from this public area.

The President thanked David for taking us yet again on a botanical walk where there was plenty of interest for specialists and non-specialists to enjoy.

Skernaghan Point

While writing this report, I googled *Skernaghan Point* and was interested to learn it was only 24 miles from *Portpatrick* where the nearest golf club and camp sites could be found - no mention of being separated by the North Channel!

Margaret Marshall

Archaeology sites on the North Coast

Leader - Lorraine Bourke NIEA **14th August 2010**

A group of members assembled at *Layde Church* on this fine sunny day for a visit to several ruined church sites and appreciate the prehistoric landscape in dramatic coastal settings.

At Layde, overlooking the sea along a sheltered valley, we saw a multi-period medieval church with a later west tower retaining its distinctively *Irish 'wicker centering'*. This was a method of supporting the vaulting during building while the mortar set. The gravestones proved as interesting to members as the church itself. We then processed through *Cushendall*, busier than usual with a festival in train, and lunched at the Yacht Club car park. From here we could appreciate the dominant *Lurigethan hill*, a large promontory fort of probable Bronze Age date. We then headed southwards for *Ardclinis Church* passing en route below *Red Bay Motte and Castle*. Lorraine has been supervising the conservation work at Ardclinis and she related how the medieval ruin had been cleared of vegetation revealing the original masonry of the west end. This is believed to be on the site of a 1500 year old foundation. A small, cross-inscribed stone near the gate was much admired. A highly decorated 12th- century crozier from the site is in the *National Museum, Dublin*.

Our journey continued northwards where we stopped beside *Loughaveema*, the vanishing lake. This natural phenomenon, which was empty on the day, provided a lively discussion as to its cause and we learned that it was also a focus of interest in prehistoric times with a court tomb, three portal tombs, a wedge tomb, a round cairn and Neolithic occupation site all found in the immediate surrounding landscape.

Our final site was *Bonamargy Friary*, dating to about 1500, as oasis of peace surrounded by *Ballycastle golf club*. Although the sea is not actu coast with plentiful fish supplies was vital for the life of the Friary. We heard that the church had been thatched and was burned in 1584.

A beautiful east window survives and is thought to replace an earlier one. We speculated about a wooden rood screen which may have divided the nave and chancel and saw the cross commemorating *Julia McQuillan*, 'the black nun', a reclusive here in the mid 17th century after the friars had left. We noted the east range with its several rooms below and a dormitory above. A foul water drain at the south end was admired as being advanced for its time. We tracked the corbels which would have supported the cloister roof and puzzled over the historic conservation of the west wall. Members lingered over the gravestones as usual and noted in particular a small group of war graves.

Before dispersing, Lorraine reminded members of the former glassworks and coastal coal mining which had flourished here in Ballycastle under the patronage of the *Boyd family*. All were very appreciative of the detailed handouts which Lorraine had prepared.

Claire Foley

Banagher Glen

Leader - Ian Irvine

21st August 2010

Small Copper

The sun was shining as we arrived at *Banagher Glen*, a great relief to all organisers of butterfly outings as – no sun, no butterflies! A small group of Field Club members made it to this remote location and were quickly rewarded with Silver-washed Fritillary butterflies *(Argynnis paphia)* as we gathered in the car park. *Ian Irvine*, warden for the *Northern Ireland Environment Agency* was our leader for the day.

He took us up a steep path to a wildlife meadow NIEA maintain and manage by grazing with their own live stock. On the way up we saw more Silver-washed Fritillaries feeding on Marsh Thistle *(Cirsium palustre)*, Speckled Wood *(Parage aegeria)* and the path and grass were full of small frogs. Over the meadow we watched another Silver-washed Fritillary, Large Whites *(Pieris brassicae)*, Green-veined Whites *(Pieris napi)*, Ringlets *(Aphantopus hyperantus)*, Meadow Brown *(Maniola jurtina)* and a Small Copper *(Lycaena phlaeas)*. There also were large grasshoppers and a female Common Spreadwing Damselfly *(Lestes sponsa)* in the area.

