

Belfast Naturalists'
Field Club

Field Reports
2019

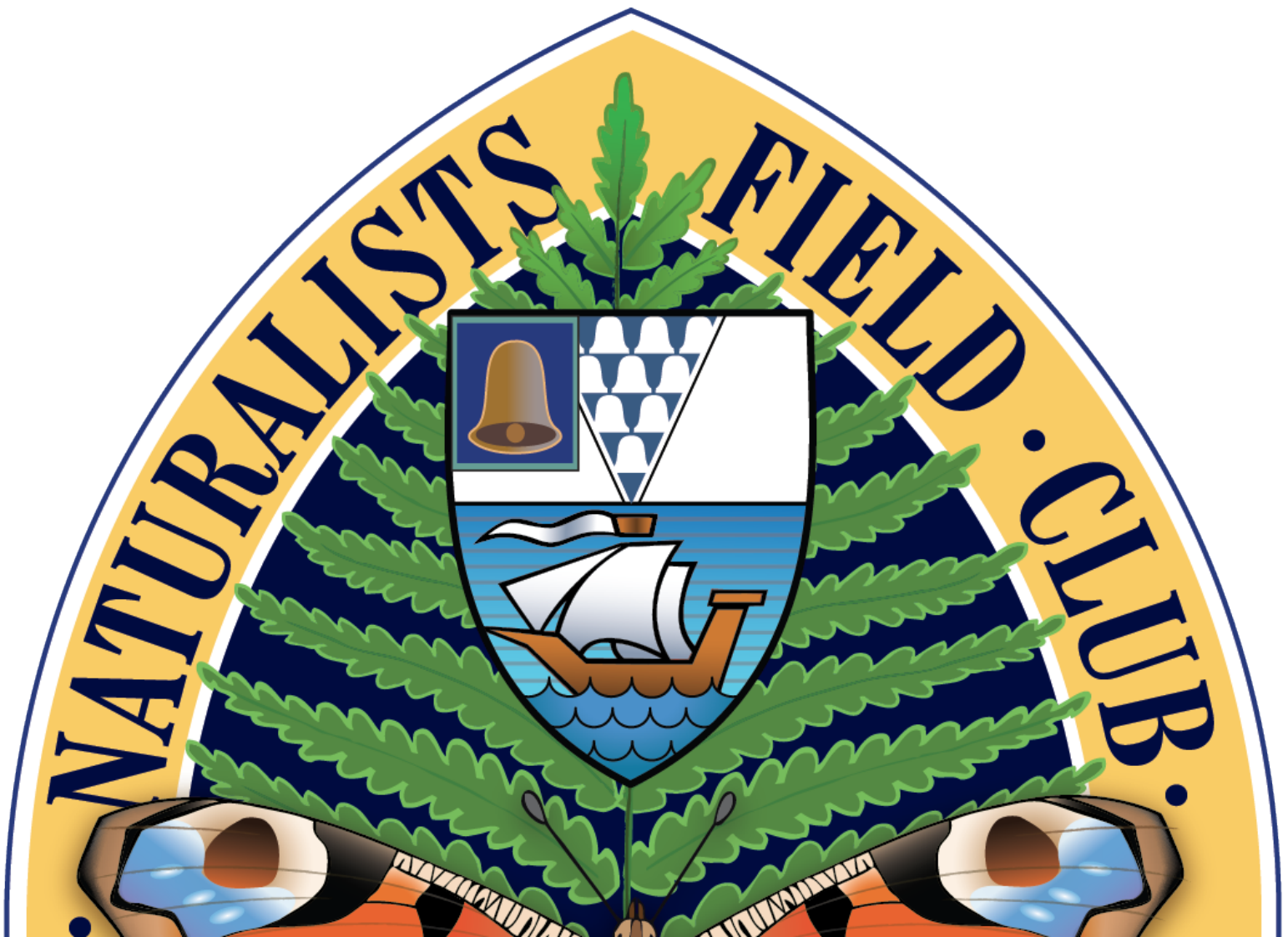




Table of contents 2019

Crawfordsburn Country Park	3
Nugent's Wood and Ballyhenry Island.....	5
Geology near Carrickfergus	11
Clandeboyne Estate	13
Slievenacloy Nature Reserve	14
Long Field Trip to County Offaly	16
Islandmagee and Portmuck Geology	17
Swifts at The Crescent, Belfast	18
Montiaghs and Portmore Zoology.....	19
Montiaghs and Portmore Archaeology.....	21
Killard Point, Geology	26
Killard Point, Botany.....	27
Killard Point, Zoology.....	30
Red Hall, Ballycarry	31
Cavehill.....	33
Edward Worth Library, Dublin.....	34
Belfast City Cemetery, Stewart Plaque	35
Geology NE Antrim	37
Fungus Foray - Gosford Forest Park	38
Gosford Forest Park - Species List	40



Crawfordsburn Country Park

Leader: Dot Blakely

11th May 2019

We began the year's outings in sunshine at Crawfordsburn Country Park.

The day began with a woodland walk with **Dot Blakely** explaining the how and the why of birdsong.

The first birds to be heard in the morning, she told us, are the ground feeders. Firstly the Blackbird (*Turdus merula*) with its loud, clear song. It's thought to be one of the most beautiful songs with each phrase starting with clear flute-like whistles and ending with scratchy twittering. Then the Robin (*Erithacus rubecula*) and the Wren (*Troglodytes troglodytes*). The Robin is very proud of his red breast – so he sings a variety of distinctive short and long notes – often sounding like – diddly dee, look at me!!! Then he shows off, puffing out his chest and showing off his bright red chest.



Blackcap
hedgelandtales.blogspot.com

The little Wren, such a small bird, has along distinctive song lasting 4 – 8 seconds ending with a repeating trill of notes, sounding a little like a machine gun!

There is a well established rookery in Crawfordsburn Country Park and we 'serenaded' with their constant chatter, along with the calls of the young Rooks (*Corvus frugilegus*) calling for food.

Another corvid, the Hooded Crow (*Corvus corone cornix*) produced its raucous call as it flew over the treetops. Magpies were also seen in flight. These large birds breed earlier than woodland birds as they feed on insect larvae, small worms and refuse, which are available earlier. Magpies also fed on the eggs and young chicks in the nests.

Wood pigeons (*Columba palumbus*) were also heard calling their characteristic - coo coo.

We were lucky to hear the Blackcap (*Sylvia atricapilla*) with its long, fast song. It has scratchy and clear notes with a variety of pitch!

Luck continued with us and next we heard and saw a Goldcrest (*Regulus regulus*) sing its high pitched twittering 'tweedly, tweedly, tweedly, twiddleedidee' and the call is quiet zi-zi-zi which is easily confused with Treecreepers and some tits. Unfortunately we lose the ability of hearing these higher pitches in later life.

We heard and some of us saw a Treecreeper (*Certhia familiaris*) looking like a little mouse on the side of a tree.

Another excitement was a sighting of both the Mistle Thrush (*Turdus viscivorus*) and the Song Thrush (*Turdus philomelos*). The Mistle Thrush song has lovely short flute-like warbles whereas the song Thrush has a loud clear voice using repeated notes and phrases.

The smaller woodland birds, tits and finches, were not forgotten. The Blue tits (*Parus caeruleus*) song is distinctive with pure, clear notes followed by a series of deeper trills e.g. tsee – tsee – tutututu, then Long-tailed Tits (*Aegithalos caudatus*) with their soft twitters and trills.



Treecreeper
chaucerfieldspicnicsociety.wordpress.com

continued



Crawfordsburn Country Park (contd)

11th May 2019



Chiffchaff (British-birdsong.uk)

Next we heard another woodland bird, a Chiffchaff (*Phylloscopus trochilus*), another warbler, repeats its song by calling out its name chiff chaff, chiff chaff!

Beautifully coloured male Chaffinches (*Fraginella coelebs*) in breeding plumage sing with repeated notes and end with a great wheel of a flourish!

A most enjoyable time watching and listening to these lovely birds with Dot teaching us how to recognise them again with lots of helpful tips.

Pamela Thomlinson



Long-tailed tit
mikejackson1948.wordpress.com



Wood pigeon



Chaffinch



Nugent's Wood and Ballyhenry Island

18th May 2019

Leaders: Ryan Mitchell & Christine Morrow
(both Natural Sciences, Ulster Museum)

Zoology and Botany



Ryan Mitchell inspects his pooter



European carrion beetle



Chocolate mining bee



St Mark's fly



Crane Fly

A two-part trip, an afternoon and then an evening excursion to catch low tide around 7pm. Ryan led a walk through Nugent's Wood highlighting the different insect species, with particular focus on hoverflies.

Once part of the *Nugent's Estate* and now managed by *The National Trust*, this walk was through a mature wood of mixed broad-leaved trees. *Ryan Mitchell* led us on an Entomological walk to discover the world of *Diptera* - the flies. We were shown the use of sweeping nets, beating foliage and pooting and Ryan discussed and identified what we found.

