BBS Summer meeting 2018: Week 2 Isle of Arran

Fig. 1. The group searching intently for bryophytes on the slopes of Muilean Gaoithe. Rory Whytock.

Rory Whytock tells the story of the second island of the summer

The Isle of Arran (vc 100) is located between the Ayrshire coast and the Kintyre peninsula on the west coast of Scotland. Despite being very popular with tourists, the island has had few bryological records in the past two decades which made it a good choice for a summer meeting where the aim was to explore unrecorded areas and try to refind older records.

Arran is quite varied geologically with the north of the island largely composed of granite while many of the southern and coastal areas contain a mix of limestone, Old Red Sandstone and siliceous rock. The northern half of the island also contains numerous large craggy hills, the highest of them being Goatfell at 874 m. We visited a mix of hills, coastal, woodland and ravine sites throughout the week.

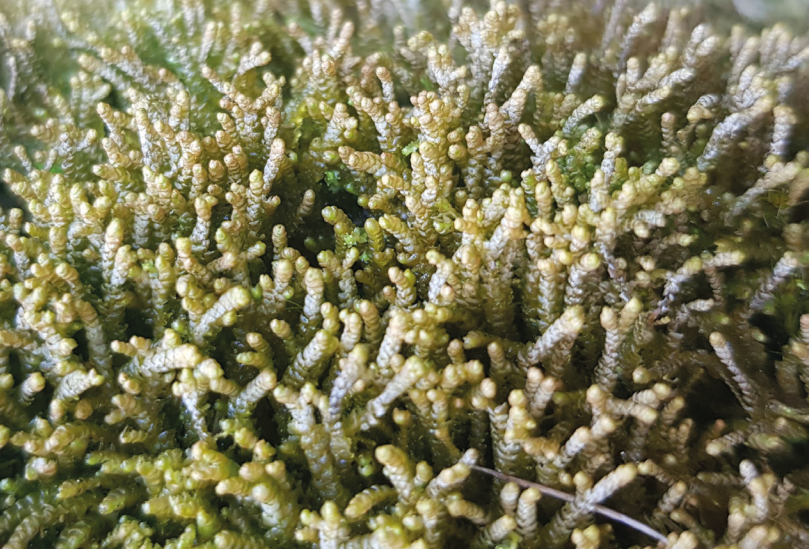
There was a total of 16 participants, many of whom resided on the island for the duration of the meeting. Other participants stayed from one day to several days. Those that managed to make it along were Des Callaghan, Alastair Stevenson, David Long, Gary Powell, George Grieff, Gordon Rothero, Liz Kungu, Mathew Adamson, Rory Whytock, Neil Bell, Nick Hodgetts, Oliver Moore, Sean O'Leary, Pete Martin, Clare Rickerby and Hannes Becher. In the account below, an asterisk (*) indicates an addition to the Census Catalogue for vc 100 or a first record since 1960.

Tuesday 24 July: Coire Fhionn Lochan

Most members of the group arrived during the day, so a reduced number of people were in the field. Having arrived the previous day Sean O'Leary and Pete Martin got the ball rolling and visited Coire Fhionn Lochan (NR9045), a small corrie on the north-west of the island, which is the only site in vc 100 where *Scapania ornithopodioides* has been recorded. Unfortunately, this was not relocated but they did find *Grimmia ramondii**. Other highlights from the day included *Arctoa fulvella* and *Gymnomitrion concinnatum*, both of which have few records in the county, *Nardia compressa, Pleurozia purpurea, Rhabdoweisia crispata* and *Campylopus atrovirens*.

Wednesday 25 July: Glas Choirein, west of Brodick

Day two saw most of the group head to a large west-facing corrie called Glas Choirein



△Fig. 2. *Bazzania tricrenata*, Glas Choirein. Rory Whytock.

(NR9834). This site had some large crags (some of which were calcareous), moorland and a number of small ravines so there was plenty of scope for a nice variety of bryophytes.

