

Deadline for next issue is:

MAY 11th 2018

Please if anyone received a new and interesting book over Christmas and has now had time to take a good look at it - please think of doing a Review!

Ideas and contacts for chasing for articles are always welcomed.

Please contact saraheno@riseup.net

TRAINING EVENTS in MAY

Want to know more about seaweed?

The Field Studies Council are running two seaweed id courses at the wonderful FSC Millport, Cumbrae.

A Closer Look at Seaweeds 20th – 23rd May arriving in time for evening meal 6pm on the 20th and departing after breakfast on the 23rd. Cost: £368 sole occupancy; £338 shared; £221 non resident.

<http://www.field-studies-council.org/individuals-and-families/courses/2018/mil/a-closer-look-at-seaweeds-73685.aspx>

Introduction to Seaweeds 23rd – 25th May arriving in time for 6pm evening meal on the 23rd and departing after breakfast on the 25th. Cost: £255, sole occupancy; £235 shared; £155 non resident.

<http://www.field-studies-council.org/individuals-and-families/courses/2018/mil/introduction-to-seaweeds-73737.aspx>

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Angus, a stronghold for the species, hosted a range of events including surveys, educational activities, Kidney Vetch (*Anthyllis vulneraria*) planting, press calls and even a field visit to Thurso to see the Caithness Small Blue. Woodlands Primary School in Carnoustie became the first school in Scotland to champion the Small Blue butterfly. The children worked very closely with the East Haven Together group and created a poster and logo to promote the first Small Blue week.

Although surveys have been undertaken along the Angus coast

Efforts continue in Angus to save the Small Blue Butterfly

Kelly Ann Dempsey

Marine and Coastal Working Group – Tayside Biodiversity Partnership

Scotland's first Scottish "Small Blue week" took place from 29th May to 4th June 2017. The Small Blue (Fig.1) is the UK's smallest butterfly and has declined in numbers both nationally and locally over recent decades.



Figure 1. Small Blue Butterfly ©KAD

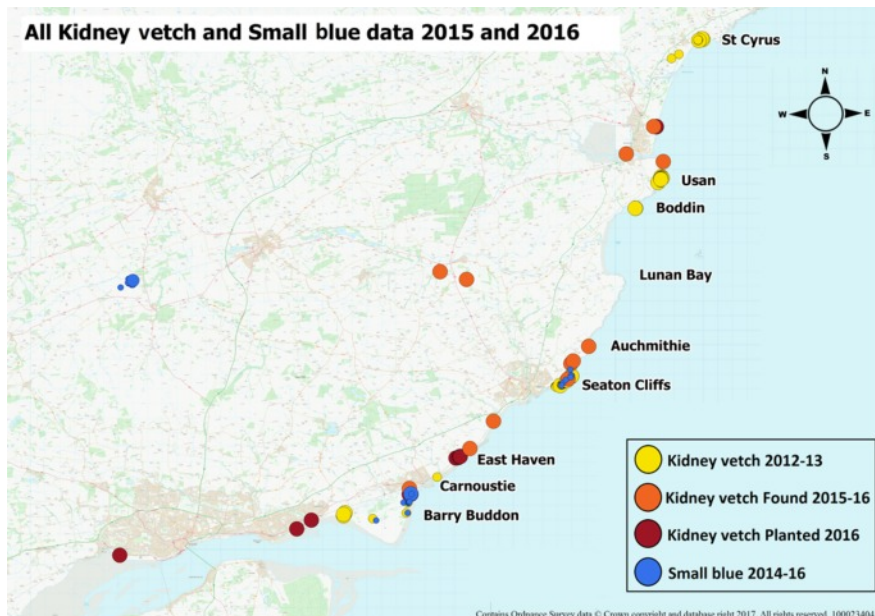


Fig 2. Kidney Vetch and Small Blue recorded distribution from 2012-16. ©KAD/Angus Council.

since the 1970's, until recently, very little data on its host plant, Kidney Vetch existed. The Tayside Biodiversity Partnership set up the "Small Blue Butterfly Interest Group" in 2011. Its aims are to understand the ecology of the Small Blue and Kidney Vetch in Angus and work with Butterfly Conservation, volunteers, communities and businesses to safeguard the species.

Survey and planting effort has been supported along the coast by landowners, communities, volunteers and businesses such as Scotia Seeds, Celtica Wildflowers and Carnoustie and Montrose Golf Links. Scottish Natural Heritage, Angus Council, Butterfly Conservation and the Scottish Wildlife Trust have all been very supportive.

We now have a greater understanding of both species' current distribution and abundance (Fig.2).