Despite it being a pretty dull and cool day with not a lot of insects flying, we did poot and sweep up various species. Many insects have no common names - here are some of the species found:

- *Rhagonycha lignosa* - a soldier beetle.
- *Phosphuga atrata* is a European carrion beetle that feeds on live snails, insects and earthworms. The snail eating beetle (photo left).
- *Andrena scotica*, the chocolate mining bee or hawthorn bee (Photo left).
- *Bibio marci* or St. Mark's fly or Hawthorn Fly. We learn that the males lek. At the lek, males aggregate, interact, compete with one another, and display to females. Females at a lek may then select a mate (photo left).
- *Ichneumon sp* - A parastoid wasp
- *Tipula submarmorata* - a crane fly. Amazing to hear that some species of crane flies are migratory (photo left).
- *Syrphus sp* Larva. Hoverfly larva – Appears to be attacking an aphid. Ryan mentions that many hoverflies are arboreal (Photo next page).
- *Empis stercorea/aemula* - a dagger fly (photo next page).
- *Geometridae* Moth? A looper caterpillar.
- *Limonia phragmitidis* (photo next page).
- *Rhamphomyia sp.*
- *Limonia nubeculosa* - also known as the Short-palped crane fly, is a species of crane flies in the family of *Limoniidae* (photo next page).
- *Baccha elongata* is a species of hoverfly (or flower fly) in the genus *Baccha*. Very atypical. They also differ from other hoverflies by their elongated, thin abdomen ending in club (photo next page).

continued

Nugent's Wood and Ballyhenry Island (contd)



Hoverfly larva



Dagger fly



Limonia phragmitidis



Short palped crane fly



A little bit about crane flies. It is a common name referring to any member of the insect family *Tipulidae*, of the order *Diptera*, true flies in the superfamily *Tipuloidea*. An adult crane fly resembles an oversized mosquito and we learn that many species of Crane flies are migratory!

A really big thank you to Ryan for a great afternoon and to record our appreciation for his time in identifying what we found.



Flower fly

We then drove the short distance along from Portaferry to *Ballyhenry Island*. Ballyhenry Island is a small tidal island owned by the *National Trust*, some 200m square and popular as a base for shore divers.

Christine provided some delicious home made bread with mackerel pate and a memorable ginger cake! We then had a relatively short window to follow the receding tide - Low water was at 19.40. We were joined by marine biologist *Bernard Picton*.

Christine discussed the various intertidal habitats and the different groups of marine invertebrates.

The Shore (or intertidal zone) delineates the passage between the sea and land, between low water and high water with seawater ebbing and flowing daily with the action of the tides. Different species colonising the different zones.

The Splash zone is the area just above the limit of high tide and home to salt tolerant plants, lichens and a small number of invertebrates. Below this is the *Upper shore*, the area at the upper reaches of high tides, only submerged for a few hours each day and home to periwinkles, barnacles and limpets.

continued



Nugent's Wood and Ballyhenry Island (contd)

The Middle shore is the main tidal zone covered and uncovered with every tide, dominated by brown seaweeds, barnacles, limpets, mussels, crabs and anemones. The lower shore is the lower limit of the tide and only exposed for a short period of time during spring tides.



Species need to contend with the constant desiccation/submersion, fluctuating levels of oxygen, salinity and temperatures, changing levels of sunlight and exposure to air and water, certainly, a tough environment, yet they are biologically rich and home to a myriad of different species.

Christine started off with various types of seaweed as we ventured across the intertidal zones. Ryan and Bernard went on ahead to search for specimens.



Channelled wrack



Knotted wrack



Brown algae

Species found and discussed:

- Channelled wrack, *Pelvetia canaliculate* with fronds that curve inwards to create a channel - Tolerant of dessication. (Photo left).
- Knotted wrack *Ascophyllum nodosum* (photo left).
- Brown algae *Ascophyllum_nodosum* with hemi-parasitic red algae *Vertebrata lanosa* (*Polysiphonia lanosa*) (photo left).
- Gutweed *Ulva Intestinalis* - which is edible.
- Sea lettuce *Ulva lactuca* (photo next page).
- Bladder wrack *Fucus vesiculosus*.
- A sponge *Hymeniacidon perlevis* (photo next page).
- The first sea slug, thanks Bernard! Solar-powered sea slug *Elysia viridis*. Bernard mentioned we have over 50 species in Northern Irish waters (photo next page).
- Buttonweed *Himanthalia elongate*. Early phase clinging to a pebble but looking like a mushroom. Later phases are sold in France and Ireland as 'Sea Spaghetti' and added to salads (photo next page).
- Edible crab *Cancer pagurus* distinguished from other species by its 'piecrust' edge and massive black tipped pincers (photo next page).
- Saddle oyster *Anomia ephippium*. Lovely find by Rosie (photo next page).
- Yellow-plumed sea slug *Berthella plumula*. It feeds on the sea squirts (photo next page).

continued

Nugent's Wood and Ballyhenry Island (contd)



Sea lettuce



Edible crab



Saddle oyster

- A smorgasbord of squirts and sponges. We can also see the calcareous tubes of the Keeled tubeworm *Spirobranchus triqueter* (photo below).

- *Terpios gelatinosa* a blue sponge.



Sea slug *Elysia viridis*



Smorgasbord of squirts and sponges



Buttonweed



Yellow plumed sea slug



Christine Morrow wrangles a piece o bladderwrack

continued

Nugent's Wood and Ballyhenry Island (contd)



Variety of sponges

- A variety of sponges and ascidians (commonly known as sea squirts). The small, yellow flask-shaped things (right of centre) and Dog Whelk eggs *Nucella lapillus* (photo left).

- A polychaete worm or bristle worm.

- Common brittlestar *Ophiothrix fragilis* Beautiful! (Photo left).

- Toad crab *Hyas coarctatus* - Missing 2 legs (photo below left).

- Snakelocks anemone *Anemonia viridis*. A truly beautiful organism. This species is widely consumed in southwestern Spain, in the Gulf of Cádiz region, as ortiguillas de mar (literally, "little sea nettles", because it has urticant properties before it is cooked), or simply *ortiguillas*. (Photo below).



Common brittlestar



Toad crab



Snakelocks





Nugent's Wood and Ballyhenry Island (contd)



Sea lemon

- Sea lemon *Archidorisopsis pseudoargus*. A large sea slug up to 12 cm long (photo left).

- Painted goby (*Pomatoschistus pictus*)

- Wireweed (*Sargassum muticum*) aka Japweed, Wireweed is an invasive species from the Pacific that appeared on the Isle of Wight in 1973, having spread to Britain from France. It competes with native species such as seagrasses and is considered a nuisance in harbours, beaches and shallow waters (photo left).



Wireweed

- Oyster thief (*Colpomenia peregrina*) - you can see from the size of this specimen how it could easily float away with a host oyster (photo left)

A huge thanks to Christine Morrow for leading the walk and to Bernard and Ryan for locating the various species - a really fascinating outing and a window into an amazing array of life

I need to add that all these identifications were from my notes as Christine introduced each species to the group - thank you Christine - full credit.

All rocks that were lifted to expose sponges etc were carefully replaced in the original orientation

Matthew Porter 10th February, 2021



Oyster thief



Collection and photo by Ryan Mitchell





Geology near Carrickfergus

Leader: Mike Simms

21st May 2019

Joint with Belfast Geologists Society.

Boneybefore shore - Deserts and dykes



Mike Simms

The north shore of *Belfast Lough* between *Carrickfergus* and *Kilroot* is seldom frequented by anyone other than local dog-walkers, but it exposes some fascinating geological phenomena that are worth a close look.

To this end an excursion was planned for both the *BNFC* and the *BGS*, to demonstrate why this under appreciated stretch of coast deserves more attention.

Attendees gathered in the interestingly named minor road of *Boneybefore* before passing through a small arch beneath the railway to access the beach, where several prominent rock ridges could be seen rising above an apparently flat sandy beach.

First we looked at some less conspicuous rock outcrops of red mudstones with thin greenish sandstone beds. The red mudstones did not show any obvious structures, other than some layers of red and green mottling, but the green sandstones showed obviously layering. In places the upper surface of the sandstones were covered with small symmetrical wave ripples, evidence of deposition in shallow water ruffled by wind.

On the underside of some of these sandstones were numerous square markings, sometimes projecting enough to be seen as parts of cubes.

These are salt pseudomorphs, evidence of aridity during deposition of the mudstones beneath each sandstone. Evaporation of shallow salt lakes, represented by some of the red mudstones, saw the growth of cubic salt crystals in the surface of the mud. The green sandstones represent minor floods that dissolved these salt crystals and filled the cubic hollows that they left behind in the mud with sand. Some of the more subtle structures in the mudstones, such as the red-green mottling, are evidence of more prolonged periods of aridity and formation of desert soils.



All of these red and green sedimentary rocks are part of the *Mercia Mudstone Group*, a sequence of rocks deposited during the *Late Triassic Period*, around 220 million years ago. More spectacular evidence of aridity is found in the nearby *Kilroot Salt Mine*, where hundreds of metres of rock salt were deposited from vast hypersaline lakes just a little older than the rocks at *Boneybefore*.

continued



Geology near Carrickfergus (contd)

21st May 2019



Salt crystal pseudomorphs on the underside of a sandstone bed. The largest here are about 2 cm across.

The contortion of some of the layers on the beach at Boneybefore may be linked to the effects of movement or dissolution of some of the salt beds beneath the surface here.

The conspicuous ridges crossing the beach roughly north-south are very different. They are hard dark basaltic rocks, solidified lava from a period of volcanism around 60 million years ago, intruded along cracks that developed in the older Triassic rocks as the Earth's crust in this region was being stretched by the opening of the North Atlantic Ocean. They are what is known as dykes, and some may have reached the surface all those millions of years ago to form fissure eruptions. The Triassic rocks adjacent to the dykes has been baked by the lava which was intruded at

temperatures of about 1200°C, and commonly is altered from red to green. In places the intruding lava has engulfed chunks of Triassic sediment broken off from the walls of the fissure.