We watched and heard Buzzards *(Buteo buteo)* circling and mewing in the distance and four Jays *(Garrulus glandarus)* chattering as they flew slowly through the treetops.

Silver washed Fritillary and underside below

Reluctantly we left the meadow as clouds covered the sun and walked up to *Altnaheglish Reservoir* for lunch, seeing more Silver-washed Fritillaries on the way.

A pleasant walk of for kilometres up the road through the following the valley, passing the deep pool where the *Altnaheglish* and *Glenedra* streams meet. Legend has it that a monster water serpent lives there, St Patrick was supposed to have driven all the snakes from Ireland but this beast escaped his attention!

The day ended as we arrived back to the cars just as rain began to fall. A successful outing in a beautiful spot that was well worth travelling to visit.

Pamela Thomlinson

Common Buzzard

Archaeological sites in the Carrickfergus area

Leader - Claire Foley **25th September 2010**

A good group of members assembled in *Carrickfergus* under the shadow of the castle and while they were disappointed to find that *Andrew Gault* had to send his regrets they were happy enough to continue under my guidance.

Carrickfergus walls

First stop was *Kilroot Bishop's Palace* near the coast beyond *Eden village*. Here we mused on the tradition that St Patrick had founded a church here and we tried to imagine what kind of establishment this might have been.

A small walled graveyard (see opposite) is well used and raised above the surrounding ground now but in the 19th century burial was known to have extended further out. The low walls of the church were still discernible in the early 19th century and in 2002 an excavation carried out immediately to east found evidence of earlier burials. A replica *bullaun* stands on a plinth in the graveyard while the original is cared for in nearby *St Colman's Church of Ireland* church.

Graveyard at Bishop's Palace

The fine three storey house beside the graveyard is an elaboration of an early 17th century *Bishop's Palace* and it gazes along the straight avenue to west which continues towards *Castle Dobbs* across the county road. A defensive bawn was built around the garden at that time and one circular flanking tower, later converted to a dovecot, remains of an original four. A clear survival of the 17th century formal garden is a stretch of silted up canal. Jonathan Swift lived nearby while rector of *Ballycarry* but unfortunately his house was demolished in the 1950s.

We processed to *Glynn Church* next (see left) and admired the relict medieval field system as expressed on the 1857 OS six-inch map. We read that the original foundation here is also attributed to Patrick but there are no clues to this earlier period surviving above ground. The church is under conservation by NIEA at present and we examined the chancel and nave, two quite distinct sections and debated about whether one was an extension of the other as it is unusually long for a church at 23m. The east window is relatively intact although needing support and there are other windows in the north and south walls but partly ruined. All in all the ruin doesn't seem to have changed much since it was sketched by *F. Morewood* in 1896 (UJA, Series 2 (1896) 180-83).

continued

Archaeological sites in the Carrickfergus area (contd)

25th September 2010

Orr Memorial

The next stop was *Ballycarry* to look over the 17th-century ruined church, the last of several at this place where there is evidence of an Early Christian ecclesiastical enclosure of probable 6th or 7th century date which in turn had been built on an area of Neolithic activity. We agreed that the church was in a reasonable state in spite of family vaults being built within it. Gun loops low down in the west wall attest to its possible defensive use, possibly during the 1640s. *The Orr memorial* was much admired although it is in need of some careful conservation.

We repaired to Carrickfergus passing *Dalway's Bawn* en route and joined a tour of the 17th century walls in the company of expert ***Ruairi O'Baoill*** who has spent many years excavating and researching the town.

These are in a good state of preservation, and it is interesting to be able to see the breach (picture below) made in the walls in 1689 when the Jacobite garrison then holding the town was put under siege by *General Schomberg* - the regular courses of masonry giving way to irregular infill.