Records of food plant and butterfly continue to be collected by volunteers and in May/June 2017 the Tayside Biodiversity Partnership funded a coastal survey to get a better picture of abundance along the entire coast. The survey was a repeat of a previous 2005 SNH study. In brief, findings were that there is no lack of abundance of Kidney Vetch; it has in fact increased since 2005. The Small Blue however has declined drastically. On a positive note, butterflies were discovered once more at two coastal spots at Elliot Links near Arbroath and Usan and there is a healthy population

The image on the NBN Atlas had been provided by David Fenwick who produces the website [APHOTOMARINE](http://aphotomarine.com), and who has kindly supplied 2,000 species images for use within the NBN Atlas.

On receiving the email, Sophia put Dr. Caballer and David in touch with one another. Subsequently, David supplied a higher resolution image, showing the full detail of the *Hermaea* in question. From this Dr. Caballer was able to confirm that the species was indeed *Hermaea cantabra*.

You can read the full story on the NBN website: <https://nbn.org.uk/news/nbn-atlas-helps-discovery-species-new-uk/>

NBN Conference review and videos

With just over 180 delegates representing biodiversity organisations, local environmental records centres, recording schemes, government bodies, students and individuals all concerned with biodiversity data and biological recording, the 2017 NBN Conference was the best attended to date.

For the first time in its 17 year history, the Conference took place in Wales where it was held at the National Museum Cardiff. With two keynote addresses, the annual Sir John Burnett Memorial lecture, 24 presentations and an afternoon of workshops we hope we offered something for everyone.

Please visit the NBN website to catch up with some of the snippets from social media and the three Live broadcasts. <https://www.facebook.com/NationalBiodiversityNetwork/> PDFs of all of the presentations and the workshop notes can also be found on <https://nbn.org.uk/>

NBN Honorary Membership awards 2017

As part of the NBN Conference in Cardiff we were delighted to bestow Honorary Membership upon Dr Mark Hill and Profes-

Helen Roy was given Honorary Membership of the NBN Trust to recognise her unique contribution to biological recording since having taken on the running of the Ladybird Recording Scheme, as well as recognising her important role in the wider NBN data-provision process.

Over the last ten years or more, she has been a tireless enthusiast for public engagement in biological recording. She has pioneered development of online recording, and been a primary advocate at meetings, conferences and public engagement events. She has championed the uptake of modern systems of recording, particularly iRecord and its associated developments. Her high public profile, especially in the area of insect recording, has benefited the NBN through engaging with very disparate groups of people.

Mark Hill has been recording bryophytes for over 50 years in association with the British Bryological Society, which he joined in 1965. For much of this time he worked as a professional ecologist and his recording was a spare-time activity.

He was appointed head of the Biological Records Centre in 2003 and from then until (and beyond) his retirement in 2010 he made major contributions to the techniques for analysing biological records.

Mark's recording of bryophytes is reflected by his 48,580 records (including determinations and confirmations of specimens collected by others) which are freely available on the NBN Atlas at full resolution.

Read the full citations on the NBN website: <https://nbn.org.uk/news/honorary-membership-awards-2017/>

NBN News – January 2018

UK Award winners 2017

The winners of the third UK Awards for Biological Recording and Information Sharing were announced at the National Museum Cardiff during an evening ceremony on Thursday 16 November 2017.

These awards have been developed by the National Biodiversity Network, the National Forum for Biological Recording and the Biological Records Centre. Their intention is to recognise and celebrate the outstanding contributions made to biological recording by adults and young people, which is helping to improve our understanding of the UK's wildlife.

You can read about each of the winners on the NBN website.

<https://nbn.org.uk/news-events-publications/uk-awards-biological-recording-information-sharing/winners-2017-uk-awards-biological-recording-information-sharing-announced/>

NBN Draft Sensitive Species Policy

The NBN Atlas has a system whereby records of species that are deemed sensitive are made available at a reduced resolution, reducing the risk of intentional or accidental harm to the species recorded.

The species that these rules apply to, and the resolution at which the records will be released, is detailed in a country-specific sensitive species list which has been supplied to the NBN Atlas by the relevant country agency (these lists are available to [view and download from the NBN Atlas](#)).

Since publishing these lists, we have received feedback on them from people and organisations within the Network. There is a general feeling that the creation of the sensitive species lists needs to be consulted on more widely throughout the Network to get a broader view on sensitivities.

The draft Sensitive Species Policy is now available via the NBN website and we welcome your feedback on this policy. Please note, that we are not asking for feedback on individual species that are present on the current sensitive species list, but for feedback on the policy and criteria that will define the lists.

Please send your feedback to Ella Vogel at e.vogel@nbn.org.uk by **Friday 9th February** at the latest.