There is evidence that not all of these dykes formed in exactly the same way, and probably they formed at different times over perhaps many thousands of years. One of them is almost dead straight and with parallel sides, stretching out into the lough as if it has been built. Perhaps this formed as lava welled up in a crack formed by that episode of crustal stretching, so the formation of the fracture influenced the intrusion of the magma. At the other extreme one of the dykes seems to consist of an apparently disconnected series of irregular lumps, although aligned along the same general trend. This shows more evidence that it has been forcibly intruded into the Triassic bedrock, flowing where it can find a way through, rather than filling a developing fracture in a more passive way.

The importance of this rather unprepossessing site is that it demonstrates that just a few simple observations can reveal aspects of our geological history that would never be recognised or appreciated if we all stuck to the well-known localities.

Mike Simms 2nd February 2021



Red desert mudstones with thin greenish sandstone beds in the Triassic Mercia Mudstone Group (about 220 million years old) on the shore at low tide.

welled up in a crack formed by that episode of crustal stretching, so the formation of the fracture influenced the intrusion of the magma. At the other extreme one of the dykes seems to consist of an apparently



A hard Paleocene basalt dyke (about 60 million years old) cuts through the much softer Mercia Mudstone. More resistant to erosion, it forms a natural wall, or 'dyke' on the shore.

Clandeboy Estate

Leader: Fergus Thompson, Head Gardener

28th May 2019

This visit was to Clandeboy Estate, one of the few great, private estates of Northern Ireland that still remain in the ownership of the original family, the Dufferin and Ava family. The historic parklands were laid out by the

1st Marquess (1826-1902), under the guidance of *James Frazer*. The project was so extensive that the estate still boasts the largest area of broadleaved woodland in Northern Ireland. More recently, in 1975, *Lady Dufferin* was responsible for encouraging the *Conservation Volunteers* set up their Northern Ireland base within the estate. We had previously visited the gardens in 2011, and *Fergus Thompson*, head gardener at Clandeboy, again showed us

around the gardens – formal gardens, a wildflower meadow and woodland gardens where a large collection of rhododendrons, magnolias and other trees and shrubs gave a fine display. As it grew dark, we were treated to a beautiful sunset.

Liam McCaughey



Handkerchief Tree (*Davidia involucrata*)





Slievenacloy Nature Reserve

1st June 2019

A joint meeting with **Butterfly Conservation Northern Ireland**.



This reserve in the Belfast Hills is owned and managed by Ulster Wildlife. The site is sensitively grazed and managed to ensure it maintains its rich biodiversity. Our boots were dipped in disinfectant before entering the reserve where *Pamela Thomlinson* and *Sam Millar* opened moth traps set the previous evening.

Moths and insects found were Least Black Arches (*Nola confusalis*), Herald (*Scoliopteryx libatrix*), Map-winged Swift (*Hepialus fusconebulosa* f. *gallicus*), *Ancylis Badiana*, Tortricidae family, Shears (*Hada plebeja*) and Twin Spot Carpet, (*Xanthorhoe spadicearia*). Moth trap intruders were a parasitic wasp *Apocrita* sp, two caddis flies, these have been kept for identification and a crane fly (*Ophion luteus*).

Moths

Lunar Thorn (*Selena lunularia*) on an Ash tree and a Garden Tiger Moth Caterpillar (*Arctia caja*) on the path, which promptly squeezed out green poo! This is a biodiversity priority species. Red shouldered moth (*Ctenucha rubroscapus*). Mother Shipton Moth (*Callistege mi*), Narrow bordered Bee Hawk moth (*Hemaris tityus*). This hawkmoth was an amazing find as it had just emerged with all the purple scales intact. It was fibrillating and then flew off. Also found was a Cinnabar moth (*Tyria jacobaeae*). A white spotted pug *Eupithecia tripunctaria*, from Ian McCaughey's garage door was also identified.

Bumble bees

White tailed bumble bee (*Bombus lucorum*).

Birds

Near the building there was a blue tit's nest (*Cyanistes caeruleus*), with parents flying in and out feeding the young.

Butterflies

Orange Tip (*Anthocharis cardamines*), found on Lady's Smock (*Cardamine pratensis*) which is their food plant. Green Veined White (*Pieris napi*), Cryptic Wood white butterfly (*Leptidea juvernica*) which landed with its wings closed. We saw Meadow Vetchling (*Lathyrus pratensis*) which is one of the important food plants for this species.

Flora

Bugle (*Ajuga reptans*), Common spotted orchid (*Dactylorhiza fuchsii*), Lousewort (*Pedicularis sylvatica*), Bitter Vetchling (*Lathyrus pratensis*), Sedge, Cyperaceae family, Tormentil (*Potentilla erecta*), Lady's smock also known as the Cuckoo Flower (*Cardamine pratensis*), Spearwort (*Ranunculus flammula*) which is related to buttercup, Bird's foot trefoil (*Lotus corniculatus*), Mat grass (*Nardus Stricta*), Purple Moor grass (*Molinia caerulea*) which is typical of rough pasture and on the UK Biodiversity Action Plan.

continued
Page 14



Slievenacloy Nature Reserve (contd)

1st June 2019

The presence of this grass shows it is a rare and highly threatened habitat. Also seen were Milkwort (*Polygala vulgaris*) and Hawthorn (*Crataegus monogyna*).

Cattle



Irish Moiled Cows

The site is grazed extensively with traditional breed cattle under a conservation grazing regime. *Judy and Mike Meharg* currently hold the grazing lease from Ulster Wildlife. The main breed of cow grazing on Slievenacloy is the *Irish Moiled Cow*. It is a native Irish breed listed as uncommon by the *Rare Breeds Survival Trust*. In appearance they are a small breed of hornless cattle, mostly red and white, with a white stripe along the back. They are 'big bellied' which allows them to digest vegetation which is coarse which gives them an excellent *Grazing Animal Profile* for use in management of *High Nature Value lands*. They were a dual-purpose breed, reared for both beef and milk. To ensure economic productivity cows in this herd are crossed with a beef breed bull every other year.

To maintain the biodiversity of native grasslands at Slievenacloy grazing limits are set at 1 livestock unit per hectare between May to December so that the land is not overgrazed. This herd is known as a suckler herd where adults raise their calves for 6 months before the young are weaned. No herbicides nor fertilizer can be applied to the reserve. The cattle are housed in sheds through January to end April feeding on 'haylage', a fully grass fed diet. The manure is collected in tanks and processed through a biodigester which converts it to electricity to supply the grid. The digestate is spread at recommended concentrations on lowland farms to ensure wise use of nutrients.

Archaeology

Tom Meharg explained that there is evidence of an early medieval cattle holding enclosure with a ring pattern.

A Queen's University survey found evidence of walls with a ditch, two metres deep. At its base preserved hazelnut (*Corylus avellana*) fragments were found and these were carbon dated to 8th century.

Other items found during excavations :- Neolithic pottery 3rd century BC, a turf wall house, 13th century AD with Scandinavian sod and stone walls. Pottery contemporary with 13th century. Stone axe 3000 BC; this would have been kept in house for 'folklore' safety – polished stone axes were termed 'thunder stones' in medieval times. It was believed they were formed when lightning struck the earth and if placed in a thatch roof would save the building from further strikes.

The cattle kept were very important for the status of the people and they were a currency in early times before the introduction of coinage. There were Vikings (circa 852AD) in Lough Neagh and they must have had trading interactions. Evidence that the site had a long history was found with Neolithic flints also present.

The meeting ended in the afternoon with a superb barbecue hosted by the Meharg Family, The meat was from Irish Moiled cattle which had been reared on the nature reserve. This was gratefully acknowledged by all.

Veronica Browne



Long Field Trip to County Offaly

9th - 13th June 2019

Federation of Irish Field Clubs

Please refer to the full report which is available as a separate document.



Shannon Callows



St Brendan's Grave, Clonfert



Stone inside Clonfert Cathedral



Entrance to Clonfert Cathedral



Pyramid at Kinnitty



Famine Bowl, Kinnitty Castle



Window detail St Mary's Church, Pollagh



Islandmagee and Portmuck Geology

Leader: Ian Enlander

Sat 22 June 2019

BNFC members gathered at Portmuck Harbour on Islandmagee for the first part of the two part trip of the day, the morning half being devoted to geology under the leadership of local resident the geologist Ian Enlander.



We had approx 15 members. Weather on arrival was actually cloudy but warm enough. It was obvious that as the day wore on we might be lucky for a noticeable improvement in the weather and we weren't disappointed as this is what happened - sunny and warm by the time we stopped for lunch. First stop was to the foreshore leading up to the inaccessible cliffs at Portmuck just below the Coastguard cottages. Here Ian outlined the local geology which included the usual *Tertiary Basalt*

and *Ulster White Limestone* - Chalk (Cretaceous).

Our attention was drawn more to the older underlying noticeable layer of *Hibernian Greensand Formations* with its distinctive sponge beds, *Glauconite sands*, yellow sands and grey marls.

Here we could find numerous fossils including ammonites, belemnites and echinoids. We spent some considerable time here



Continuing on round the far end of the bay to the east facing the Isle of Muck we saw the extensive outcrops of chalk on the other side of the Portmuck Fault. Due to a major intrusive volcanic feature (not seen) the chalk is extremely hard.

The raised beach here becomes a distinctive landmark and is a 'tombolo' feature close to where it faces the Isle of Muck across the bay particularly at low tide.