Claire Foley

17th Century walls

Fungus Foray, Clandeboye

2nd October 2010

The annual fungus foray was held in conjunction with the *Northern Ireland Fungus Group* (NIFG) and was joined by ten members of the *Conservation Volunteer Northern Ireland's Green Gym initiative*. The foray had kind permission from the Clandeboye estate to explore some of the more private grounds of the said estate. Wikipedia states that ...

"The Clandeboye Estate is a country estate located in Bangor, County Down, Northern Ireland, 12 miles (19 km) outside Belfast. Covering 2,000 acres (8.1 km2), it contains woodlands, formal and walled gardens, lawns, a lake, and 250 hectares (620 acres) of farmland. The estate is currently home to the Marchioness of Dufferin and Ava, widow of the last Marquess (the title being extinct)".

No mention though is made of their delicious yoghurts!

Debbie Nelson holds a particularly fine specimen.

With the prospect of ancient forests and grasslands the estate promised an exciting foray. Despite a gloomy weather forecast there was a large turnout and quite a few of the member's children played their part. With over forty pairs of eyes scouring the ground the identification skills of *Roy Anderson*, *Chris Stretch, Debbie Nelson* and *Robert Cobain* of the NIFG were kept constantly in demand.

Essentially fungi fall into two main types: the *Ascomycotina* or "Spore shooters" and the *Basidiomycota,* the "Spore Droppers". The variety of habitats at Clandeboye, from native woodland through ornamental parkland to grassland, yielded an abundance of species representing the many types of fungi. *Boletes* with tubules instead of gills, the gilled fungi such as the *russulae*, *milkcaps* that ooze "milk" on cutting across the gills, *stinkhorns, brackets, clubs, corals, earth tongues*, colourful grassland *waxcaps, cup fungi, puffballs, jellies* and the beguiling *earthstars*.

Guidance was given on a rolling basis of the many key factors in identification. It is vital that a record is made of the type of tree, plant or habitat where the fungi are found.

Shaggy Scalycap

Many fungi and flora co-exist in a specific mutually dependent symbiosis or *mycorrhyizal* relationship as it is known. Fungi lack chlorophyll and cannot produce their own food so instead they absorb nutrients from their surroundings.

There are three main types, *symbiotic*, *saprophytic* and *parasitic*. Although absolute identification may necessitate microscopic examination of the spores and various chemical tests, they can be keyed out with their physical characteristics, stem, gill and cap shape, odour, taste and indeed texture.

continued

Fungus Foray, Clandeboye (contd)

2nd October 2010

The fruiting body of Boletus luridiformis, under Beech where the yellow flesh turns bright blue on cutting.

Symbiotic fungi require carbon compounds, sugars and starches produced from the photosynthesis of plants. This is all done underground by a mass of individual filaments or hyphae that forms a large matted network or mycelium that connects directly into the plant's root system and provides the host plant with nutrient salts and other key organic minerals that the plant cannot obtain. They also draw water from the soil and can feed it into the tree's roots. As the majority of all plant species form a mycorrhyizal relationship with specific fungi this can be a key point in identification.

The other two main types, Saprophytic feed on the dead remains of plants, animals and organic matter such as dung.

Parasitic fungi feed on living organisms, caterpillars, insects, flowers, trees and even on other fungi. So, while many fungi are crucial for our native flora, some like the honey fungus, *Armillaria mellea* can destroy a healthy tree.

Maureen Carswell photographs an Earthstar

There are over five times as many types of fungi as there are flowering plants in the UK and the foray ended up a great success with over a 125 species recorded (a club record apparently), a complete list follows with their common name given where possible. The show of earthstars was particularly enchanting, *Geastrum striatum* or the Striate Earthstar.

The exciting news is that the foray produced one species new to Northern Ireland and three new to the whole of Ireland plus one species on the NI priority list.

We hope to repeat the joint outing in 2011 and I would like to express our deep thanks on behalf of the Belfast Naturalists Field Club to the members of the Northern Ireland Fungus Group (NIFG) and the Clandeboye estate.

Matthew Porter

A species list follows.