The policy will list the criteria that should be applied to define the sensitive species lists. The lists will be drawn up by experts within the Network. If you are interested in volunteering to compile the list for a certain taxon group or groups, then please get in touch.

NBN Atlas helps in the discovery of a species new to the UK

Last November, Sophia Ratcliffe, Technical & Data Partner Support Officer at the NBN received an email from Dr. Manuel Caballer Gutierrez of the Muséum National d'Histoire Naturelle, France. The email related to the possible discovery of the sacoglossan opisthobranch mollusc *Hermaea cantabra* in the UK.

Dr. Caballer had seen an image on the NBN Atlas labelled as *Hermaea bifida*, which he thought was *Hermaea cantabra*, a species he had previously authored in 2015. It was a species thought to be endemic to the Bay of Biscay, the type location being Santander, Spain.

at a site in central Angus. Increased survey effort has allowed recording of populations, of both species, in sites that haven't been surveyed for some time (Fig.3). Plans are now to supplement the Kidney Vetch on sites to ensure that small, fragmented populations can persist.



Fig 3. A very small, isolated patch of kidney vetch on Rossie Island, Montrose "rediscovered" in 2016 and surveyed for small blue in 2017. ©KAD

The group will continue to focus on planting Kidney Vetch in suitable areas to make a natural corridor to allow species migration. Understanding how successful supplementary planting can be, and how land use practices impact on both species, is another area of ongoing research. The group engages regularly with at least 10 landowners along the coast and has interviewed all 21 to gauge interest in restoration work and general awareness of both species.

Small Blue week in Angus was such a great success in 2017; perhaps we should consider "Small Blue Month" in 2018. Watch this space.

Further information

A Tay Estuary Forum occasional paper on the project will be available later in 2018. If you would like to know more or help with the project in any way please visit;

Butterfly Conservation Scotland
<http://butterfly-conservation.org/842/scotland.html>

Tayside Biodiversity Partnership
<http://www.taysidebiodiversity.co.uk/getinvolved/projects/projects-butterflies/>

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Chairs column

Chris McInerny

A very happy new year to all members of BRISC

I'd like to report on the success of the BRISC annual

conference at the Millport Field Centre on the Isle of Cumbrae on the 14 October 2017, which focused on marine recording. It was a great success, with many excellent talks followed by a wildlife walk. The Centre was superb with the venue right next to the beach, great catering, and attentive staff. A most enjoyable day, and we look forward to the next BRISC Conference in October 2018, which will be on urban recording, and likely to be in Edinburgh.

At the Annual General Meeting, following the Conference, Duncan Davidson retired as BRISC Treasurer and Jonathan Willett retired as Chairman. We thank them both for their service.

During these cold short winter days I struggle to record biology! But at the moment here in Glasgow I am counting wildfowl and gulls on inland loch roosts – not for the fainthearted! Thank goodness for thermal clothes! But not long until my reptiles reappear after their hibernation in mid-February.

Best wishes, and good recording through 2018.



Editorial

Sarah Eno

Here I am ID-ing seaweeds in October on the wonderful weedy shores of the Isle of Cumbrae.

In this issue we have a very important and informative update on the work of SBIF. April could be exciting as the results are presented, hopefully, to the Scottish Government.

We have two articles on conservation of the Small Blue butterfly and its food plant. And its a bumper crop of bursary reports.

Remember the BRISC Conference at Loch Lomond? We visited the Queen Elizabeth Forest where Katy Anderson told us about the water vole project. Here is an update from the FCS website. It's good to hear of continued success.

<http://scotland.forestry.gov.uk/news/1931-water-voles-thriving-in-the-trossachs>

“Water voles are recolonising restored wetlands in the Trossachs thanks to an ambitious re-introduction project. Over 1,000 animals were released into 1,700ha of restored wetland habitat on the National Forest Estate and are now thriving throughout the Trossachs. In November last year, this project was shortlisted for The Nature of Scotland Awards which gives recognition to conservation projects for their excellence, innovation and outstanding achievement in Scottish nature”.

SBIF update

SBIF's review of the biological recording infrastructure is continuing at pace! We have now reached the point where we are ready to complete our business case and recommendations for change to the infrastructure, and these will be firmly based on the findings of the questionnaire and interviews, and the outputs from the workshops that were held last year.

Each of the four two-day workshops, which were held between September and December last year, focused on developing potential options for one aspect of the functions of and support for an improved infrastructure, namely data flows, service delivery, governance and funding. The most important output from each workshop was a set of Key Messages and a Preferred Model for the topic, but we also generated valuable ideas for business changes that would be required to implement the preferred model.

