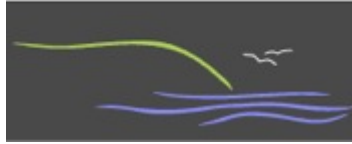


Scarborough Field Naturalists



JANUARY 2021 NEWSLETTER

Hello everyone

I hope you all had as good a Xmas as the current situation has allowed and are looking forward to a better year in 2021. We will be looking at what the situation is immediately after the new year and the results of any changes to regulations and, hopefully, trying to get some mini outings started again so keep an eye on the web site, Facebook and emails.

Happy new year to you all.

Nick Gibbons

SWIFTS

Despite all the problems this year we have got off to a great start.

Jinny has kindly collated all the records and submitted them to North East Yorks ecological data center. They work with Tim Burkinshaw the council ecologist (and Swift group member!), who in turn can request Swift friendly planning in areas identified as strongholds (fingers crossed). She will be sending out information on where we need to cover next year in the next few weeks. Getting information on where we have swifts will strengthen Tim's hand so hopefully it will feed directly into conservation.

We are working with FBOG to get Filey covered. Whitby Nats are covering to the north but have requested help for Robin Hoods Bay area.

We have £139 in the SFNS account. This includes cash paid to Richard for boxes as this has been paid into the bank. If anyone wishes to see the accounts, I can send a copy. We also have a stock of boxes with Richard and we can start to think of approaching owners of sites who may be able to host multiple boxes. If anyone has any contacts with businesses on Taylor way industrial estate please let me know. I am going to contact Sirius as the headquarters building there looks promising.

It might also be worth contacting Scarborough evening news and local radio in spring. Any volunteers for that????

I have not sorted out any speaker systems. Charles is looking at some and I will do some research too. If you have any ideas, suggestions or questions please let me know.

Rob Stark

BLUE-RAYED LIMPETS

On our sea shore surveys, this year, one of the 'must' finds was the blue-rayed limpets. One of the first questions everyone asks is 'how do they produce the blue-rays? Well, this article from britannica.com reveals all.

'The blue-ray limpet is a tiny mollusc that lives in kelp beds along the coast of Norway, Iceland, the United Kingdom, Portugal, and the Canary Islands. These organisms may be small, their size is comparable to that of a human fingernail, but they have a unique and noticeable feature. Bright blue dotted lines that run in parallel

along the length of their translucent shells.

Now, scientists at MIT and Harvard University have identified the two optical structures within the limpet's shell that give its blue striped appearance. First, the researchers scanned the surface of the limpet's shell and found no structural differences in areas with and without the stripes. An observation that led them to think that perhaps the stripes arose from features embedded deep in the shell. To get a picture of what lay beneath, the researchers used a combination of high resolution 2-D and 3-D structural analysis to reveal the 3D nano-architecture of the photonic structures embedded in the limpet's translucent shells.



In the regions with blue stripes, the shell's top and bottom layers were relatively uniform, similar to the shell structure of other molluscs. However, about 30 microns beneath the shell surface, the researchers noted a stark difference. In these regions, the regular platelets of calcium carbonate morphed into two distinct structural features. A multi-layered structure with regular spacing between calcium carbonate layers, resembling a zigzag pattern. And beneath this, a layer of randomly dispersed, spherical particles.

Through a series of measurements and tests, the researchers found that the zigzag pattern acts as a filter, reflecting only blue light. As the rest of the incoming light passes through the shell, the underlying particles absorb this light. An effect that makes the shells stripes appear even more brilliantly blue. The researchers say such natural optical structures may serve as a design guide for engineering colour selective, controllable, transparent displays that require no internal light source and could even be incorporated into windows and glasses.'

