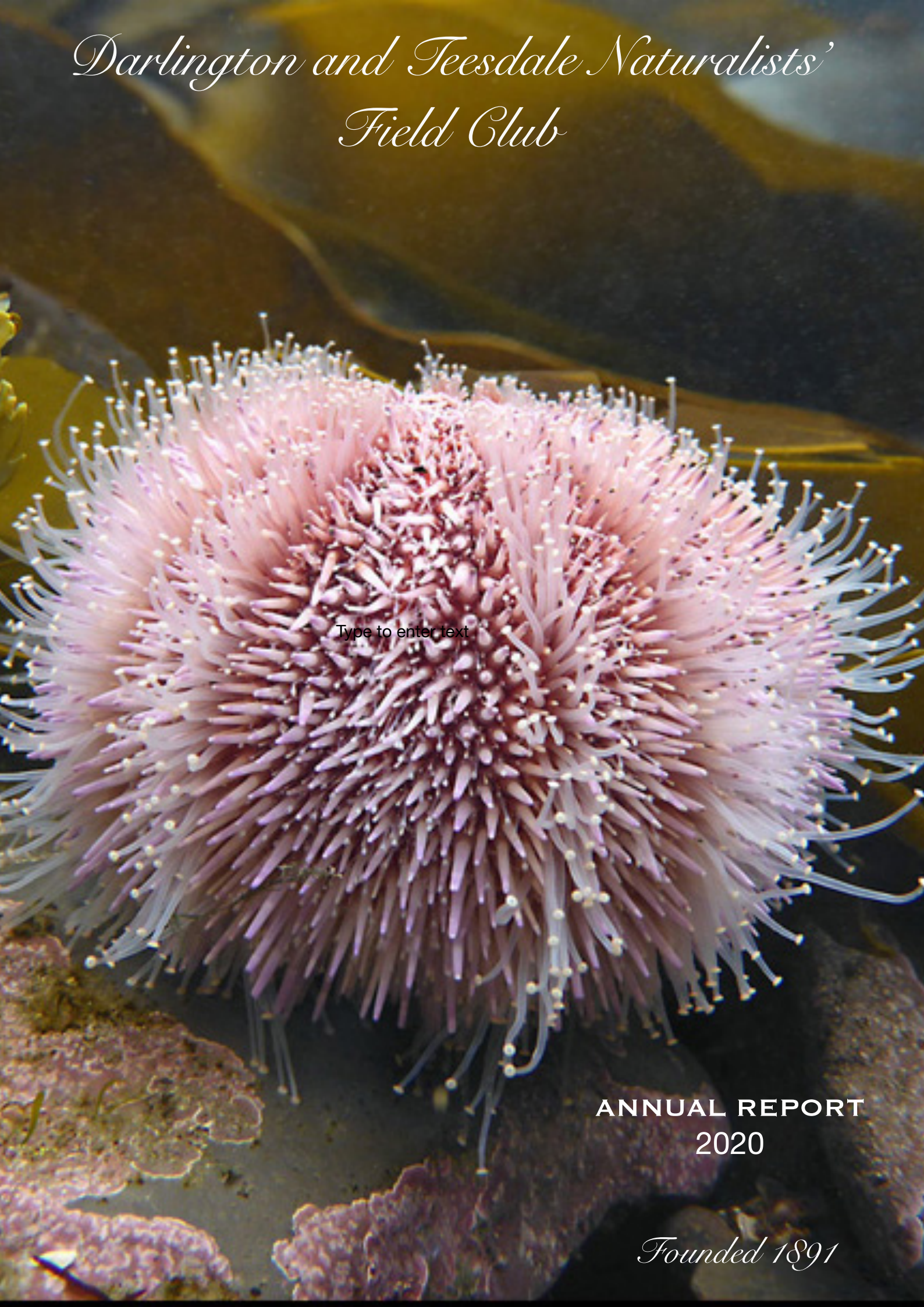
Darlington and Teesdale Naturalists' Field Club