The full outputs from all the workshops are now available for download at <https://nbn.org.uk/about-us/where-we-are/in-scotland/the-sbif-review/> and the Key Messages and Preferred Model (one page each) appear at the start of of the documents so they can be easily found. At the time of writing the questionnaire and interview findings are still to be published but they will become available through the same link soon.

It is hard to distil our findings in a short article but it is clear from all the discussions that the status quo is not a

sustainable option. There is much interest in us proposing bold recommendations for change, but there is also some interest in gradual tapered change or speeds of change between these two extremes! It was almost inevitable that this would be the case, but the key will be to identify the risks and opportunities associated with different approaches.

Following the completion of our business case and recommendations for change, and their sign-off by the SBIF Advisory Group, the recommendations will be presented (hopefully in April this year) to the Scottish Government for consideration. The submission of our recommendations for change will be an important milestone for SBIF and BRISC. It will be SBIF's first direct response to the Scottish Government since the establishment of the Forum, and the establishment of the Forum was directly attributable to the success of the BRISC petition to Parliament.

In the phase after the submission of the recommendations SBIF will continue to promote active discussion amongst recorders and other sectors of the community about the recommendations, what they could mean for us all, and to plan and prepare for transition and change. We will be looking to attend suitable events so if you are planning an event and would like us to attend please do get in touch with me, Christine Johnston, NBN Scottish Liaison Officer.

Email c.johnston@nbn.org.uk

In untangling the causes, Andrew illustrated several cases in forensic detail. A striking example for me was the emerging understanding of the impact of Polychlorinated Biphenyls (PCB's) in fertility. PCBs have been banned in many countries but being persistent, are still widely present. Analysis of the ovaries of killer whale strandings in the Hebrides show them to be reproductively inactive when they would have been expected to be otherwise. Killer whales, as top of the food chain, can bioaccumulate the largest amounts of PCBs (it's fat soluble) of any mammal on the planet. Killer whale population in the North East Atlantic are doing well, but the Hebridean population may go extinct. There were further gruelling pictures particularly of the spiral lesions on grey seals which eventually turned out not to be propeller damage but a result of violent interactions with other grey seals!

Just how much can be learned from these sad events, is amply shown as Andrew has contributed to nearly 100 scientific papers from research on marine strandings. See https://www.researchgate.net/profile/Andrew_Brownlow

The AGM was quickly and efficiently executed. The committee stood down and all were re-elected, albeit with some changed roles. See the back page for committee details. The annual report 2016-17 can be found on the BRISC website.

After an excellent lunch (I recommend the food!) the afternoon was a gentle exploration of the shoreline led by three of the FSC staff. I only hung out in the seaweed group and tried to learn the names of some of the abundant brown algal species piled on the rocks; and watch some of the methods used in the Seaweed Search MCS project. Others wandered with more FSC staff, along the foreshore, looking at plants and



Dr Cowie talks to a group on the Cumbrae foreshore

whatever other wildlife chanced within their field of view. Its always a good time to share our group knowledge as well.

Another informative BRISC conference very efficiently and comfortably hosted by the FSC, Millport. I heartily recommend the place for its facilities, its courses and for the wildlife which you can help record.



Common scurvy grass (*Cochleria officinalis*)

All conference photographs © David Palmer

The Story of the Berwickshire Small Blue

Iain Cowe

Butterfly Conservation

The Small Blue continues to inhabit the Berwickshire coast, a clear decade after the species was rediscovered. This was after fears before 2007 that it had



A group of Small Blues © Iain Cowe

become extinct throughout the Scottish Borders, particularly after the apparent loss of the Butterfly from several sites in the central Borders around Hawick.

(Ed. note - I worked with the Council a decade ago to save the colony on the disused railway line in Hawick, where in the end, the scrub just got beyond our control and the food plant also disappeared).

During that passage of time, a decade of surveying has taken place annually along the entire Berwickshire coast and with great success. There have been frequent finds of quite new colonies and suitable habitat. No actual conservation work, either habitat improvements or planting, has taken place as the habitats available remain fairly stable. However, prolonged stability of a habitat can lead to problems for an insect species that depends solely on Kidney Vetch (*Anthyllis vulneraria*). This plant thrives on broken, disturbed and unstable environments where it is able initially, to out compete other plants.