This is largely caused by different tidal currents in the vicinity of the Isle of Muck.

Raised beaches result from the land rising faster than the rising sea levels as a result of glaciers melting.

Finally back to car park for lunch and then on to Whitehead area for afternoon botany session.

Ian Forsythe



Swifts at The Crescent, Belfast

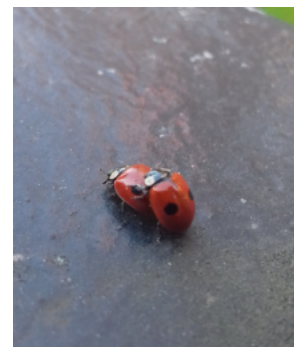
Swifts coming in to roost - Neville Cobbe

25th June 2019



*Upon a sun-drenched evening in June
Outside the Crescent Arts Centre we met,
Each one expecting eagerly that soon
We should see swifts on high, and closer yet
As, sure enough, they circled in the sky
Pursuing prey with speed to match their name
Then, ceasing soaring, swifts with skill would try
Beneath the eaves a sure foothold to claim;
Not easy with small feet! Apodidae
Are much at risk if floundered on the ground
But, swooping down from downy nests, display
Such daring dives! Parabolas abound!
With thanks to Mark Smyth and to Peter Cush
And ladybirds seen mating near a bush.*

Neville Cobbe



Photography by Neville Cobbe and Liam McCaughey



Montiaghs and Portmore Zoology

**Leaders: Cathryn Cochrane and
Pamela Thomlinson**

29th June 2019

The weather wasn't very kind to us to begin with, a worrying start since we were looking at invertebrates and our target species being the Irish Damselfly! While we were waiting for the sun to come *Pamela*

Thomlinson and *Dorothy Lyle* took us through a few moth traps set out the night before in a variety of habitats that can be found at Montiaghs Moss; a mosaic of peat ramparts, trenches, pools, drains, interspersed with small hay fields, alder and willow carr and tall hedgerows.

Dorothy, Cathryn and Pamela set up three moth traps, in different areas, the evening before and next morning closed them up and brought them to a space in the road where the group could gather.



Lesser Swallow Prominent

We were delighted to have full moth traps and with *Neville Cobbe's* help we started to identify the contents and show the many highlights to the group. We had a total of 48 species with a total of 158 moths.

Among them were Buff-tip (*Phalera bucephala*), an unmistakable moth when at rest with its wings almost vertically folded against the body, this large moth closely resembles a broken birch twig, Elephant (*Deilephila elpenor*) and Poplar (*Laothoe populi*) Hawkmoths, Scalloped Hook-tip (*Crocallis elinguaris*) another moth with a characteristic position resting with wings raised in a tent-like shape. We were also delighted to see the

Small Yellow Wave (*Hydrelia flammeolaria*), this is common in England and Wales has only recently been seen in Ireland.

The rain eased and although the sun didn't appear the temperature did increase enough to encourage a few invertebrates to move enough to keep us intrigued. Armed with numerous nets the group was ready to pounce on anything that moved. First to be netted was an Emerald Damselfly (*Lestes sponsa*) followed by a Variable Damselfly (*Coenagrion pulchellum*).



Rare picture of an archaeologist pond dipping for dragonflies

continued

Montiaghs and Portmore Zoology contd

29th June 2019



Darting in and out, between the heather along the edge of the pools were Large Red Damselfly (*Erythromma najas*) and Azure Damselflies (*Coenagrion puella*). After a few failed attempts the group were delighted when they finally got a glimpse of the infamous Irish Damselfly (*Coenagrion lunulata*).

The bog habitat and pool system did look particularly spectacular and a number of plant species of interest were recorded. The group



meandered along the narrow peat ramparts, often coming to a dead end and having to retrace their steps, to get good views Black Bog Rush, Bottle Sedge Marsh Lousewort and Alternate Water Milfoil. Scattered throughout the Montiaghs were colours of pink, yellow and white from cross-leaved heath, bog asphodel and cotton grass and not forgetting the aromatic Bog Myrtle.

We were also pleased when *Professor James O'Connor* from Dublin University later identified some caddis flies also caught in the trap. There was one *Glyptotendipes pallidus* female, one *Limnephilus flavicornis* female and one *Limnephilus auricula* female, this female is only the second record for the County.

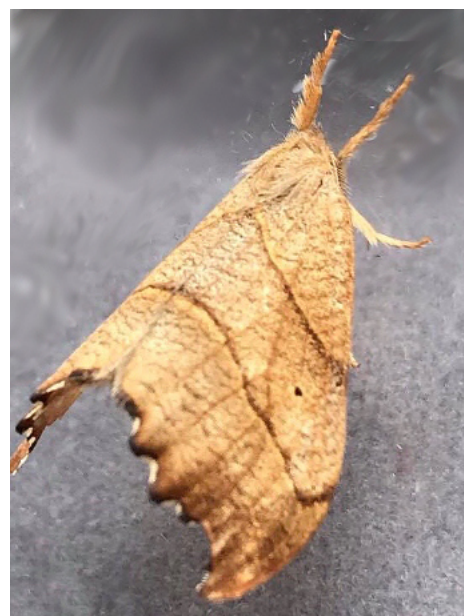
continued



Emerald Damselfly



White Ermine



Scalped Hook-tip

continued



Montiaghs and Portmore Zoology contd

29th June 2019



Small Yellow Wave

Many thanks to Cathryn Cochrane for all her help setting up and guiding this trip to a real hidden treasure!

Cathryn Cochrane and Pamela Thomlinson



Poplar Hawkmoth



Barred Yellow



Buff-tip

Montiaghs and Portmore Archaeology

Leader: Barrie Hartwell

Portmore House and St Lau's Church

Portmore Estate

Although virtually nothing remains to be seen today, this was the site of one of the finest hunting estates in Ireland. In the late 16C *Captain O'Neill* occupied 20,000 acres of *Kilultagh* with a fort at *Lisnagarvy* (Lisburn) and another at Portmore.

However, O'Neill's fort was captured at the end of the *Nine Years War* and the defeat of the Irish at the *Battle of Kinsale* (1602). The O'Neills were forced to transfer *Kilultagh* to the English and they developed the land into a sporting estate. In 1603, *Sir Faulke Conwy* received part of the Manor of *Kilultagh* from James I. This included a 'good handsome house'

In 1627 he was created *Viscount Conwy of Aberconwy*, *Conwy Castle* and *Kilultagh* and received the remainder of the Manor of *Kilultagh* from Charles I.

continued



Montiaghs and Portmore Archaeology

29th June 2019

In 1664, Portmore was rebuilt by The third Baron Conwy and *Sir George Rawdon*. Portmore House was designed by *Inigo Jones* (plans do not survive) - generalised plans suggest a three story house over a partially or sunken basement with steps over to a 1st floor entry. In 1666 Conwy Castle (Wales) was dismantled, having been wrecked by the Parliamentarians in 1646, and wood and 33 tons of lead moved to Ireland. In 1671, 40 tons of marble arrived along with a mantelpiece by *Francis Canvenguge*. Portmore Castle was famed for its ivory tables and marble halls, and even the extensive stables had marble fittings.

18 hearths and the great stable chimney were rebuilt.

By 1679 the Earl of Conwy's estate covered 11 parishes and stretched 16 miles from the Ballymullan Hills in Co Down to Hog Point on Lough Neagh and 10 miles in breadth from Moira to Crumlin. It covered 60,000 acres and had the largest rent roll in Ireland. At its centre was the fine country mansion of Portmore House. It eventually passed to the Hertford Estates.

Note: Visit of *John Cennick*, Moravian Minister..... 1746:

'On the 1st December, Mr. Moore, who resided at the Manor House of Lord Conwy (Earl of Hertford) at Portmore, showed Cennick, after hospitable entertainment: a large hall 90' long and 20' wide which would hold 800 people, another, larger still, capable of containing nearly 2000 persons, also a third, all of which he placed at his disposal. Here he preached on the 2nd December, and the throng was so great that fears were entertained about the [floor] was giving way.'

There were an Italian patterned gardens with large cypresses, fountains, narrow gravelled paths lined with Flemish flowerpots, a bowling green, stables containing two troops of horse and possibly the men (a barracks?), and marble cisterns with piped water from Portmore Lough direct to the horses' mangers, enclosed walks with wall-trained fruit, an orchard, a 4 acre pond for water birds, canals and quays with pleasure boats, the great park of 2000 acres sweeping down to the lake with large oaks, and much more.

Imagine! a Mansion 24.7 x 8.2m (81'27") of stone and brick. Walls 0.8-0.9m (2.5'-3'). Painted tiles (over 6000), 18 hearths, floors of wood and medium sized black stone over an arched brick basement. In 1874 the BNFC recorded seeing remains of a large cellar and mounds indicating fallen masonry.

Arthur Stringer (c1664-c1728): was the author of *The Experienced Huntsman* (1714). This was the first treatise on hunting in Ireland and the earliest reliable book on Irish fauna and was based on his own observations and experience as huntsman at Portmore.

continued



Montiaghs and Portmore Archaeology

29th June 2019

In 1761 the House was pulled down by order of *Lord Hertford* – ‘timber of best oak, cut freestone and anything of value including estate land and timber sold off to be sold to private buyers’.