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ANNUAL REPORT
2020

Founded 1891

Darlington & Teesdale Naturalists' Field Club

Founded 1891

Registered Charity No: 510783

Website:- www.dtnfc.org

Annual Subscription

Ordinary member £10.00
Full time student £1.00

Cover photograph courtesy of Joyce Scott Cleveland Naturalists

Echinus esculentus - Common or Edible sea urchin

Officers and Council 2020

President	Falungee Sarker
President Elect	Fleur Miles
General Secretary	Sue Weston
Membership Secretary	Fleur Miles
Treasurer	Martin Chisholm
Summer Programme	Derek Risbey
Winter Programme	John Turner
Editor	Lynne Heslop

Section Organisers

Archaeology	Steve Keeney
Botany	David Selby
Geology	Elizabeth Elliott
Lepidoptera	Brian Wood
Mammals	Don Griss
Marine Biology	Carole Sobkowiak
Mycology	Jill Cunningham
Ornithology	John Turner
Projects.	Carole Sobkowiak

Other Members of Council

Mary Atkinson

Other Organisations

AES
British Pteridological Society
BSBI
Durham Wildlife Trust
Ramblers
YNU
Yorkshire Wildlife Trust

CONTENTS

Council Reports

President	Falungee Sarker
General Secretary	Sue Weston
Membership Secretary	Fleur Miles
Treasurer	Martin Chisholm
Editor	Lynne Heslop
Summer Programme	Derek Risbey
Winter Programme	John Turner

Section Organiser Reports

Archaeology	Steve Keeney
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New Discoveries and Individual Reports

President's Report - Falungee Sarker

Year 2020 has been a challenging year for our club. We have accepted the challenge and continued our club's work in a new way.
At the beginning of 2020, we participated in the Volunteer Fair in Dolphin Centre which was well attended by the public and club members. Our Time Line, Fossil Fern and Ammonite were displayed as well as field identification books which showed the public how to identify trees with accompanying specimens. People were interested in the club's winter programmes and summer walks. In the beginning of March, Derek Risbey and I completed our short indoor course on Field Botany. Thanks to Derek for organising this and to all the club members who joined the course. Then on 18th of March as we were preparing for the Q.E.College yearly exhibition "Wellbeing Fair", the country was facing lockdown with a new Corona virus. We had to evaluate the new normal and adapt a way to steer our club's journey for this new challenge. Members responded to this challenge by recording flora, fauna and other wild life on their daily walks and then sending the reports to the respective section leaders. We also helped each other with photographic identification. This year we have discovered many "first time records in Darlington and/or Co Durham". There is a new section created in this issue of Annual report with our new discoveries. Inosculation is a natural process rarely seen, please read the article written by Lynne Heslop.
The spread of salt on our roads encouraged the growth of Reflexed salt-marsh-grass *Puccinellia distans*. We were also recording in Darlington other new arrival grasses like Squirrel-tail-fescue *Vulpia bromoides* and Water Bent grass *Agrostis semiverticillata*. With climate change on our door step it will be interesting to record all flora and fauna.
This has been an extraordinary year, but still our conservation minded organisation took part in a number of conservation works. Garden Wild Flower Hunt, a new initiative by BSBI, launched in Spring 2020.This survey helped us to find out which wild flowers are growing in our garden and at the same time we improved our ID skills. "No Mow May" was set up by Plant life. Again we recorded wild flowers growing in our gardens and Plant life calculated the amount of nectar each garden produced for pollinators. I do hope members will participate again next year.
Guess the Wild Flower picture quiz by Derek Risbey was popular among the members. This was a real joy in such a difficult and isolating

time. Thanks go to Derek. We have so many weeds growing in our paths and pavements. I think these weeds are fascinating in their ability to survive in inhospitable places by their intelligence and adaptability. It will be valuable to collect this information.
We had successful winter talks and conducted council meetings using Zoom. We found this was convenient to join from home. Thanks to John Turner and Sue Weston for organising the events. This year at the BSBI annual exhibition, I presented a ten minutes talk about how to take the visually impaired people out for a woodland walk to enjoy the wild life. Nature is for everyone and visually impaired people should experience the enjoyment of wild life just like we do.
I would like to thank all the club members for their continuous support. Next year 2021 will be the club's 130 years anniversary and I wish the club many prosperous years to come.