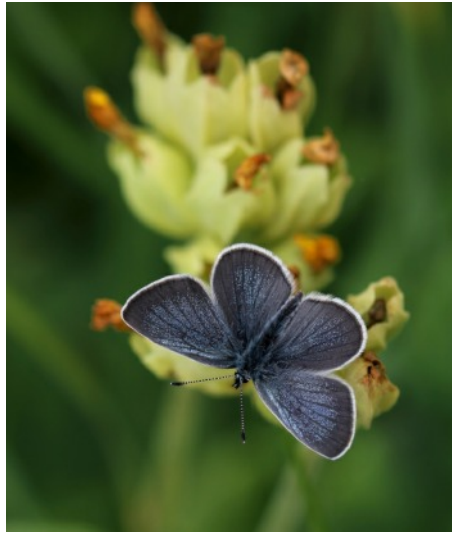
Much has been learned during 10 years regarding this butterfly. One thing more than anything else has been the length of the flight period. On average the Small Blue butterfly emerges mid-May and peaks early June. In 2017 a



Suitable habitat along the Berwickshire coast © Barry Prater

new record was set with a few adults holding territory on the 3rd May. More eye-catching than that was to see adults at that same site a little over 3 months later on the 7th August. This suggests at least a partial second brood. There certainly appears to be a gap between the first week of July and the first in August when no or very few adults are recorded.

Originally, back in 2007, the first Small Blue was discovered along the coastal path south of Burnmouth on the Lamberton coast. Since those early discoveries the butterfly was then discovered north of Burnmouth at several locations and is now headed for Eyemouth by the coastal fringe adjacent to the Golf course. Back in 2014 an inland quarry, some 5 miles from the coastal colonies was found to house Small Blue. This quarry site had been much recorded in the past with no evidence of the species despite a reasonable chance of its presence due to the amount of decent Kidney Vetch on the site. This colony is small and may not survive for long. However, the real question here is just how they came to find this place at such great distance from the coast. For such a small butterfly it does appear to have a very good range when conditions suit. Similar open country exploits have occurred with Northern Brown Argus this past decade with fresh individuals turning up many miles from any described suitable habitat, or food plant.



Small Blue male © Iain Cowe

Small Blue week was celebrated with what has become an annual Small Blue walk. On May 27th last year 26 willing participants visited the sites south of Burnmouth. The walk involved butterfly Conservation along with members of the Edinburgh Natural History Club as well as a strong contingent of Burnmouth locals and a smattering of enthusiasts from further afield.

So far we have been promoting the Small Blue at a local level, encouraging awareness, holding walks and talks as well as updating local communities with breaking news via social media sources. As always, a lot more can be done, and there will always be lots more to do.

learning of biological recording by using a specially produced kit. The website includes an on-line recording form. At that point they were on the way to having 100,000 records in their first year but winter will hopefully see this increase substantially.

Tara Proud stepped in at short notice for Natalie Hirst to speak on Citizen Science on our Coasts and in Our Seas. Run by the Marine Conservation Society and the Natural History Museum, it focuses on Biodiversity, Pollution and Fisheries. Tara



spoke about three Citizen Science Projects involving different levels of commitment and skills. This means a range of public effort can be attracted.

The Big Seaweed Search is the simplest with a lovely leaflet to identify some seaweeds which some of us used for a small practice on the Cumbrae shore in the afternoon. Capturing our Coasts and lastly, Seasearch are for people who like sport diving or at least snorkelling! This latter survey, which has been going for 30 years, is vital in providing data for the designation of Marine Protected Areas.

Aroa Sampreda-Fernandez who is on a TCV Natural Talent traineeship, gave us another fascinating talk on her research project. This is based on the Edinburgh intertidal

shoreline. She will resurvey many places which have data from the 1930's and later survey data (late 1980's) and compare the changes and impacts on the algal (seaweed) communities. So far this has shown one striking change – the land reclamation by Granton Harbour where rocky shorelines have been obliterated. Historic data-sets gives the project a very interesting opportunity to map the changes and explore the consequences for intertidal habitats and species. I wonder what some of our data will be used for in future decades?

Andrew Brownlow, who I have heard before at a TWIC Conference in Bo'ness, gave his sometimes funny but mainly very serious picture of what strandings of cetaceans can tell us about the marine environment. Surprisingly, given the recent political



change regarding marine plastics, these have not been found to be a major cause of death (so far) in the large marine animals SRUC has investigated. Other possible causes can be infectious diseases, metabolic derangements, trauma, marine contamination, predator-prey pressure, climate and weather and underwater noise - all implicated in different degrees in marine stranding events.

BRISC Conference Report

Sarah Eno

Thirty-three people attended the BRISC conference in October 2017. It was held in the comfortable Field Studies Centre at Millport on the Isle of Cumbrae.

Magdalena Blanz bravely opened the conference with a talk on her Grass ID bursary. Her training course had been published (Sept BRISC 2017 newsletter) so here she amplified it with more background on how it sat within her wider archaeological research project. This also considers the effects of seaweed-grazing by terrestrial mammals on seaweed ecology.