Fungus Foray, Clandeboye (contd)

2nd October 2010

Species List 1 of 3

Agaricales			
Amanita ceceliae	Snakeskin Grisette	Birch	scarce
Amanita rubescens	Blusher	Beech	
Boletus chrysenteron	Red Cracking Bolete		
Boletus luridiformis		Beech	turns bright blue on cutting
Collybia butyracea	Butter Cap	Beech	
Collybia confluens	Clustered Toughshank	Ash	
Coprinus atramentarius	Common Inkcap	Ash	
Coprinus lagopus	Hare'sfoot Inkcap	Ash	
Cortinarius hemitrichus	Frosty Webcap	Birch	
Cortinarius triumphans	Birch Webcap	Birch	
Crepidotus variabilis	Variable Oysterling	Beech Twigs	
Cystoderma amianthinum	Earthy Powdercap		
Entoloma porphyrophaeum	Lilac Pinkgill	Birch	
Hebeloma crustuliniforme	Poisonpie	Ash	
Hygrocybe pratensis v. berkeleyi		Birch	
Hygrocybe chlorophana	Golden Waxcap	Grass	
Hygrocybe conica	Blackening Waxcap	Grass	
Hygrocybe psittacina	Parrot Waxcap	Grass	
Hygrocybe russocoriacea	Cedarwood Waxcap	Grass	
Hygrocybe virginea	Snowy Waxcap	Grass	
Hygrophoropsis aurantiaca	False Chanterelle	Cypress	
Inocybe geophylla v. lilacina	Lilac Fibrecap	Beech, Ash	
Kuehneromyces mutabilis	Sheathed Woodtuft	Beech	
Laccaria amethystina	Amethyst Deceiver	Beech	
Laccaria laccata	Deceiver	Beech	
Lactarius blennius	Beech Milkcap	Beech	
Lactarius quietus	Oakbug Milkcap	Oak	
Lactarius rufus	Rufous Milkcap	Scot's Pine	
Lactarius subdulcis	Mild Milkcap	Beech	
Lactarius torminosus	Woolly Milkcap	Birch	
Lactarius turpis	Ugly Milkcap	Birch	
Leccinum scabrum	Brown Birch Bolete	Birch	
Lepista nuda	Wood Blewit	Ash	
Limacella guttata		Beech	
Lyophyllum decastes	Clustered Domecap	Ash	
Mycena archangeliana	Angel's Bonnet	Scot's Pine	
Mycena galericulata,	Common Bonnet	Beech	
Mycena leptocephala	Nitrous Bonnet	Grass	Roys List
Mycena pura	Lilac Bonnet	Beech	
Mycena sanguinolenta	Bleeding Bonnet	Holly	
Mycena vitalis	Snapping Bonnet	Beech	
Oudemansiella mucida	Porcelain Fungus		
Pholiota squarrosa	Shaggy Scalycap	Beech	
Pleurotus ostreatus	Oyster Mushroom	Beech	
Pluteus cervinus	Deer Shield		
Psathyrella corrugis	Red Edge Brittlestem	Beech	scarce
Psathyrella piluliformis	Common Stump	Beech	scarce

Porcelain Fungus

continued

Fungus Foray, Clandeboye (contd)