We set off as one large group from the top of the String Road, which cuts through the middle of the island, to start recording in our first selected monad (NR9835). The weather was especially kind to us on this day with the sun out in full and little wind, a rarity in the hills of Arran! As the weather was so nice the group were treated to fine views of the mountains in the north of the island (Fig. 1).

Once recording had begun, we quickly began to find some sub-montane bryophytes on the top of Muileann Gaoithe hill. Nick had a good find with *Anthelia juratzkana* on exposed stony ground near the top of the hill and *Rhabdoweisia fugax** was found by Sean O'Leary. *Arctoa fulvella* was also reasonably frequent on the exposed crags.

Despite the good start in the first monad, the next one (NR9834) proved more productive with a greater number of oceanic species. One of the first exciting finds was *Campylopus setifolius* in a shallowly incised ravine with some calcareous rock. This species has been recorded from the island previously but only on a few occasions, so it was an exciting find. This was quickly followed up by finds of *Herbertus hutchinsiae* subsp. *hutchinsiae*, *Ulota calvescens**, *Molendoa warburgii, Racomitrium ellipticum**, *Scapania aequiloba** and *Bazzania tricrenata* (Fig. 2). This gully was obviously highly productive and it continued to be when I found an interesting specimen which I collected from rocks near the top as *F. microphylla* but noted that it had deciduous leaves. This was later confirmed as *Frullania microphylla* var. *deciduifolia** and is the first record for this variety in Scotland. This is a variety that I had previously spent some time checking *Frullania fragilifolia* and *F. microphylla* specimens for in Ayrshire, to no avail, so this discovery made the effort worthwhile.

Thursday 26 July: Holy Island and Glen Sannox

The group split into two teams for the day, with one heading to Holy Island (NS0530) and another heading into the hills again to the top of Glen Sannox to visit a large north-facing corrie (NR9843). The Holy Island team consisted of David Long, Pete Martin, Sean O'Leary and Liz Kungu. There was only one previous record for the island (recorded by Pete a few years previously). The team had a good day and managed to somewhat trump Pete's previous

Fig. 3. *Campylopus atrovirens* var. *falcatus*, Glen Sannox. Rory Whytock.

species list, ending with 128 records consisting of 83 species. *Grimmia decipiens* was notable as a first record for the Island (not new to the vc as it had previously been recorded on Bute), while *Campylopus brevipilus, Leptodontium flexifolium* and *Philonotis calcarea* were also species which are scarcely recorded in the county.

The second group heading to Glen Sannox was slightly larger with myself, Gordon Rothero, Nick Hodgetts, Gary Powell, George Grieff, Clare Rickerby, Des Callaghan, Oliver Moore, Alastair Stevenson and Matt Adamson. The main aim of recording Glen Sannox was to head for a large north-facing corrie called Coire nam Fuaran which held no previous records. There was a long flat, rather monotonous walk along a path for 2–3 km before we decided to start recording. The first good find of the day was located by Gordon who showed off a nice stand of *Campylopus atrovirens* var. *falcatus** on some granite boulders (Fig. 3). After this we saw a similar range of species to those seen on the previous day such as *Campylopus setifolius, C. gracilis, Anthelia juratzkana* and *Herbertus aduncus* subsp. *hutchinsiae* (Fig. 4). Although we got a reasonable number of species to begin with, the vast expanses of granite did not provide a huge amount of variety. After a big slog up a hill and

△Fig. 4. *Herbertus aduncus* subsp. *hutchinsiae*, Glen Sannox. Rory Whytock.

a well-earned break for lunch (Fig. 5) we started exploring our intended destination of Coire nam Fuaran. The species list was once again similar to what we were recording earlier in the day but we started finding some quite sizeable populations of *Bazzania tricrenata*, *Anastrepta orcadensis* and *Anastrophyllum minutum*.

While searching the northern face of the corrie Clare and I were intrigued by a small *Marsupella* on sloping wet slabs which turned out to be *M. stableri**, an exciting find with the location being the most southerly location for the species in Scotland (Fig. 6). There are only a few records further south in Britain, in the Lake District and Wales.