Sadly three other bursary speakers could not make the conference so some quick rearrangements meant Dr Phillip Cowie (Senior Education Team Leader) spoke next on the History of Recording on Cumbrae. This talk was so detailed and fascinating its hard to capture it completely. Phillip started with Sir John Murray (the 'father of Oceanography') who sailed over 68,000 miles - part Britain's display of naval power and also part marine research. He eventually produced 90 volumes of documents from



Dr Phillip Cowie of FSC Millport

the 362 sampling stations. The expedition's samples were initially stored in a boat (The Ark) in Granton near Edinburgh. Then David Robertson, a well heeled entrepreneur, appeared and offered to house the collection in Millport, where he had a holiday home! This eventually transformed into a marine research station. There was a lot of collecting and recording in the early years of 20th century which gradually declined until early 1960's. The result is a filing cabinet of original materials and records such as the first Scottish Sea Loch Survey. Some data has gone into NBN but there is still lots historical information to digitise. Since the field station was taken over from universities by FSC in 2014, biological recording has become more mainstream in the courses and also widened to include more terrestrial taxa as well as marine.

It was good to hear an update from Aisling Gribbin on the progress of collect-



ing and mapping data in Ayrshire as part SWSIEC (South West Scotland Environmental Information Centre). Over the summer much effort goes into the many public events – taking advantage of opportunities to get people interested in the nature of Ayrshire and promoting

BRISC PROJECTS

BURSARIES

Bee Identification Workshop

Susan Falconer

Light drizzle, grey clouds scudding by on a brisk breeze and not a buzz to be heard. An August day in the Lake District. The weather forecast was more of the same with the possibility of some sunshine on Sunday. However, the views looking south from the FSC centre at Blencathra over the fells compensated for the less-than-perfect weather for the participants on the Bee Id Workshop.



Learning to identify bees with the aid of a microscope

I was delighted to receive a grant from BRISC/Glasgow Natural History Society to attend the Bee Id weekend workshop. My job as Biodiversity Officer for the City of Edinburgh Council is extremely varied including providing secretariat to the Edinburgh Biodiver-

sity Partnership, supporting projects delivered by members of the Partnership and giving advice and information about Edinburgh's wildlife and habitats. As a former teacher and countryside ranger I am always keen to encourage people to learn more about wildlife and, where possible, to experience this for themselves. Whilst working as an ecologist I was introduced to solitary bees by an enthusiastic and knowledgeable colleague. Surveying for Tormentil Mining Bee was my first encounter and I was hooked.

Choosing to learn more about this under-recorded group and encouraging others to do this to help protect and conserve these insects, was my main motivation for attending the course. Honey bees and other pollinators have been in the spotlight for various reasons and I felt that other bee species were overlooked so I wanted to find out more.

Our course tutor, Steven Falk was lively, entertaining and expert. We



were introduced to the biology of bees and how to use the keys and microscopes on the first evening.

On the morning of the first day we learned how, why and where to collect specimens, initially using the grounds of Blencathra field centre and the local habitats. Given the cool and damp conditions we did manage to collect some bumblebees and were able to practice identifying and pinning and preserving. Steven also gave us advice on what to take into the field and the importance of voucher specimens and recording. The second day was spent at a local fellside farm and we were given access to heather moorland, wildflower-rich grassland and woodland habitats to search for bees. The sun shone and we found 7 species of bumblebee including a Mountain Bumblebee (*Bombus monticola*) nest. The course was rounded off nicely with tea and cake in the farmhouse garden with the buzz of bees nearby.

Looking ahead, I've been practicing bee identification in my local patch ready for next season. I have a meeting with the entomological curators from the National Museum of Scotland to discuss potential projects within the Edinburgh Biodiversity Partnership with the aim of raising awareness of the importance of bees. I am also working with colleagues in the local authority to encourage the creation and management of habitats for bees.

The only long faces were those on the bees.

Identifying Leafhoppers

Rebecca Cairns

Thanks to BRISC and GNHS offering training course bursaries, I was able to visit FSC's Preston Montford site in Shrewsbury for the 'Identifying Leafhoppers' course run by Dr. Alan Stewart from the University of Sussex.

At the time of the training course, I had just finished my Natural Talent Traineeship with The Conservation Volunteers and SASA (Science & Advice for Scottish Agriculture) and was focusing on improving my invertebrate ID skills. During my time at SASA, I first became aware of Auchenorrhyncha (hopper species) significance in agriculture as vectors of emerging plant diseases such as *Xylella fastidiosa*. Accurate identification of hoppers is crucial for monitoring both insect-vectored pathogens and local biodiversity. With only a few hopper specialists in Britain, it highlights the importance



Collecting samples using sweep nets

Aims

1. Provide a forum to ensure the development and promotion of Scottish mammals to benefit research, study, environmental education, conservation and local communities.
2. Produce small scale voluntary field based projects to better understand Scottish mammal ecology and behaviour.
3. Act as a partnership to bring together an active group with a plan and timescale to define research opportunities.