Falungee Sarker

General Secretary - Sue Weston

The year started well with the Winter Programme in January and a Natural History Quiz.
Meetings were held in February and March to plan for two Wildlife Explorers events later in the year.

In March the country was put into lockdown with the Covid19 pandemic and all meetings and events were stopped. This was a huge shock to everyone. This meant we had to think about how to keep in touch with members. No one was sure how long it would be before things would be back to normal!

Firstly, contact was made with most members via the telephone to ensure they were coping OK. This was quite important as quite a number of members live alone and some are elderly.

Derek Risbey created a wonderful Botany identification activity for members that was sent via emails each week. As it was Spring time and with those able to have a daily walk, recording of nature continued. This included botany, birds, fungi and butterflies & moths. Fal Sarker, John Turner, Jill Cunningham and Brian Wood created a report for each month of items that members had seen locally and had sent to them. The reports were then sent out as a Monthly email with any other club news. This method of communication kept members informed and also allowed them to share their own finds. Emails became the main communication method for the rest of the year.

Council Meetings were held over the year by the Zoom application.

The first Lockdown required all people to stay at home with only essential workers allowed to continue working. Everyone could exercise daily but only locally. Only food shops were able to stay open with restrictions on numbers. These measures were to protect us from the Pandemic and the Lockdown measures were put in place on March 23rd. Restrictions were eased in May but some variations of lockdown all through 2020.

These restrictions were devastating for everyone and particularly the Field Club where everything was on hold. Although restrictions were eased over the summer months and into early Autumn mixing with others was not allowed and the need for communication via email continued until the end of the year and into 2021. Monthly newsletters and reports continued to be created and sent to members.

As Autumn approached the Council agreed that Winter Meetings would need to be held via Zoom and that we would need to subscribe to this method of communication. John Turner arranged for some speakers who were willing to use Zoom to deliver some interesting talks over the Winter months. These meetings were held monthly rather than the weekly face to face ones to make them more manageable. This is continuing and has made us realise that we could have speakers from anywhere in the world by using video meetings.

It has been a year where online communication has been vital to keeping in touch and hopefully the Field Club will manage to continue successfully with plenty of members subscribing to being part of it.

I would like to thank everyone who sent information to the club email account this year to share their walks and finding, also to those who sent photos, reports and snippets to share. These have been incredibly important to ensure we feel part of the Field Club at a time when the whole world changed making us all seem distant and changing the way things were done.

Membership Secretary - Fleur Miles

I became the Membership Secretary at the February 2018 AGM so this was my third year in post.

Membership, at the moment, stands at 69 in total. That is 63 Ordinary Members, 5 Honorary Members and 1 Life Member. Membership went down from 72 in total last year to 69 in total this year. We welcomed 3 New Members. 2 Members left due to other commitments and moving away. 1 Member - Andrew Rolland - sadly passed away on Mon 23 March 2020. At the time of writing, we are awaiting 16 renewals.

As I was unable to start collecting Membership Renewals in October 2020, on the door in the usual manner, at the start of the Winter Lecture season, I would like to thank Members for adapting to the new pay-on-line system. Two thirds of Members used the banking on-line system whilst I collected from others, by post, who do not do on-line banking. I would like to thank Martin Chisholm, the Treasurer, for his assistance.

Treasurer - Martin Chisholm

The accounts are prepared on the receipts and payments method and are for the financial year ending 31 December 2020. Overall, there was a small surplus. Thank you to Members for renewing their subscriptions and for the additional donations. The Club also received a £50 legacy and a healthy tax refund, which contributed to the surplus.

Income, compared to 2019, was significantly reduced due to the lack of meetings and related entrance donations. The introduction of payment of subscriptions by Bank Transfer has been positive for the Treasurer and Membership Secretary. Hopefully Members have found the process straightforward and will use it as the preferred method in future years.