Once we had finished searching the corrie and failed to add any more species for a while, it was time to head back to the cars. On the way we passed an old barytes mine at the foot of Glen Sannox, where it had previously been mentioned that there was an old record for *Tortella inclinata*. Having just climbed from sea level to around 800

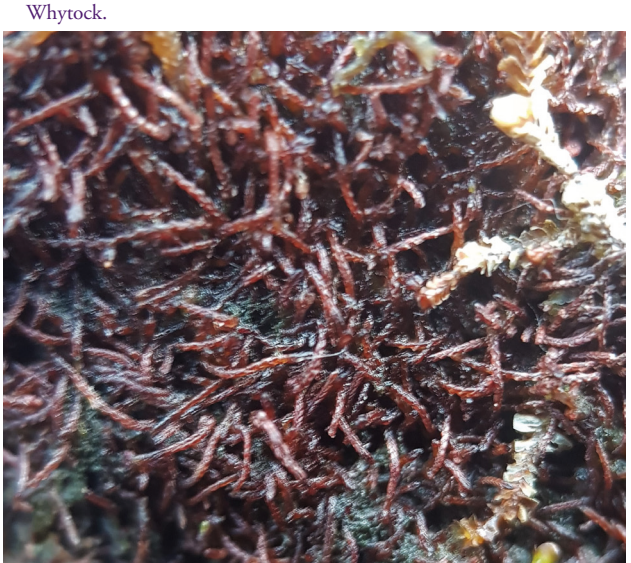
△Fig. 5. A beautiful lunch spot in the sun, Coire nam Fuaran. Gordon Rothero.

m and then returned on a 10 km round journey, no one was too excited about searching for this elusive old record. Or so I thought. It turned out that Nick managed to refind the population by taking a sample of *Tortella* from the track side as he strode past! Well done indeed Nick.

Friday 27 July: Cock of Arran

With everyone tiring from the previous two days' outings in the hills it was time to visit the coast for a change. We ventured to the Cock of Arran (NR9651) on the northern end of the island near Lochranza, where the geology is very variable and offered much potential for a variety of species. This expectation of a large species list did not disappoint. Not long after we started recording in an area between a small glen named Fairy Dell and a large boulder scree marked as An Scriodan, we came across a number of species new to the vice county including *Cephalozia pleniceps**, *Tortella nitida**, *Solenostoma paroicum** and *Plagiomnium rostratum**. The coastal rocks were also rich in colonies of *Porella obtusata*, *Frullania microphylla* var. *microphylla, F. teneriffae, Tortella fasciculata** and *Tortella flavovirens*. The group made a swift move along the coast after searching the large boulder scree of An Scriodan where we passed the large rock said to look like a crowing cockerel which lends its name to the Cock of Arran. Once we arrived at a coastal woodland surrounding Ossian's Cave, we had our lunch before starting to record again. By this point all

▽Fig. 6. *Marsupella stableri*, Coire nam Fuaran, Glen Sannox. Rory Whytock.



hopes of an easy day were starting to feel fruitless as we had covered a fair bit of ground and had much more interesting habitat to discover ahead of us.

The deciduous coastal woodlands revealed a nice suite of oceanic species not seen earlier in the day including *Plagiochila spinulosa*, *P. punctata* and *Lepidozia cupressina*. Gordon had a cracking find when he picked up *Calypogeia suecica** from a thin layer of peat overlying rock, not its usual habitat of rotten logs. Its associates were *Scapania umbrosa* and *Lepidozia cupressina*, however, which can also be expected on logs. This discovery represents the southernmost location for this species in Scotland.

Due to the unprecedented hot weather that had occurred prior to our visit, many of the oceanic species were unfortunately not in the best of health and looked very unhappy and shrivelled up (Figs 7, 8). One small patch of woodland just to the east of Ossian's cave proved to be particularly productive for oceanic species, however, and yielded some very nice finds by Gordon who picked out *Adelanthus decipiens* and the highly oceanic filmy fern *Hymenophyllum tunbrigense*. Good finds at this location kept coming when Des managed to find *Calypogeia integristipula** overlying some base-rich sandstone.