General Meetings and Membership

This Partnership will be Scottish based and link to other wildlife organisations but will have a specific Scottish focus and will meet 2-5 times per year. The SMG will set up a field group, with some committed members, organisers and volunteers. This group will carry out the studies and will be directed by the committee. We hope that people will come forward to represent the group so we have a number of positions to fill such as chairman, vice-chairman, secretary, treasurer etc. We will encourage anyone to join and get involved either as a core member or as a volunteer.

An executive SMG comprising of representatives from each of the core member organisations or individuals will direct the work of the Partnership. The executive will meet on a four monthly basis but may also set up sub groups, and invite individuals and/or other organisations to attend meetings or to join the Partnership. We hope to encourage a large voluntary section geographically spread throughout Scotland, to help and support the programme of works.

The executive SMG will set the strategic direction, study titles and any sub groups with relevant timescales within the first 5 year plan. Representatives of the executive SMG members will be expected to attend a minimum of 2 out of 5 meetings per annum; (which will include at least 2 field excursions and meetings) and associate member (volunteers or member representatives) may attend on an ad-hoc basis. We do not anticipate a membership charge at this stage but will need donations to be agreed by the group to initiate the Partnership. This group are not currently funded and all expenses will be expected to be covered by individual members. We will also look into grant funding opportunities.

In the first year we anticipate using the facilities of Wildoutdoors, at Birnam Guest House, which will also have an administration capacity. We envisage that much of the work will be field based once we have an outline survey strategy.

Please contact Adrian Davis, Naiad Environmental Consultancy

Tel 07761673231. Email: naiadecology@hotmail.co.uk

shoulders". The shoulders referring to the humeri which look a bit like shoulder pads on the thorax of the hoverfly. The presence or absence of hairs on these sets you off on the key.



Hoverflies on sunflower (2011)

Although the course was very much focused on using already prepared specimens from the hoverfly recording scheme's teaching collection, Roger and Stuart also spent time explaining how some hoverflies can be identified from photos. This is a task Roger is very familiar with as he and a few other dedicated enthusiasts run the UK

Hoverflies Facebook page where anyone (who joins the group) can upload photos for identification help. We also had the chance to try out collecting and pinning our own specimens, skills which are essential to identify those species not 'doable' from photographs.

Overall, I came away from the course with a host of new knowledge and skills that I can bring to my own hoverfly recording activities contributing more to the hoverfly recording scheme and also hopefully encouraging others to become more aware of, interested in and ultimately help look after the world for these fascinating and diverse insects.

Huge thanks to the BRISC bursary for helping me to attend the course and everyone who attended the course in August at Preston Montfort, especially Roger and Stuart who are so enthusiastic and keen to see others learn from their experiences and accumulated knowledge.

BRISC received the following information about a new group. Note that the first meeting was held in Birnam January 21st

The Scottish Mammal Group

The Scottish Mammal Group SMG is a new voluntary organisation offering interested individuals and groups a practical opportunity for field based involvement in mammal studies. There is currently a real gap in field ecology knowledge in relation to mammal behaviour and ecology. Many protected species such as wildcat, pine marten, red squirrel, beaver and otter are little understood in relation to their den site behaviour and ecology. Breeding strategies and key factors such as survival rates, are also little understood in many species, which make conservation of some species particularly difficult.

of engaging people in the taxonomy of lesser known taxa.



Collecting samples using pooters

This was my first time visiting Shrewsbury, and I couldn't have picked a better time to go. The warm July weather encouraged a huge diversity of invertebrates (not just hoppers!) to venture out. Preston Montfort and the surrounding Shrewsbury countryside really is beautiful, and somewhere that I would love to visit again. The Friday evening included a general introduction to the course and an overview of leafhoppers: finding out about their ecology/biology and understanding why hoppers are such an ecologically important group to study.

On Saturday we carried out a full morning of hopper collecting around the Preston Montfort site at a range of habitats including fields, pond and wood margins. As well as sweep netting, Alan taught us how to use a 'bug-vac' in order to collect species that

tend to stay very close to the ground. The hardest part of collecting hoppers was attempting to use the pooters. As their name suggests, leaf hoppers will "hop" very fast and very far if they sense any sort of threatening movement!

We spent the afternoon firstly sorting specimens into families e.g. leafhoppers, planthoppers, froghoppers etc by focusing on key morphological features, followed by attempting to identify specimens to species level using a range of literature.