Expenditure was minimised. Room rental covers the cost of Zoom subscriptions to allow the monthly 2020 winter meeting programme and Council meetings to proceed. The club ran no Sponsorship activities during the year thus no exceptional items.

The Operational Income and Expenditure for 2021 is difficult to forecast. Income will depend on whether face to face meetings will go ahead in the Autumn and the reduction in the tax refund based on the 2020 reduced income. Expenditure is likely to be similar to 2020 with only a very small chance that any Wildlife Explorer events could happen.

The Club's reserves policy aims to ensure one year's running costs are covered and remains at a conservative £5000. The balance remains healthy for use to support the aims and objectives of the Club. Council has approved Sponsorship projects and activities to encourage the involvement of children and families in natural history. Hopefully these can resume at some point during the year. The surplus of the Balance over Reserves easily covers the forecast expenditure in 2021.

At the time of writing the Accounts are yet to be audited, though with the relative inactivity on the Account, no issues are foreseen. Thanks go to Ian Hart for his continued contribution to the audit process.

DARLINGTON AND TEESDALE NATURALISTS' FIELD CLUB

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st DECEMBER 2020

INCOME	**2020**	**2019**	**EXPENDITURE**	**2020**		**2019**	
	£	**£**		**£**		**£**	
Annual subscriptions	540.00	620.00	Room Rental	43.17		243.00	
Entrance donations	215.00	535.55	Subscriptions	253.00		185.00	
Donations	127.00	0.00	BSBI		35.00		30.00
Field trip fares	350.00	0.00	AES		20.00		20.00
Events donations	0.00	10.00	YNU		30.00		30.00
Income tax refund	258.01	242.43	Durham WLT		30.00		30.00
Interest	0.41	1.08	Yorkshire WLT		50.00		50.00
			Ramblers		63.00		
			British Pteridological Society		25.00		25.00
			Printing	185.25		279.75	
			Annual Report		185.25		176.50
			Programmes & Publicity				103.25
			Administrative Costs	-		-	
			Website	280.00		140.00	
			Donations	-		1535.00	
			Darlington Wildlife Explorers (2018)		-		1,100.00
			World Around Us competition		-		175.00
			6th Form College		-		250.00
			Speakers' expenses	50.00		140.00	
			Insurance	216.60		217.00	
			Equipment	-		-	
TOTAL INCOME	1,490.42	1,409.06	Social events expenses	-		-	
Profit/Loss on year	-112.4	1350.68	Field Trip expenses	350.00		19.99	
	1,378.02	2,759.74		1,378.02		2,759.74	

BALANCE SHEET AS AT 31ST DECEMBER 2020

Balance at 1st January 2020		**Balance at 31st December 2020**	
	£		**£**
Cash in hand	23.01	Cash in hand	5.01
Barclays Current A/C	11,376.03	Barclays Current A/C	11,506.02
Business Premium A/C	539.26	Business Premium A/C	539.67
	11,938.30		12,050.70
		Cheques not yet drawn	-
Profit/loss	112.4		
Income & Expenditure A/C			
	12,050.70		12,050.70

Editor - Lynne Heslop

Thank you to all the Council Members for submitting their reports under these difficult circumstances and I hope it will make for the usual enjoyable reading by the members. Thank you to Martin Chisholm for his technological guidance and to Mary Atkinson for the final proof reading.
We hope to put the Annual Report on the website this year as well as continuing to provide the usual hard copies.

Summer Programme - Derek Risbey

This is my first year in the job of running the summer programme. Once I had the programme laid out, the work was very easy, because it did not take place due to the covid restrictions.

The programme laid out was very exciting and I am sure it would have been good and interesting, but it was not to be. I would like to thank everyone who offered to arrange an outing that didn't take place although the intention was there. We had three outings arranged with the Yorkshire Naturalists' Union (YNU) which I am sure would have been first class.

Looking to the future with any certainty is impossible. So as the summer programme time approaches we will be controlled by the covid rules and scientific data. When the time is right I am ready to spring into action to produce the programme. At this stage we need to be patient and see how things turn out.