2nd October 2010

Species List 2 of 3

	Brittlestem		
Psilocybe fimetaria		Rabbit Dung	[new to Ireland]
Psilocybe semilanceata	Magic Mushroom / Liberty Cap	Grass	
Rickenella swartzii	Collared Mosscap		
Russula atropurpurea	Purple Brittlegill	Oak	
Russula exalbicans		Birch	
Russula farinipes		Beech	
Russula fellea	Geranium Brittlegill	Beech	
Russula fragilis	Fragile Brittlegill	Beech	
Russula grisea		Beech	
Russula nigricans	Blackening Brittlegill		
Russula nitida	Purple Swamp Brittlegill	Birch	
Russula nobilis	Beechwood Sickener	Beech	
Russula ochroleuca	Ochre Brittlegill	Beech	
Russula vinosopurpurea		Beech	
Stropharia caerulea	Blue Roundhead	Grass	
Stropharia caerulea	Blue Roundhead		scarce
Suillus granulatus	Weeping Bolete	Exotic Pine	
suillus luteus	Slippery Jack		
Tricholoma arvernense		Pine	[new to NI]
Tricholoma stiparophyllum			
Tricholoma ustale	Burnt Knight		
Tricholomopsis rutilans	Plums and Custard		
Tubaria furfuracea	Scurfy Twiglet	Beech Twigs	
Volvariella speciosa		Ash	
Xerocomus chrysenteron		Beech	
Xerocomus subtomentosus		Beech	
Brackets, Clubs, Corals			
Clavulina cinerea	Grey Coral	Cypress	
Clavulina cristata		Beech	
Clavulinopsis helvola	Yellow Club	Grass	
Clavulinopsis laeticolor	Handsome Club		
Crepidotus mollis	Peeling Oysterling	Beech	
Ganoderma applanatum	Artist's Bracket		
Ganoderma australe	Southern Bracket	Beech	
Meripilus giganteus	Giant Polypore	Beech	
Phellinus ferruginosus	Rusty Porecrust	Oak	
Piptoporus betulinus	Birch Polypore / Razorstrop Fungus	Birch	
Polyporus squamosus	Dryad's Saddle	Ash	
Schizopora paradoxa	Split Porecrust	Beech	Roys List
Stereum gausapatum	Bleeding Oak Crust	Oak	
Stereum hirsutum	Hairy Curtain Crust	Beech	
Stereum rugosum	Bleeding Broadleaf Crust	Beech	
Trametes versicolor	Turkeytail	Beech	
Trechispora mollusca		Beech	
Trichaptum abietinum	Purplepore Bracket	Scots Pine	
Ascomycetes			

continued

Fungus Foray, Clandeboye (contd)

2nd October 2010

Species List 3 of 3

Aleuria aurantia	Orange Peel Fungus	Ash	
Ascocoryne sarcoides	Purple Jellydisc		
Ascotremella faginea		Beech	
Bisporella citrina	Lemon Disco	Beech	
Bisporella sulfurea		Beech	
Byssonectria terrestris		Beech Litter, Deer Dung	[new to Ireland]
Cudonia confusa	Cinnamon Jellybaby	Exotic Holly litter	[new to Ireland]
Diatrypella favacea		Beech	
Helvella crispa	White Saddle	Beech	
Helvella lacunosa	Elfin Saddle	Beech	
Humaria hemisphaerica	Glazed Cup	Beech	
Hymenoscyphus fagineus		Beech cupules	
Hypoxylon petriniae		Ash	
Kretschmaria deusta	Brittle Cinder	Beech	
Leotia lubrica	Jellybaby	Ash	
Microglossum viride		Grass, wood edge	earth tongue
Nectria cinnabarina	Coral Spot	Sycamore	
Otidea alutacea	Tan Ear	Ash	
Otidea onotica	Hare's Ear	Beech	
Peziza micropus		Beech	
Trichoglossum walteri		grass under *Chamaecyparis*	[NI Priority sp.]
Quatemaria quaternata		Beech	
Xylaria hypoxylon	Candlesnuff Fungus	Beech	
Xylaria longipes	Dead Moll's Fingers	Sycamore	
Xylaria polymorpha	Dead Man's Fingers	Beech	
Puffballs, Stinkhorns			
Geastrum striatum	Striate Earthstar	Ash	
Geastrum triplex	Collared Earthstar	Monterey cypress	
Lycoperdon perlatum	Common Puffball	Beech	
Lycoperdon pyriforme	Stump Puffball	Beech	
Phallus impudicus	Stinkhorn	Pine, Ash	
Scleroderma verrucosum	Scaly Earthball	Soil	
Jellies			
Exidia thuretiana	White Brain	Ash	
Hirneola auricula-judae	Jelly Ear or Jew's ear	Beech, Sycamore	
Tremella mesenterica	Yellow Brain	Oak	
125 species