John Hume

PINKFEET

Picture shows a small part of a 400+ group of Pink-footed Geese on the Wolds above Muston just before 2.00 p.m. this afternoon. They were disturbed about 25 minutes later by two walkers on the public footpath and took off towards the coast, eventually turning southwards in the direction of Filey. They had been there at least most of the morning and about twenty came in from the coast to join them at about 11.30 a.m. when I went to look at our cattle in the next field. The noise gave them away, otherwise I would have missed them. No doubt they had probably come down to rest because of the fog. Geese have been passing over for weeks now, but there seems to have been an increase in the last two days, with several skeins of well over a hundred as well as a few smaller ones.



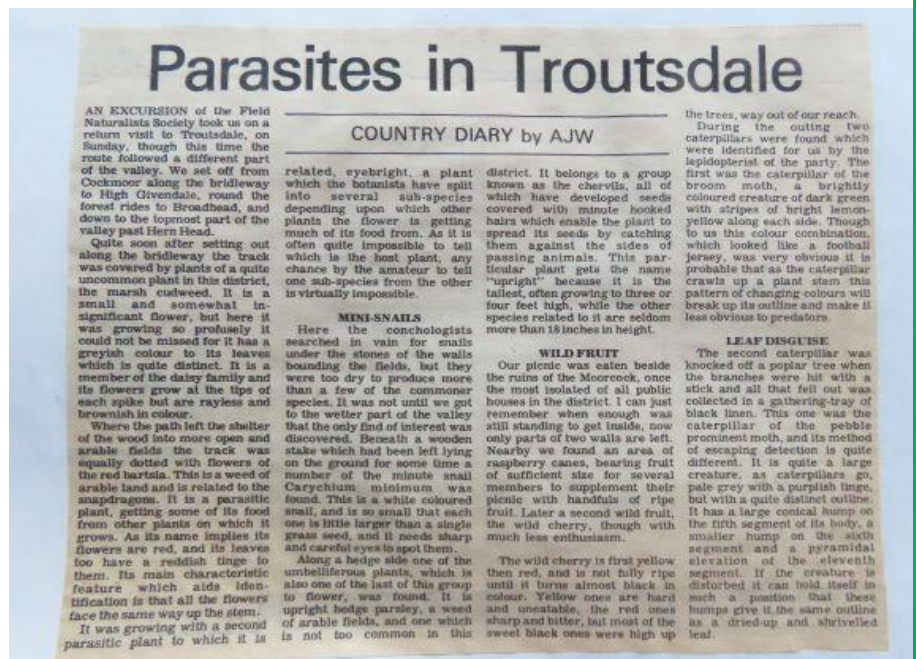
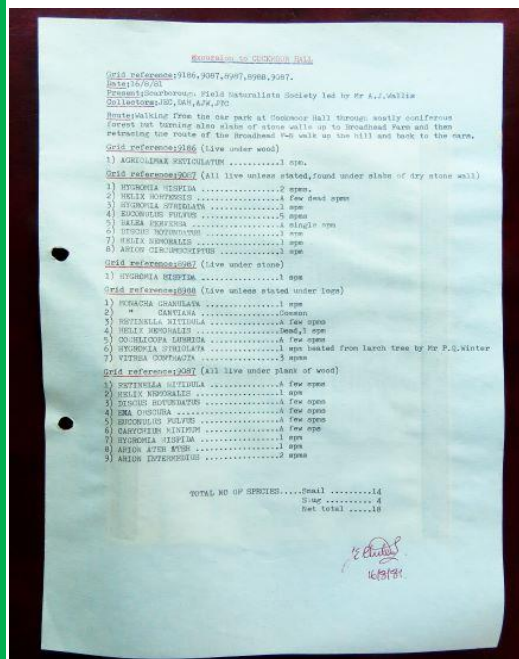
Philip Winter

Eds Note – Looks like a theme for this early winter with large flocks flying over and staying around the Wolds and Humber.