If anyone has any suggestions for the coming year, I would love to hear from them, so we can use their ideas, hopefully in this coming year.

Winter Programme - John Turner

January 2020

13	Quiz Night	Sue Weston
20	Bewick - The North East's Wildlife Artist	Keith Gunning
27	Ecology & Habitat Conservation	Ian Marshall

February 2020

3	Review of the Summer Outings - part 2	Derek Risbey
10	All You Ever Wanted To Know About Lampreys But Were Afraid To Ask	Dr. Martin Lucas
24	Nothing Like Any European Animal - Collecting Fauna & Flora On Cook's Voyage 1768-1770	Phil Philo

March 2020

2	AGM followed by Shetland	Sue Bradley
9	Butterflies of NE & N Yorks	Martin Partridge

Lockdown occurred and the rest of the events for March and April had to be cancelled. The rest of the Winter Programme was undertaken virtually through the use of Zoom.

September 2020

14	Garden Moths	Martin Chisholm

October 2020

12	The Brightwater Project Revisited.	Dafydd Jones

November 2020

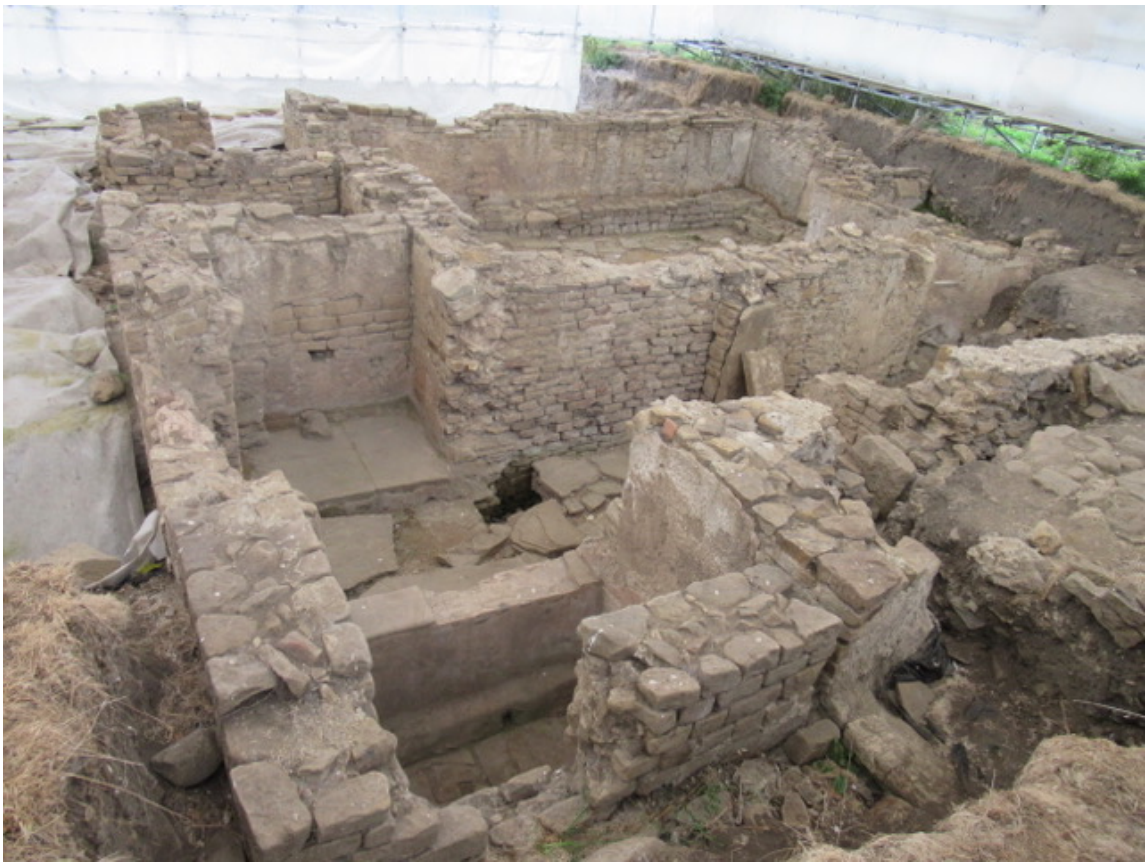
16 Members' Photos

Section Organisers' Reports

Archeology - Steve Keeney

The Covid 19 Pandemic and associated restrictions to mitigate its spread has made this a very different and difficult year for the Field Club. We, like many other organisations, have had to cancel our usual programmes of outings and meetings and there is still uncertainty when they will be able to return. However the positive news of the roll out effective vaccines and when it is safe to do so, the Club activities will return.
Dr Richard Taylor Manson the Club's founder and first president was appointed Darlington's first Public Vaccinator. It would be very fitting if we can celebrate the Club's 130th year in 2021 and return to our usual activities as a result of an effective and safe immunisation programme.
During lockdown I enjoyed a daily walk and enjoyed rediscovering many footpaths close to home. We are blessed in Darlington with good footpath and cycle route networks. Visiting local nature reserves (and with a bit of research) discovering more about the history of my local area certainly helped me during these strange times.
When restrictions permitted I made short journeys to visit sites of archaeological interest such as Durham, Raby Castle, Piercebridge, Barnard Castle,The Bowes Museum, Auckland Castle deer park and Binchester Roman Fort. We are spoilt for choice!