A Newsletter ad of 19th April 1763 states “*Sale of Portmore. Good old oak in Portmore Deer Park, scantlings, timber of stables. The bricks likewise.*”

However, Portmore is known to an international audience through a song first published by *Edward Bunting* in 1840. It has been recorded at least 16 times and features in 5 films, especially the *Highlander* series. There have been versions of it in Gregorian chant, mixed with birdsong, given a Spanish orchestral setting and performed by the US Airforce Symphony Orchestra and recorded by a progressive trance artist.

This version is by the Rails:

Bonny Portmore (Daniel Black, 1796)

*O bonny Portmore, you shine where you stand
And the more I think on you the more I think long
If I had you now as I had once before
All the lords in Old England would not purchase Portmore*

And another version :

*O bonny Portmore, I am sorry to see
Such a woeful destruction of your ornament tree
For it stood on your shore for many's the long day
Till the long boats from Antrim came to float it away.
All the birds in the forest they bitterly weep
Saying, "Where shall we shelter or where shall we sleep?"
For the Oak and the Ash, they are all cutten down
And the walls of bonny Portmore are all down to the ground.*

The famous Great Oak of Portmore, symbolic of the natural oak woodland which covered the area, was either blown or cut down in 1760.

St Lau's

Next we visited the old *Church of St Lau.*, just half a kilometer south-west (as the crow flies) and on an elevation overlooking Portmore Lough. Known as the *Church of Derbi* in the 1306 taxation and *Saint Leu* or *Laa Loo* locally. Possibly slighted by *Cromwell*, though this is reputedly the church in which *Jeremy Taylor* first preached while living as a guest of Lord Conwy at Portmore House. It is the first Church of Ballinderry on an island in a bog surrounded by a fosse and lined with a double hedge.

It was the site of regular pilgrimages on the Saint's Day on August 4th or thereabouts until 1847. There are possible associations with Lughnasa festival Mongan and Manannan.

continued
Page 23



Montiaghs and Portmore Archaeology

29th June 2019

Here we looked for remains of the church (gable and foundations, 20x8m), headstones (70) e.g. the Rev. Bernard O'Doran, vicar of Killead (d. 1815) under East gable wall and the Harbison family, scarping of the site and St Patrick's knee stones (ballauns) which attracted many people looking for cures for warts and other diseases.



The church was used for funerals into the 20th century and before the lake level dropped or after heavy rains, a boat was required to ferry the coffin and mourners to the island. (GlenavyHistory.com)

From 1894-1928 there were 452 burials, 140 from the Belfast area. Occupations include labourers, weavers, farmers, servants, a carpenter, brush maker, dressmaker and mill worker. 20% were children under 10 and 50% of these under 1. 20% were aged 70+ and four were over 90 (McCorry).

Portmore Lough

Portmore Lough is curiously round and very shallow with an absence of peat in the bed which would be expected. There is an interesting theory that it may have been formed as a result of an airbursting meteor – Prof. Mike Baillie at Queen's has summarised it thus :-

1. Finn MacCool scoops a handful of earth and throws it at the Scottish Giant which lands short and forms the Isle of Man and so creates Lough Neagh.
2. Isle of Man is named after the god Manannan i.e. an aspect of the god Lugh.
3. Manannan's symbol is the *triskele* (three-legged wheel/swastika which is a comet symbol).
4. Irish story: Manannan was buried standing up in a lake that had once been a red peat bog.
5. Old Church at Portmore is known colloquially as *Laa Loo* in honour of St Lugh, the Christianised version of the Celtic sky god Lugh, who is famous for coming up in the West as bright as the sun.
6. A bog oak found within 1km of Portmore, when analysed by dendrochronology, was shown to have damage and reaction wood showing that it was pushed over in AD539.

continued



Montiaghs and Portmore Archaeology

29th June 2019

7. Annals of Ulster: 'Failure of bread' in AD539 [note: AD539 was fourth year of a world-wide famine caused by volcanic events in 535] Comets seen in 539 and 541. Could this be the result of an airburst from meteor debris?



At the end of the trip, we followed the Lower Ballinderry road past the Jacobean Middle Church of Ballinderry built for Jeremy Taylor and consecrated the year following his death in 1667. It was heavily restored in 1902 but retains its 17th century box pews, three-decker oak pulpit and candlelit interior.

Jeremy Taylor, Anglican divine, was regarded as 'one of the greatest prose writers in the English language' -

"He that loves not his wife and children feeds a lioness at home, and broods a nest of sorrows";

"Love is friendship set on fire".

Shortly after this, on our way home we passed the elegantly restrained Parish Church of Ballinderry (Boyd, 1824) on a rise at the end of a tree lined avenue and then a fine line of 19th century grain lofts and warehouses.



Portmore Lough

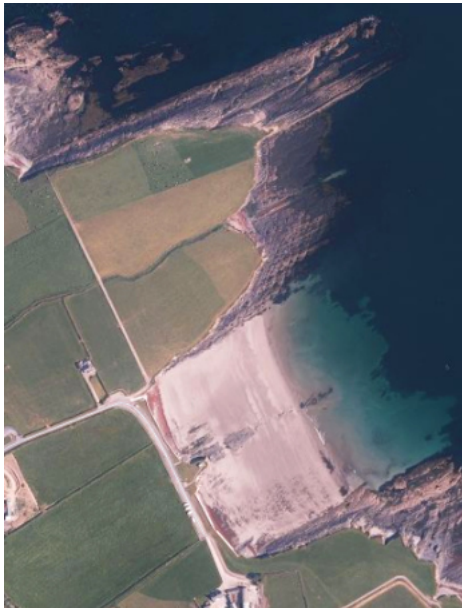


Killard Point, Geology

Leader: Dr Ralph Forbes

6th July 2019

33 people attended a walk over the grassland of *Killard Point* in fine weather under the expert guidance of botanist, Ralph Forbes. We are most grateful to Ralph for leading this meeting and sharing his knowledge of the site and its recent history with us.



Killard Point: Rock structure and recent Post-glacial sediments.

The grey-coloured rock on the shore at *Mill Quarter Bay* as you approach Killard NNR is believed to be around 450 million years old. It has been dated to the Silurian period of geological time when plant and animal life forms on Earth were just beginning (marine life was fairly well-established by this stage). These Silurian rocks were formed by sedimentation within an ancient ocean called the Iapetus Ocean. They were moved and shaped into their current position by a major mountain-building event in geological history known as the *Caledonian orogeny* that took place from the Ordovician to early Devonian, roughly 490–390 million years ago.

The effect of the Caledonian orogeny at Killard was to push up, bend and contort the layers of Silurian rock until they were left almost vertical. Thus the parallel grooves that can so readily be seen along the shore were once the horizontal beds of rock stacked on top of each other. On the northern side of Killard headland, the first Silurian rocks met are raised only slightly above the foreshore, and are often partially hidden by drifting sand or a high tide. On the headland itself, the raised twisted beds of rock very much dominate the landscape. These maritime rocks are today heavily colonised by a range of lichens.

During the most recent Quaternary Ice-age, called the *Midlandian* in Ireland, that lasted for 65,000 years and ended about 10,000 years ago, passage of heavy glacial ice-sheets across the parallel grooves in these rocks, smoothed the vertically arranged bedding planes, but they still remain very obvious.

This spectacular curving beach beyond the point is *Benderg Bay*, and at this end of the bay there is another landform that gives clues to the processes of glaciation and de-glaciation. Behind the current beach is a dune platform covered with Marram Grass. This is a 'raised beach'. During the glacial period, ice weighed down the earth's crust, compressing it. When the ice melted the crust effectively bounced back up. This post-glacial rebound is known as 'isostatic uplift' and it created raised beaches like this one, left high-and-dry, no longer in synchronisation with current sea level. At coastal sites eastwards around the north of Ireland from Malin Head in Co Donegal to Carlingford Lough in Co Down, raised beaches, sometimes 2 - 3 deep in terraces, one above and behind the other, can be observed backwards from the current high tide line.

The sand dunes located on top of the raised beach at Killard/Ben Derg were formed subsequent to full deglaciation of the area. They were

continued



Killard Point, Botany

Leader: Dr Ralph Forbes

6th July 2019

developed by wind action, shifting deposits of sand that the melting glacier ice left behind. It is so unusual to see such clear evidence of the process of de-glaciation, that Killard has won a place in geological and geographical scientific literature, this post-glacial period being referred to as 'The Killard Point Event'.

Botany



Although Green-winged Orchid (*Orchis morio*) and Spring Squill (*Scilla verna*) had finished flowering, numerous fruiting heads of Spring Squill were present. Flowering of this species this year was the best that Ralph Forbes has ever seen at Killard. It has been enhanced by cattle-grazing that was introduced to the reserve a few years ago. More intensive grazing would bring even greater improvement to the diversity of the grassland, but this creates a conflict, because the reserve is popular with dog-walkers. A balance has to be maintained between access, amenity value and management for conservation value.

'Stace' refers to ['New Flora of the British Isles'](#) by Clive Stace.