TIPEX AND TYPEWRITER

As a teenager in the late seventies and early eighties, encouraged by Athol Wallis and with his father's mollusc collection as an aid, I did a lot of recording of land, freshwater and marine molluscs, particularly while out on Scarborough Field Naturalists' Society 'excursions'. From 1981, degrees and a career in conservation saw me moving increasingly south, until four years ago when I returned to Scarborough to care for ailing parents. Last

year, when it came time to clear and sell their house after both had passed away, I hoped to find my old mollusc records, and when they did not materialise, I sadly assumed that they had been disposed of. So, it was a wonderful surprise when Brian Cockerill, out of the blue a few days ago, sent me a photo of some of the pages from my record folder with the brief note, 'Do these look familiar?'. The Field Nats was a family tradition - my dad, John Childs, was secretary for eight years and chairman for two. With good foresight, he had passed the records to Ian Massey for safe keeping, and on Ian's death, they had ended up in Brian's safe hands. The last few days have seen me taking copies of the excursion reports - many sites are still familiar favourites, but there are some which I plan to rediscover next year, though my interests are now more entomological than conchological. By chance, a friend and Field Nats member Debbie Harding (now Pavier) who accompanied me on many of my molluscan forays, recently got in touch after many years of lost contact, and it's been a joy to share some of these memories with her too and to make plans for some joint reconnoitres in the future. The photo shows a typical report from one of Athol's excursions and his ensuing Country Diary. I was very proud of how professional my reports looked as I had progressed from handwritten with the recent purchase of a typewriter and a bottle of Tixex. Brian will be pleased to know that my fungus records will come to him in the more modern form of an Excel Spreadsheet!



Joan Childs

POET'S CORNER

From our trip to Wykeham lake dragonfly spotting,
 To Flamborough cliffs sea bird watching,
 A flask of hot tea, binoculars, a reference book,
 Maybe a telescope to take a good look.

Filey brigg was wonderful if not a little breezy
 When Nick climbing the cliff, he made it look easy
 We saw some sea waders and the odd sandwich tern
 And Rob spotted orchids down the bank amongst the fern.

Our field trips to enjoy nature held lots of wonders to see,
 The tiny frogs, sea urchins, "jelly beans" were the highlights for me,
 So next year grab your sarnies, camera, and don't forget your hat for the sun,
 Let's set forth to the beach, the lake, Dalby forest, let's have some fun.

Sandra Branfoot

UPCOMING PROJECTS FOR 2021

HOLBECK CLIFFS

There is a good-sized area of grassland and scrub below the Holbeck car sandwiched between the area covered by the South Cliff Gardens project and the Cayton, Cornelian and South Bay SSSI. The area is designated on the Government 'Magic' site as 'No definitive habitat but habitat exists' and is also partly covered by a designation of 'Registered Park and Gardens. A survey by Rob Stark and Nick Gibbons identified some interesting flora including a number of Bee, Spotted and Pyramidal orchids plus a good range of chalk flora. There is currently no apparent management on the site and there are large patches of Winter heliotrope which are slowly spreading across the area. This species is dominant and where it is got a good stand all other flora is completely suppressed.



We have had discussions with Tim Burnhill of SBC re the possibility of getting this managed. Tim is interested and we propose to carry out more detailed surveys in the spring and will be looking for volunteers to assist.



Winter heliotrope



General view from cliff top

CINDER TRACK

As per the last newsletter we will be trying to do some surveys on the Scarborough to Burniston section of the track, particularly looking for potential bird and bat box sites. The project hopes to look at the rest of the track between Burniston and Hawsker and we will be planning some surveys along this section also in 2021 in discussion with Tim Burnhill.

SCARBOROUGH RUGBY CLUB

As a result of the piece on the Cinder track in the December newsletter Mandy Hillier contacted me regarding some advice for the Rugby club grounds which lie adjacent to the Cinder track. Rob S and myself had a very enjoyable morning with Mandy touring the site and were staggered at what she has achieved with the Club and her volunteers with wildflower banks, tree planting and hedge planting. We have passed Mandy some initial thoughts on the visit regarding further potential possibilities. There is a chance to help make some further improvements and we plan to do a more in-depth survey at the end of April/early May and will again be looking for anyone interested in helping.

Nick Gibbons

MERRY CHRISTMAS AND A HAPPY NEW YEAR