Binchester Roman Fort visitor centre is now closed but when it reopens next year it is well worth a visit. The recently excavated site of an early bath house is now covered by a huge marquee and it is amazing how much and how well preserved the site is. The preservation was helped by the original site when abandoned becoming the refuse dump of a later fort and was then paved over, an early example of a landfill site?

My walk around Piercebridge was made more interesting after downloading the "Battle of Piercebridge Trail" created by Phil Philo on the Tees Archaeology Website. This site is well worth visiting with free booklets to download; The Historic sites register and news of a new lottery funded "Seascape Project" for 2021.
I would just like to finish by thanking all Council Members and particularly Sue Weston who has done an amazing job as Secretary keeping us fully informed and updated as well as hosting Zoom meetings and Council Meetings during this difficult period. I would also like to thank all members for supporting the Club and hopefully to see you all soon!



Binchester Roman Fort - the early Bath house restoration

Botany - David Selby

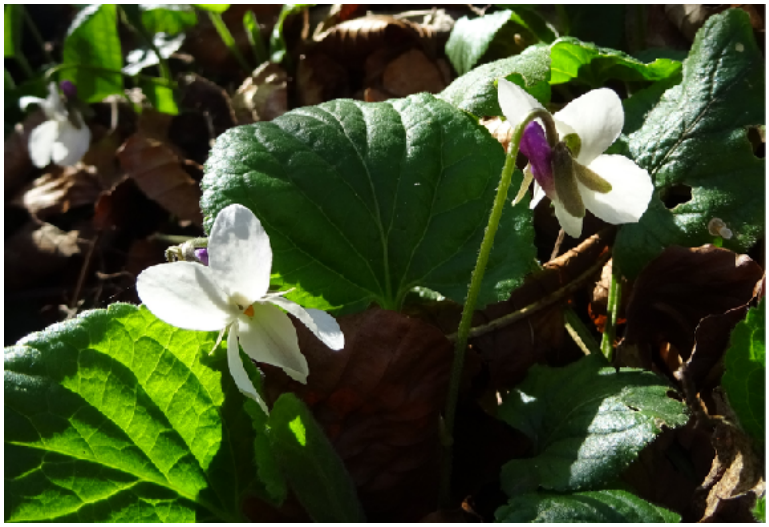
This report often starts with the words, “We have had another good year.” Perhaps surprisingly the same is true in 2020 though it has been a very different year.
It started well enough in January with an excellent Botany Class for members run by Falungee Sarkar (Fal) and Derek Risbey. These were very informative, practical and well attended - until the pandemic struck. Thank you to you both for all the work you put in to make them so successful.
In March the pandemic stopped our summer field programme before it had started. We had planned to link up on three occasions with the Yorkshire Naturalists Union (YNU) but unfortunately that could not happen. Instead Derek organised a photographic ‘Guess the Wild Flowers Competition’ which was a great success and requested by other groups.
Members are to be congratulated on the extensive observations they reported on their various outings as the restrictions allowed. In all 47 reports were received over the summer which given the challenges faced is remarkable.