***Knautia arvensis* (L.)** Coult., Field Scabious, Stace p. 836 fig.

Conopodium majus (Gouan) Loret, Pignut. Stace p. 858

***Pimpinella saxifraga* L.** Burnet Saxifrage Burnet-like basal leaf 1–2 pinnate, vs bract. Stace p. 856, fig.

***Scorzonerooides (Leontodon) autumnalis* (L.) Moench** Stace p. 740

***Lotus corniculatus* L.** Stace p. 164

***Equisetum arvense* L.** Field Horsetail 'Mare's Tail', cone before stems Stace p. 14

Ononis repens, Restharrow, woody at extreme base, young shoots can be sticky and can end in a spine Stace p. 175

***Lysimachia (Anagallis) arvensis* (L.) U. Manns & Anderb.**, Scarlet Pimpernel Stace p. 549

***Anacamptis pyramidalis* (L.) Rich.** Pyramidal Orchid, very little variation, rarely white Stace p. 922

***Anthyllis vulneraria* L.** Kidney Vetch Stace p. 162

continued



Killard Point, Botany (contd)

Leader: Dr Ralph Forbes

6th July 2019



Bee orchid

- Crepis capillaris* (L.) Wallr. Smooth Hawk's-beard Stace p. 754 fig755
Stellaria graminea L. Common(?) Lesser Stitchwort p.488
Galium verum L. Lady's Bedstraw Stace p. 573
Cynosurus cristatus L. Stace Crested Dog's-tail p. 1061
Agrostis capillaris L. Common Bent Stace p. 1075
Sonchus arvensis L. Perennial Sowthistle perennial, patch-forming Stace p. 744
Rumex crispus L. Curled Dock Stace p. 478 fig477
Heracleum sphondylium L. Hogweed Stace p. 864
Raphanus raphanistrum L. subsp. *maritimus* (Sm.) Thell. Sea radish Stace p. 422
Anthyllis vulneraria L., Kidney Vetch Stace p. 162
Rumex acetosa L. Common Sorrel Stace p. 475 fig477
Dactylorhiza fuchsii (Druce) Soo, Common Spotted-orchid. Stace p. 916 fig 917
[cf. *Pale pink. D. majalis* (on the continent) Stace p. 920]
Chenopodium album L., Fat-hen on seashore. Stace p. 517, fig514, fig515
Ulex gallii Planch. Western Gorse – different growth form Stace p. 196, fig176
Koeleria macrantha (Ledeb.) Schult., Crested Hair-grass. Stace p. 1067
Bulboschoenus (Scirpus) maritimus L. Palla, See Club-rush. Stace p. 991
Briza media, Quaking Grass. Stace p. 1073
Ophrys apifera Huds., Bee Orchid. Stace p. 925
Atriplex portulacoides Sea Purslane Stace p. 512 [Not *Portulaca oleracea* L., Common (Sea) Purslane. Stace p. 539]
Cirsium vulgare (Savi) Ten., Spear (Common) Thistle. Stace p. 730
Leymus arenarius (L.) Hochst., Lyme-grass (blue) glaucous. Stace p. 1098
Native, mobile sand on maritime dunes
Polygala vulgaris L., Common Milkwort. Stace p. 197
Calystegia soldanella (L.) R.Br., See Bindweed at seaward edge of Marram on sand dunes fronting the bay. Stace p. 600
Viola tricolor L., Wild Pansy
There is some uncertainty at present. Previously this would have very likely been recognized as Subsp. *curtsii*, a perennial form of coastal sand. Recently Porter & Foley (2017) in the new BSBI Handbook considered it a mere ecotype of Subsp. *tricolor*, which should be annual. Some digging required!!) Stace p. 336. I notice that the BSBI Big Database (Jan 2020) still continues to use subsp. *curtsii* to name the many records from around the coasts of these islands.
Elymus junceiformis (Á. & D. Löve) Hand & Buttler (syn. *E. farctus*) Sand Couch. Native, maritime sand-dunes [not *E. athericus* (Link.) Kerguelen Sea Couch] Stace p. 1097

continued



Killard Point, Botany (contd)

Leader: Dr Ralph Forbes

6th July 2019



Pyramidal Orchid

Cakile maritima Scop., Sea Rocket. Native, near sea drift-line on sand and sometimes shingle around coasts. Stace p. 441

Honckenya peploides (L.) Ehrh., family Caryophyllaceae. Sea Sandwort
Stace p. 485

Cynoglossum officinale L., Hound's Tongue. Stace p. 598 I did not see Hound's Tongue on this occasion, but you might have.

Thalictrum minus L., Lesser Meadow Rue. Stace p. 129 fig110

Ammophila arenaria, Marram Grass

Cochlearia officinalis, Common Scurvygrass

Atriplex laciniata, Frosted Orache

Anthoxanthum odoratum, Sweet Vernal Grass

Daucus carota, Wild Carrot

Silene uniflora, Sea Campion Stace p. 501

Armeria maritima, Thrift

Aster tripolium, Sea Aster

Phragmites australis, Common Reed

Potentilla anserina, Silverweed

Samolus valerandi, Brookweed, Stace p. 553

Triglochin maritimum, Sea Arrowgrass

Beta vulgaris subsp. *maritima*, Sea Beet

Carex arenaria, Sand Sedge

Carex flacca, Glaucous Sedge

Centaurea nigra, Common Knapweed

Thymus polytrichus, Wild Thyme

Calluna vulgaris, Heather, Stace 559

Prunus spinosa, Blackthorn

Rubus fruticosus agg., Bramble

Report by Ralph Forbes and Caroline Pannell



Killard Point, Zoology

Joint with BCNI

6th July 2019



Ryan gets up close

We walked along the beach towards the Nature Reserve and were greeted by the busy sand martins (*Riparia riparia*) flying in and out of their nests along the sand banks. Once we climbed upwards and entered the Reserve itself we were greeted with a range of butterflies. Common blues (*Polyommatus Icarus*), meadow browns (*Maniola jurtina*) and we were delighted that this year we had painted ladies (*Vanessa cardui*) abounding. We also saw the six-spot Burnet (*Zygaena filipendulae*), a day-flying moth and listened to the sound of grasshoppers. Along with the cries of meadow pipits (*Anthus pratensis*), skylarks (*Alauda arvensis*), and stonecats (*Saxicola torquata*) heard and seen over and in the scrub. The coast and sea were busy too with fulmars (*Fulmaris glacialis*), oyster catchers (*Haematopus ostralegus*) and seashore feeders sandpipers and gulls. We also watched the 'persil white' gannets (*Sula basana*) feeding out at sea.

See below for the full Lepidoptera list compiled by **Stephen Craig** (many thanks) who completed a zigzag count over the Reserve.

Pamela Thomlinson

Butterflies	Latin Name	Number
Common Blue	<i>Polyommatus icarus</i>	260
Dark Green Fritillary	<i>Argynnis aglaja</i>	15
Meadow Brown	<i>Maniola jurtina</i>	222
Painted Lady	<i>Vanessa cardui</i>	17
Red Admiral	<i>Vanessa atalanta</i>	1
Ringlet	<i>Aphantopus hyperantus</i>	5
Small Heath	<i>Coenonympha pamphilus</i>	3

Moths

Silver-ground Carpet	<i>Xanthorhoe montannata montannata</i>	1
Silver Y	<i>Autographa gamma</i>	2
Six-spot Burnet	<i>Zygaena filipendulae</i>	61



Garden Tiger

Strangely, it felt that the numbers flying were more than we counted. There were also cocoons that were likely to be of Six-spot Burnet.

There was at least one Garden Tiger (*Artica caja*) and possibly two sightings of Humming-bird Hawk-moth (*Macroglossum stellatarum*). **Geraldine Burns** who walks the Killard butterfly transect also located some Cinnabar (*Tyria jacobaeae*) larvae on ragwort.

Stephen Craig



Red Hall, Ballycarry

**Leaders: Barrie Hartwell and
Mrs Irene McClintock**

3rd August 2019

The Club is indebted to *Irene McClintock* and family, for facilitating access to the house and estate, guiding us through the fascinating history of the rooms and providing tea, coffee and biscuits in the elegant dining room.



Entrance hall

The original building was probably a late 15th century towerhouse, replacing the 12th century motte and bailey which still survives in the SE corner of the estate.

John Dalway built a house here and sold it in 1609 as Red Hall to *Sir William Edmonston* whose family made extensive additions and embellishments. From 1788 to 1860 it was owned by *Richard Kerr* who made further extensive modifications, adding the north and south wings, a walled garden and barn, planting in the desmesne to create a landscaped park and developing the *White Harbour at Whitehead*. Mr McAuley then

purchased the estate and added the tower, parapets and bathrooms to the house. It was auctioned in 1900 to *Mr. Porritt* and again in 1920 to *Mr. Reade* who sold most of the land.

It was finally purchased in 1927 by the owner's grandfather, *Vice Admiral Jack McClintock*, who led the expedition to discover the fate of the Franklin exploration of Arctic Canada.

The BNFC first visited the estate in 1929 for the annual fungus foray, then being hosted by *Mrs. R. McClintock*. They visited a second time in 1996, being shown around the house by *John and Evelyn McClintock*.

The field club is currently undertaking a transcription of the Journals of the naturalist *John Templeton of Malone* who visited Red Hall in 1809 on a plant-hunting expedition. He described it as -

'...an elegant modernised house in which a single room is only preserved in its original state showing clearly the difference of taste between the last and present centuries and how much we are indebted to Greece and Rome for our more light and elegant ornaments...'



Stucco ceiling

Over 200 years later, Irene McClintock showed two rooms which may qualify as 'original state': the hallway with its strapwork decoration, and the floral decoration and naive figures on the stucco ceiling of one of the bedrooms. A large, historic house such as this requires constant maintenance and it is sobering to see how much work is required and yet gratifying to see the results of all this attention.



Red Hall, Ballycarry

3rd August 2019



Richard Kerr's mill

Afterwards we walked through the 18th and 19th century landscaped park to the mill and the accessible parts of the Glen, which runs steeply downhill towards Larne Lough.