On Sunday we took a field trip to two



Cicadella viridis leafhoppers

local nature reserves: Llanymynech (an old quarry site with rich flora found within the grassland beneath the cliff) and Sweeney Fen (a protected wetland home to marsh-loving hoppers such as *Cicadella viridis*). It was another great day out in the field, and our group managed to collect a large diversity of species.

Seaweeds

Hannah Bischof

In summer 2017, I took part in the course "Introduction to Seaweeds" at FSC in Millport (Isle of Cumbrae). We spent the first evening on the rocky shore next to the FSC centre where we learned about the classic zonation of seaweeds and collected specimens to identify in the lab the next day. The next two days we mostly spent in the well-equipped lab identifying seaweeds. Our teacher, Dr Jane Pottas, was very knowledgeable and her fascination for seaweeds was contagious. With only three participants, our course was very small but that made it easy for everyone to improve their identification skills or get help if things were unclear.

I found the course very interesting and engaging, and it gave me direction for further recording. One thing I found especially fascinating when looking at seaweeds on the different shores around Cumbrae, was seeing how the



same species of seaweed can look very different depending on whether it is from a sheltered or exposed shore. Another thing that was new to me was starting my own seaweed herbarium, and I will continue to work on this to have it as a point of reference for further recording.

The course gave me a good insight into the wide world of seaweeds and I now feel confident about recording on my own as well as sharing what I learned with people on my course at university. Above all, I think recording is about keeping our eyes open for what is going on in the natural world around us. The course taught my eyes to be alert to the little things: a change in the colour of vegetation, various patterns of bubbles on seaweeds, small epiphytes growing on top of other seaweeds. With further practice, I will improve that skill which will not only benefit my ability to record seaweeds, but also the recording of any other group. I cannot thank BRISC enough for enabling me to take part in this course!

I am planning to record seaweeds in Scotland, especially at the East coast around Edinburgh as that is closest to where I live. I am also interested in trying to compare the seaweeds found in Scotland to the ones along the coast of Germany where I grew up. I think there should be significant differences due to climatic conditions and habitats.

Thank you very much to BRISC and GNHS!

What's black and yellow and goes buzz?

Hoverfly Identification

Miranda Shephard

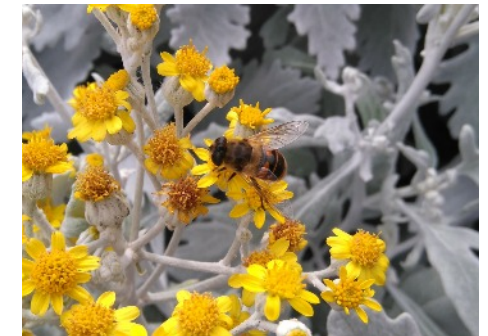
My interest in hoverflies began in 2011 after I and my then 2-year-old son grew giant sunflowers in the back garden. These sunflowers were visited almost constantly by a variety of black and yellow insects, which I now know to have been mostly bees and hoverflies. I was intrigued and fascinated by the smaller and more numerous hoverflies as they tricked me into thinking they were small bees or even wasps, only giving themselves away with their characteristic hovering.

In years since then I've spent a considerable amount of time, much to my neighbour's amusement, peering at and taking photographs of insects on flowers. At first in admiration of their colour and form and latterly, with the purchase of the excellent Britain's Hoverflies WILDGuide, the intention of identifying which of the 165 illustrated species they were. The time came though, when I realised that my point and shoot photography would only get me so far.

Having found and booked onto an introduction course, run by the hoverfly scheme organisers Roger Morris and Stuart Ball, at FSC Preston Montford I was delighted to receive the news in March 2017 that my application for a BRISC bursary was successful.

So early August 2017 found me travelling down to the English/Welsh border

for four days of hoverfly geekery along with plentiful eating. If you've ever been to an FSC centre you'll know they make sure you don't go hungry during your stay! My trip got off to a good start as I spotted Gatekeeper butterflies from the train as it waited outside Shrewsbury and then, while having a look around the town before being collected by FSC staff, I was delighted to find the honeybee mimic hoverfly *Eristalis tenax*.



Eristalis tenax

As with anything it's also always a delight to meet like-minded people and even more so when it's an area of natural history that most folk think you're a bit odd for being so enthusiastic about.

Over the course of the four days, which were mainly centred around becoming familiar with the hoverfly anatomy and terminology that enables identification. Through use of the hoverfly bible, British Hoverflies: An Illustrated Identification Guide by Stubbs and Falk, we kept ourselves amused with frequent shouts of "Roger? I'm not sure if I've got hairy