The highlights are reported by Falungee Sarkar below:

Despite the pandemic, club members regularly recorded a substantial range of flora on their own walks. These are the highlights of our Covid-19-defeating botanical records for 2020.

From the top of the Cronkley Fell to the South Gare at the Tees mouth there has been a profusion of flora reported. Tom Fowkes has seen thousands of blooms of Spring Gentian *Gentian verna*, as far as eye could see there. This was the first week in May. John Binks first found this plant in Teesdale forest, Durham in 1650. No human activity was recorded in South Gare but there was no shortage of wild flowers such as the Northern Marsh-orchid *Dactylorhiza purpurella* and Pyramidal Orchid *Anacamptis pyramidalis*

Most of us recorded Sweet Violet *Viola odorata,* the first recording dating back to 1629, but with the advancement of molecular biochemistry we can identify plants at its subspecies level, *Viola odorata var.dumentorum.*
Jill Cunningham has found some new locations of Black Poplar *Populus nigra L.* In the past this dioecious tree has been systematically recorded in Darlington. Jill also found a new location of Springbeauty *Claytonia perfoliata* at a densely populated site in Darlington.Road verges had an opportunity to be very showy this summer. This was the result of the Council finally listening and delaying their premature mowing. People had the chance of enjoying wild flora and fauna.



Sweet Violet
Viola odorata

John Turner recorded Giant Bellflower *Campanula latifolia* on a farm track. Some plants like Gallant-soldier *Galinsoga parviflora*, Shaggy-soldier *G.quadriradiata*, and Henbit Dead-nettle *Lamium amplexicaule* were recorded in the Cockerton and North Road areas that were used by many vehicles which had probably transported the plant seeds. What is probably another transplant was a Large-flowered Evening Primrose *Oenothera galzioviana*, a single plant found near the railway line in Darlington.

Ian Bond found Galingale *Cyperus longus* close to a pond and most probably was an introduction. Mary Atkinson spotted American Skunk Cabbage *Lysichiton americanus* with its showy yellow flowers. This invasive species arrived in the country in 1947.
Fal and Derek again recorded many Yellow Star-of-Bethlehem *Gagea lutea*. Recording this plant every year is a special event in the club's calendar. It was first recorded in 1571.

The Club also recorded Herb-Paris *Paris quadrifolia*, a rare plant that grows in the tufa-damp calcareous soils in ancient woodland. We recorded more than 400 plants and the club should continue to monitor the plants and protect the woodland.

Herb Paris
Paris quadrifolia

There were ‘not so common’ grasses recorded such as Water Bent Grass *Agrostis swiverticillata* by Ian Bond in South Park. Also Squirrel-Tail Fescue *Vulpia bromoides*, has been found in Low Coniscliffe, Darlington. The plant was first recorded by the father of botany John Ray in 1670. The Smaller Cat’s-tail *Phleum pratense ssp. Bertolonii* has now got its full species status as *Phleum bertolonii.* We recorded this grass in John Williams Boulevard South.
Some of the sea side flora have been recorded along salted main roads. Lesser Sea-spurrey *Spergularia marina*, Danish-Scurvy grass *Cochlearia danica*, and Salt-marsh-grass *Puccinellia distans* were among them.
There were many ferns growing in the wall crevices in Darlington. Some of the walls had lime stone mortar supporting ferns like Wall-rue *Asplenium ruta-muraria*, Maidenhair Spleenwort *Asplenium trichomanes* and Hart’s-tongue *Asplenium scolopendrium*.