Templeton described the Glen in his Journal:

'...where mossy rocks of Limestone are tossed about in wildest confusion forming a scene of destruction which raises in the mind some pleasing but melancholy reflections on the ever changing state of nature, all around you behold trees and flowers ... and fallen rocks from the lofty and impending precipices which have blocked up the course of the river, which is not seen but heard pursuing its noisy course below, through dark and secret caverns, and it is only in great floods that it is seen to flow through the Glen.'



The Glen at Altfrachan

Lunch was eaten al fresco at the head of the beautiful Glen with glimpses through the tree cover to the valley below. In recent years the paths through the glen have become overgrown with laurel and rhododendron.

The 1929 visit ended with a spell of rain and this afternoon suffered the same fate, making the walk down to the foot of the Glen along a cobbled path hazardous. It was decided to leave the quest for the *Polypodium vulgare*, *Collema granulate*, *Verrucaria stigmatella* and *Lecidea cornea* identified by Templeton to another visit.

However, there was time to reveal a darker history of the area including the effects of the 1641 rebellion on *Ballycarry* and the massacres on *Island Magee*. The glen at *Altfrachan* was the site of a skirmish in 1597 in which *Sir John Chichester* was killed, precipitating, four years later, the wasting of Eastern Ulster by his brother *Arthur Chichester* and the famine and the death of many of the Irish inhabitants.

Barrie Hartwell



Cavehill

Leader - Cormac Hamill

6th August 2019

Following his excellent February lecture '*Cavehill – an overview*' Cormac Hamill met up with BNFC members in the Hightown Road carpark on Tuesday evening, 6th August, for a walk to experience some of the features from his lecture. We could not have had a better guide, the weather stayed dry and the energetic walk satisfied the interests of all.

Archaeology was the main topic at our first stop at **Ballyaghagan Cashel**, thought to be the site of an early medieval enclosure but evidence also points back to a prehistoric past in Neolithic times (4000 – 2500 BC).



Cormac Hamill points out a souterrain

The rectangular enclosure alongside may well have been a later farm dwelling from the middle ages. Further up the hill by a stream Cormac pointed out a *souterrain* which most would have missed without his prior knowledge.

More archaeology awaited us at the top of the mountain, the site of a Neolithic cairn, possibly a *cist-cairn*, and this is also an historical spot as *Henry Joy McCracken* and the United Irishmen are said to have taken their vows here before the '98 Rebellion. Nearby *McArt's Fort* proved a spectacular setting for a group photo. This is believed to be a ceremonial fort rather than defensive where, with its magnificent views, it may have been an inaugural site in the early middle ages.

The botanical finds proved interesting - some excellent photographs are on the Facebook page – to mention a few with their common names *sneezewort*, *bog asphodel*, *devil's bit scabious*, *white & purple heather*, *harebells*, etc. Again Cormac was able to tell us the Irish names which added to our understanding of the plants.



With the plant life came insects and **Ryan Mitchell** was able to add to his fly collection – this being the 'year of the fly'.

Geology came to the fore as we stood looking at the Antrim basalt hills with underlying limestone and seeing as far as Scotland, the *Ailsa Craig*, the *Isle of Man* and our own *Mourne mountains*. Cormac was able to point out the caves that give rise to the name.

This walk brought home to us all that Belfast has one of the most beautiful settings and I have only covered a small sample of the topics both seen and discussed - with so much to see we were lucky to get back before dark. We are all indebted to Cormac for his tireless work in helping to conserve and promote this wonderful landscape for the benefit of all the citizens of Belfast.

Joan McCaughey



Edward Worth Library, Dublin

Leader - Dr Elizabethanne Boran

20th August 2019

BNFC had been invited by the Librarian, *Dr Elizabethanne Boran*, to visit the *Edward Worth Library at Dr Steevens' Hospital, Dublin*. After travelling by bus, train and Luas, we were joined on our visit by several *Dublin Naturalists' Field Club* members.

Dr Steevens' Hospital was founded in the mid 18th century to care for the indigent of Dublin and is now a *Health Board* administrative building. The building was designed by *Thomas Burgh* (1670 -1730), the *Surveyor - General of the Royal Fortifications*, who also designed the *Royal Barracks* (now *Collins Barracks*), the *Long Room at Trinity College* and the *Customs House*.



The room for the Library with its *Corinthian entablature* was part of the original design of the Hospital. *Edward Worth* himself left money for the building of the bookcases to contain his collection of 4,400 books, which he bequeathed to the Hospital.

Dr Edward Worth (1676-1738) was a Dublin physician, educated at *Oxford* and *Leiden*, lectures and text books being in Latin. He was a *Fellow of the Royal Society* and interested in all things scientific. Dr Elizabethanne Boran gave an interesting talk on the history of the library and the life of Edward Worth. The oldest book dates from 1475 and there are examples of fine bindings, many of vellum. There are early printed editions of

ancient writers on medicine like *Hippocrates* and *Galen*. Worth's original 1730 catalogue of his books and his sale-auction catalogues have been preserved.

Dr Boran had arranged an exhibition of early printed books on botany and medicine to reflect our interests.

The Library is much used for research, classes are given to students on the history of science and medicine and there are frequent seminars. The website <https://edwardworthlibrary.ie> has many special articles on ancient botany, the naming of plants, mythical creatures, early medicine and mathematics and is well worth visiting.

After thanking Dr Elizabethanne Boran for a most interesting tour, we went for lunch at the nearby *National Museum of Decorative Arts and History* at Collins Barracks. As it was the *Irish Heritage week*, members dispersed to visit various Museums, Art Galleries, Cathedrals, Churches, Colleges and the Tailors' Guild Hall. The most energetic of us did not get back to Belfast until after 9pm.

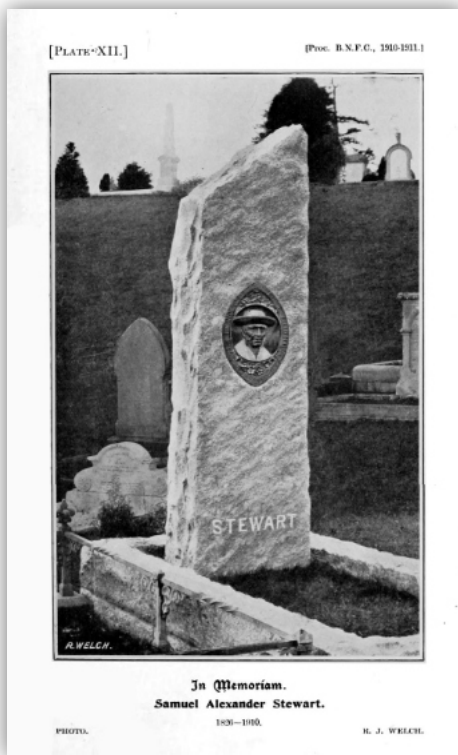
Margaret Marshall



Belfast City Cemetery, Stewart Plaque

Leader - Peter McCabe

3rd September 2019



The original plaque and memorial as photographed by R.J. Welch

Despite the inclement weather, around 20 members and guests attended the BNFC visit to the *Belfast City Cemetery* for the unveiling of the *Stewart Grave Plaque*. The meeting was conducted by *Peter McCabe* who showed us round a succession of graves relating to past members of the Club. He also pointed out other interesting features relating to the history of the cemetery.

Graves visited include those of *Fennell Stelfox*, *Alexander Hogg* (photographer of *Linenopolis*), *Robert Welch* and *Robert Patterson* of the *Natural History Society*. *Margaret Byers'* grave which referred to her as a widow and not as the founder of *Victoria College* was also visited.

The evening culminated with the unveiling of the Stewart grave plaque and here we should point out the excellent work carried out by *Barrie Hartwell*. *Alexander Stewart* was one of the founders of the BNFC, and unfortunately the original bronze plaque by *Rosamund Praeger* was stolen from the cemetery. The BNFC has replaced this using a 3D model and a casting was made using an artificial stone material (*Jesmonite AC370 with cementitious silver granite fill*). Barrie with an eye for detail not only completed this project but also tidied the grave and four neighbouring ones with *Mourne granite chippings* in readiness for the Club visit – Well done Barrie!

Samuel Alexander Stewart ALS, FBSE was a self-taught, accomplished and influential botanist, zoologist and geologist. He was widely published and in 1888 produced the '*Flora of the North-East of Ireland*' with his late friend *Thomas Corry*. He was born a year after the death of that other great local naturalist, *John Templeton* and in 1863 Samuel became one of the founder members of the *Belfast Naturalists Field Club*. After his death in 1910 at the age of 84 in a street accident, the Club raised funds for a granite monolith to be erected over his grave in *Belfast City Cemetery*. This was adorned by a bronze portrait medallion designed by *Rosamund Praeger*. In recent years the plaque was stolen and in August 2012 the Club decided to replace it with a copy made from Praeger's original plaster cast in the *Ulster Museum*. *Claire Foley* was tasked with converting intention to reality and pursued a number of options. A replacement in bronze was discounted on the grounds of cost and security - it would always be susceptible to theft. The integrity of the original artwork would also have to be maintained so the solution was to make a digital copy by laser scanning and replicate the original in a 3D printer.

The initial scan was undertaken by *John Meneely* of the Dept. Geography, QUB in December 2013 and the Club's thanks go to *Peter Crowther* and NMNI Natural Sciences curator, *Angela Ross* for facilitating this.