The group had travelled a long way and covered all the targeted areas, so it was decided to call it a day as we had to re-trace our steps to get back to the car. Des, Oliver and I had heard rumours of fossilised giant myriapod tracks in this location, which we duly found after a bit of hunting, much to our delight (Fig. 9).

Saturday 28 July: Glenashdale falls and Glen Craigag

Having not visited much extensive woodland during the meeting by this point, we decided to head to the south end of the island to Glenashdale glen and waterfalls (NS0325). This is a large glen with a mixture of deciduous and conifer woodland surrounding it. There is a very large waterfall further up the glen which is a popular tourist attraction and was our intended destination. We followed the small river at the bottom of the glen from where we had parked our cars and started recording straight away. We added some new records here with Nick finding both *Lejeunea cavifolia** and *Marchantia polymorpha* subsp. *polymorpha** while I located a patch of *Neckera crispa** on the base of an ash

△Fig. 7. Dried up colony of *Adelanthus decipiens*, Cock of Arran. Rory Whytock.

△Fig. 8. *Lepidozia cupressina* populations really suffering from the hot dry summer, Cock of Arran. Rory Whytock.

tree. About half way up the glen populations of *Aphanolejeunea microscopica*, *Tetrodontium brownianum*, *Hygrobiella laxifolia* and *Molendoa warburgii* proved to be the highlights of this site which everyone enjoyed seeing. Unfortunately, we were unable to get to the bottom of the large waterfalls due to a series of large sandstone overhangs (Fig. 10). So, we followed a footpath to the top of the waterfalls where we had lunch and decided that we had enough time to visit another site. We retreated back to the cars and set off for Glen Craigag (NR9434) on the string road (when Arran is viewed on a map, it said to look like a present wrapped up, with the road marked on the map running through the centre of the island looking like the string holding it all together, hence the name).

A small but deeply incised wooded glen near the centre of the island proved an unexpected location but a welcome one which held numerous bryological treasures. As soon as we stepped out of the cars the hunt was back on and the group managed to record *Riccia sorocarpa*, *Phascum cuspidatum* and *Bryum ruderale*. Further up the Glen we managed to see some more populations of *Hygrobiella laxifolia*, *Tetrodontium brownianum* and *Aphanolejeunea microscopica* which once again proved popular. Oliver made a nice discovery of *Grimmia ramondii* on large boulders in the stream and it would have been a new vc record had it not already been collected by Sean and Pete on the first day. But the real bryological interest peaked when the ravine became extremely incised and tricky to traverse. The extra effort proved immediately worthwhile as the gorge now had much higher levels of humidity (Fig. 11) and supported some very nice species. *Drepanolejeunea hamatifolia* was quickly located on the side of some large boulders in the stream among patches of *Lejeunea patens* and *L.*

△Fig. 9. Oliver needed to show that the Giant Myriapod which made these fossilised tracks was wider than him. Rory Whytock.

▷Fig. 10. David Long and Liz Kungu exploring the lower waterfalls at Glenashdale. Rory Whytock.

lamacerina, and further searches revealed a small scrappy piece of *Metzgeria leptoneura* on the eastern vertical rockface of the glen. While on the western rockface I scraped off a tiny bilobed liverwort which I could not place immediately, but after consultation with David and Gordon it was suggested that *Sphenolobopsis pearsonii** was the most likely candidate. This was duly checked and confirmed with the microscope that evening, giving a number of the group a chance to look at.

Sunday 29 July: various sites

The weather up until this point in the meeting had largely been very nice, but it would not be a real trip to the west coast of Scotland without a decent downpour and today was the day. Owing to this the group split up so that we could cover more areas and those who wanted to could abandon any recording at will.