Progress was then halted until a 3D printer could be found big enough to produce the plaque. In October 2016 *Claire Foley* showed a half-size 3D printed model of the grave plaque, which *John Meneely* had produced, and in July 2018 he presented *Claire* with the full-sized replica made in two parts by a new printer and joined together on a metal plate.

continued



Belfast City Cemetery, Stewart Plaque

3rd September 2019



Mould, plaster support and Jesmonite cast

Although an accurate replica had been produced, there remained questions about the durability of this product and unresolved questions about its attachment to the granite gravestone.

At this point the project was handed to *Barrie Hartwell* who suggested casting the plaque in Jesmonite, a rapid setting, acrylic modified cementitious composite used for architectural mouldings and durable in conditions of external weathering. By August 2019, a silicone rubber mould had been taken and encased in a plaster support. Silicone rubber enabled an exact copy of the replica to be made which could be reused repeatedly (providing a useful backup). The replacement plaque was successfully cast in Jesmonite AC730 with silver grey granite fill reinforced with two layers of quadaxial glass fibre mat. This was then acid-etched and sealed. As the 3D printed copy was slightly oversized, the resulting Jesmonite cast was too big for the original depression on the headstone. This was then carefully fitted to the existing space with a combination of reducing the rim of the plaque and chiselling out the old cement from the headstone. The cast needed to be seated properly as it weighed a hefty 7kg. Of the two securing bolts for the original bronze plaque, the top one had been removed and the hole was reused to take a lug attached to the rear of the plaque. The remains of the original lower bolt is still firmly imbedded. The plaque was finally attached to the granite headstone with a waterproof industrial adhesive and Jesmonite plug.



President Matthew Porter unveils the plaque

The grave was weeded and Mourne granite chips laid over weed suppressing material to match the granite monolith. The lead lettering was treated with lead patination oil and the graves on either side tidied and the roots and foliage of an intrusive holly removed.

After six years the replacement plaque was finally unveiled by the president, *Matthew Porter*, at an evening meeting of the Club during which *Peter McCabe* gave a fascinating tour of the Belfast City Cemetery graves of particular interest to the Field Club.





Geology NE Antrim

Leader - Ian Meighan

7th September 2019

Joint trip with Belfast Geologists' Society



Members at Lansdowne car park

Thirteen members of both societies met at *Portrush Old Lifeboat Station* at Lansdowne Car Park on a dry and sunny morning with hint of good weather to come. Our leader *Ian Meighan* led us down to the foreshore looking across to *Dunluce* to see if we could spot the ammonite fossils in among the local igneous rocks (*The Portrush Sill*). In the eighteenth century this locality was stated to be proof that all rocks crystallised from sea water (*Neptunists*) as opposed to the view that they were of volcanic origin (*Vulcanists*). The latter group won the argument.

The ammonites weren't in volcanic rock, but were in *Liassic Mudstones* that had been turned into *hornfels* due to the heat of the nearby volcanic intrusion. We spotted several of the ammonites in the hornfel rocks.



Ammonite fossils

We continued on to *Ballycastle* for lunch on the seafront close to *Rathlin Island Ferry Terminal*. Here we were rewarded with exceptionally clear views across not only Rathlin but to *Kintyre* in Scotland's Argyll Region. We watched our leader identify 'foreign' rocks among the harbour foreshore including *LARVIKITE*, a dark igneous rock with lots of feldspars. Probably came from Norway. Also looked at another larvikite section on the nearby *Marconi Memorial* (this was to mark the setting up of the wireless links between Ballycastle and Rathlin Island in 1898). Our next stop was Ballycastle Beach to identify local rocks including a good find of *Ailsa Craig Microgranite*.



Larvikite

Finally we headed across the *Glens of Antrim* to *Cushendall* in clear sunny weather with the last stop at *Cushendall Boat Club* to examine the *Conglomerates* from *Devonian* age. Here we could see an unconformity between two different types of sandstones with the later Triassic age.

All that remained after this stop was a leisurely drive home.

Ian Forsythe





Fungus Foray - Gosford Forest Park

Leader - Richard O'Hanlon

28th September 2019



Richard O'Hanlon

Once again, our foray was led by Richard O'Hanlon, who is the principal plant pathologist at the *Agri-Food and Biosciences Institute* (AFBI) based in Belfast. Gosford Forest Park is located outside the County Armagh village of Markethill. The park was acquired by the Department of Agriculture in 1958 and comprises some 240 hectares of diverse woodland and open parkland. Gosford Forest Park is also home to Gosford Castle. It was designated the first conservation forest in Northern Ireland in 1986.

Richard had pre-collected some different species and laid them out on a picnic table to introduce the members to the fascinating world of fungi. He gave an outline of the different classes, their general structures and their importance in the natural world, both beneficial and pathogenic. It is interesting to note that fungi are genetically more closely related to animals than to plants.

The two main classes being the ascomycetes, the "spore shooters" eg cup fungi and candlesnuff with the basidiomycetes or "spore droppers" which cover the typical species with gills such as the agarics, the boletes with tubes/pores under their caps and the earthstars and puffballs.

Important characteristics in identification were discussed, the importance of smell, colour, shape and size. Examination of the gills and the stalk or stipe and how the gills attach to the stem, the texture, sliminess/dryness, the taste as in the case of milkcaps and the habitat and location, many species are host-specific and grow in symbiosis with particular trees. So guide book and hand lenses are essential.



We headed out from the carpark and we were soon finding large numbers of different species. One of the first finds was a collared earthstar (*Gaeastrum triplex*). Starting off as a dark brown bulb they split into star shaped bowls with a puffball in the centre. Remarkable and striking. A troop of sulphur tufts (*Hypholoma fasciculare*) swarmed an old stump. Fasciculare comes from the Latin word *fascies* meaning a bundle and these grow in bundles or tufts. Fragrant funnels (*Clitocybe fragrans*) with a distinctive aniseed-like odour. Pamela found a dead branch covered in candlesnuff fungus (*Xylaria hypoxylon*), small flask-like structures that resemble "snuffed out candlewicks". I learn they are faintly bioluminescent

having phosphorus accumulated in their mycelium. We found a second species of *Xylaria*, the grizzly named dead moll's fingers (*Xylaria longipes*) although the French have interpreted their morphology differently by naming them as "le pénis de bois mort"!

continued

Fungus Foray - Gosford Forest Park (contd)



Black bulgar



Collared Earthstar



Beaked Earthstar



Mycena rosea

On a dead branch there were lots of black bulgar or batchelor's buttons (*Bulgaria inquinans*) (well spotted Lesley). One of the Ascomycetes, they look like liquorice, inquinans means staining – as your hands will go a dark brown if you handle the fruitbodies. Among the leaf litter were several rosy bonnets (*Mycena rosea*) A beautiful pink coloured fungus that is poisonous. The next discovery were some poisonpies (*Hebeloma crustuliniforme*) which as the name implies are not for the table. Margaret spied a mature stinkhorn (*Phallus impudicus*) which really ponged!

Wandering through the arboretum and under some pine, we stumbled on a large number of more earthstars including another scarcer species, the beaked earthstar (*Geastrum pectinatum*) with its combed beak. On the grass were wood pinkgills (*Entoloma rhodopolium*) and lots of little delicate wrinkled clubs (*Clavulina rugosa*) and some coral types, a yellow Ramaria sp.

Among the brackets and crust types of fungus we found jelly ear (*Auricularia auricula-judae*) high up on horse chestnut (*Aesculus hippocastaneum*), hairy curtain crust (*Stereum hirsutum*) on a dead log and birch polypore or razorstrop fungus (*Piptoporus betulinus*). Richard showed us a fascinating species, a clump of silky piggybacks (*Asterophora parasitica*) growing on a decaying russula sp.

So as we made our way back to the carpark there were some magnificent specimens of fungus royalty, the Prince (*Agaricus augustus*), said to be truly delicious. We laid our finds on the picnic table in their different groups and Richard discussed the various genera and their features. We had a great turnout of 12 members and enjoyed a diversified and interesting foray. Lots of different representatives from all the fungi families. Richard was thanked for his time taken to share his knowledge of the fascinating mycological world.

(I would also like to thank Roy Anderson and Debbie Nelson for confirming some species from photographs)

The following list is kindly supplied by Richard.

Matthew Porter



Dead Moll's Fingers



continued



Gosford Forest Park - Species List

28th September 2019



Amanita rubescens

Russula cyanoxantha

Russula sp.

Russula delica

Lactarius sp.

Lactarius vietus

Lactarius sp.

Hygrocybe sp.

Mycena pura

Mycena sp.

Mycena sp.

Asterophora parasitica

Clitocybe gibba

Clitocybe fragrans

Melanoleuca sp.

Tricholomopsis rutilans

Armillaria mellea

Laccaria laccata

Laccaria amethystine

Tricholoma sp.

Lycophyllum decastes

Marasmius ramealis

Collybia sp.

Macrolepiota sp.

Entoloma sp.

Pluteus sp.

Cortinarius sp.

Cortinarius sp.

Paxillus involutus

Hebeloma sp.

Inocybe sp.

Inocybe sp.

Hypholoma fasciculare

Agaricus sp.

Psathyrella sp.

Coprinus sp.

Crepidotus variabilis

Boletus chrysenteron

Piptoporus betulinus

Trametes versicolor

Lycoperdon perlatum

Scleroderma citrinum

Geastrum sp.

Geastrum triplex

Phallus impudicus

Ramaria sp.

Ramaria sp.

Auricularia auricular-judae

Tremella mesenterica

Hypomyces chrysospermus

Otidea alutacea

Xylaria hypoxylon

Xylaria polymorpha

Bisporella citrina