Drumadoon Point is an exposed point on the very western side of the island, and a hectad which held few records. A small group of us set off from Blackwaterfoot golf course and headed straight for the large basalt columns and boulders of Drumadoon Point (NR8829). The columns certainly looked impressive but were particularly unproductive for bryophytes. The coastal rocks provided more interest after *Weissia perssonii* was found near to a small patch of *Porella obtusata*. As the bryological interest was low in this area, and we were getting a thorough soaking (Fig. 12), we made a beeline for some large caves further up the coast which might at least give us some shelter. A few small patches of coastal woodland provided some nice species on the way to the caves including *Cololejeunea minutissima*, *Ulota calvescens* and *Lejeunea lamacerina*. We explored most of the caves along this coastal

△Fig. 11. David Long at Glen Craigaig, believing he is the bryological equivalent to Indiana Jones. Gordon Rothero

stretch and added further interesting records such as *Marchesinia mackaii* on damp rock faces, and Gordon managed to locate *Rhynchostegiella teneriffae* from a deep, damp crevice in some Old Red Sandstone.

The other (and perhaps more sensible) group opted to visit Brodick castle and gardens first (NS0137) where there was a café if the weather got too bad. The group achieved a very good list indeed with many species that are scarce on the island. *Aulacomnium androgynum*, found by Matt, is a species with a restricted distribution on the island and was a good find. As the garden has a mixture of planted and semi-natural woodland, epiphytes were well represented with the group locating *Metzgeria consanguinea*, *Microlejeunea ulicina*, *Orthotrichum striatum* and *Zygodon viridissimus* var. *viridissimus.*

Some of the group that went to Brodick castle then went on to Corrie limestone caves (NS0243), near the main accommodation for the group. The site contains a band of limestone which was mined and now lies dormant. The mining works have left a series of caves which you can enter, with the ceilings lined with giant gastropod fossils. There is not much limestone or calcareous habitat on the island so the group again managed to locate some scarce species, including refinding the only previous record of *Aloina aloides* while also finding *Ditrichum gracile, Cirriphyllum crassinervium, Leiocolea turbinata, Loeskeobryum brevirostre* and a sterile *Phaeoceros* specimen. In addition to these species a second population of *Calypogeia integristipula* was discovered.

Monday 30 July: Glen Catacol and Clauchlands Point

Today was the last day of the meet, so a loose schedule that suited those leaving the island at different times was decided upon.

One group who had most of the day to spare went to Glen Catacol (NR9148) on the north-west side of the island. The list started with a familiar suite of species of acidic habitats such as *Sphagnum capillifolium* subsp. *rubellum*, *S. compactum*, *Racomitrium lanuginosum*, *Scapania gracilis* and *Leucobryum glaucum*. The site got immediately more interesting when we headed for an incised glen named Clach a' Chait where

we started finding more calcareous species like *Grimmia torquata* and *Saccogyna viticulosa*. Other notable records from this area were *Racomitrium ellipticum*, *R. affine*, *Plagiochila punctata* and *P. spinulosa*.

David and Gordon visited Clauchlands Point (NS0533) on the eastern side of the island which has previously been under-recorded and was situated perfectly for getting an early ferry. A number of species that are under-recorded in the county made this a worthwhile excursion with *Colura calyptrifolia, Frullania teneriffae, Plagiochila bifaria*, *Trichostomum crispulum* and *Tritomaria quinquedentata* being the best finds.

Conclusion

In total we added 1808 bryophyte records during the week, consisting of a very respectable 363 species (including subspecies and varieties). From this total we managed to add or de-bracket 29 species to the vice county list, including one variety that is new to Scotland.

In addition to the bryophyte records during this meeting, George Grieff, who specialises in the fascinating subject of bryophilous fungi, was able to find *Filicupula suboperculata* on *Frullania tamarisci* and *Bryostroma trichostomi* on *Trichostomum brachydontium*. Both species of fungi are very under-recorded and very little is known about them or their distribution in Britain.

Acknowledgements

I would like to extend my thanks to everyone who participated, we could not have recorded as much as we did and had such an enjoyable time without everyone's effort. Particular thanks must also be extended to Gordon Rothero who helped with recces of the Island and offered advice through most of the organisation of the meeting. I would also like to say a particular thank you to Marian Knowles who kindly let us use her beautiful cottage in Corrie as a base which housed many of the guests for the meeting.

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Fig. 12. A wet day out at Drumadoon Point. Rory Whytock.