Maidenhair Spleenwort
Asplenium trichomanes

A wonderful new find by Jill Cunningham and Fleur Miles with a profusion of wild flowers was the derelict site on John Williams Boulevard. Meanwhile the local nature reserve ‘The Whinnies’ still surprises botanists with new plants like Pepper Saxifrage *Silaum silaus* recorded here for the first time by Jill Cunningham. Actually this plant was first recorded in 1568.

Pepper Saxifrage
Silaum silaus

One of the tall and pedestal forming tufted sedges Greater Tussock-sedge *Carex paniculata* has been growing here too. Special Hawkweeds were significantly reduced due to the activities of bikes. Durham Wildlife Trust has been informed.
Sue Weston recorded Common Cow Wheat *Melampyrum pratense* in Tunstall Reservoir woods. This plant was first seen in this country in 1571 but it is now declining.

The natural world has many surprises for us. John Baker has found an unusual looking Great Mullein *Verbascum thapsus* and Jill Cunningham found *Chara vulgaris var.papillata* in a small stream in Ravengill Beck on the North York Moors.
Please take notice when recording plants because there are many escapees from gardens and there are numerous varieties of cultivars.
I would like to thank all the club members for a fantastic recording at a very difficult period of social isolation.

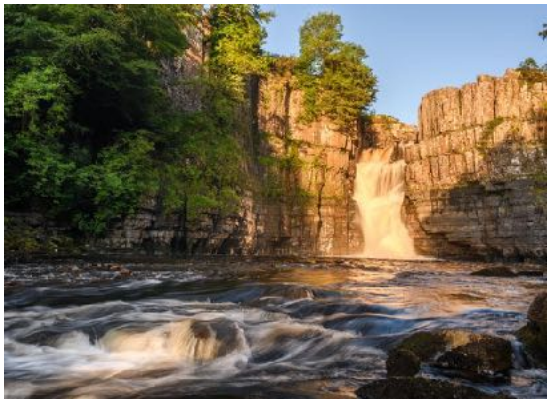
Bibliography:
Discovery of the Native Flora of Britain and Ireland by David Pearman
New Flora of the British Isles by Clive Stace.

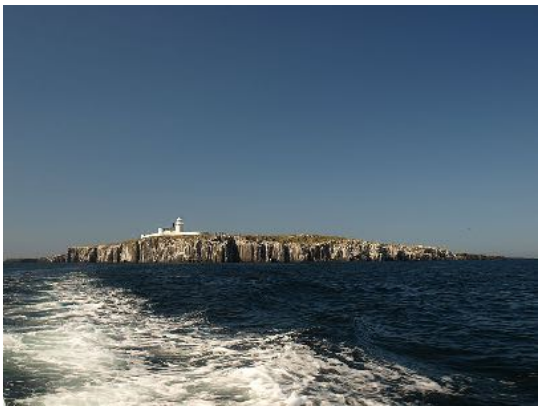
Towards the end of the year we were able to schedule the occasional meeting on Zoom and look forward to one focussed on botany by Lizzie Madison. For those of us comfortable with that approach, they provided a much needed boost to our spirits after the lockdowns and restrictions in the darker days of winter. Thank you especially to Sue Weston, John Turner and the speakers for making it possible.
As I write this on a wet December afternoon, I am sure we are all looking forward to returning to normality and a Summer Programme sometime next year and enjoying the local flora (and fauna) together again.
Thank you to all our members who have rallied to make this extraordinary year a memorable one for good reasons too.
Finally a thank you to all Section members but particularly to Fal and Derek for your support throughout my novice year as Botany Lead (not least with this report). I have learned so much but also realise I have so much more to learn.

Geology - Elizabeth Elliott

2020 was a disrupted year due to Covid 19 making it impossible to have summer field trips together although many of us went out individually and enjoyed the landscape and wild life.

Much has been said in the media over the past year about climate change. Climate change is not new. If we go back to ancient times there were extremes in climate with eras when the climate was hot due to volcanic activity and cold during Ice Ages. These events have altered the landscape. Whin Sill rock which is volcanic in origin is found near High Force, Teesdale and northwards as far as the Farne Islands in Northumberland. The dales tend to have steep sides and flat bottoms due to movement of the glaciers in Ice Ages.





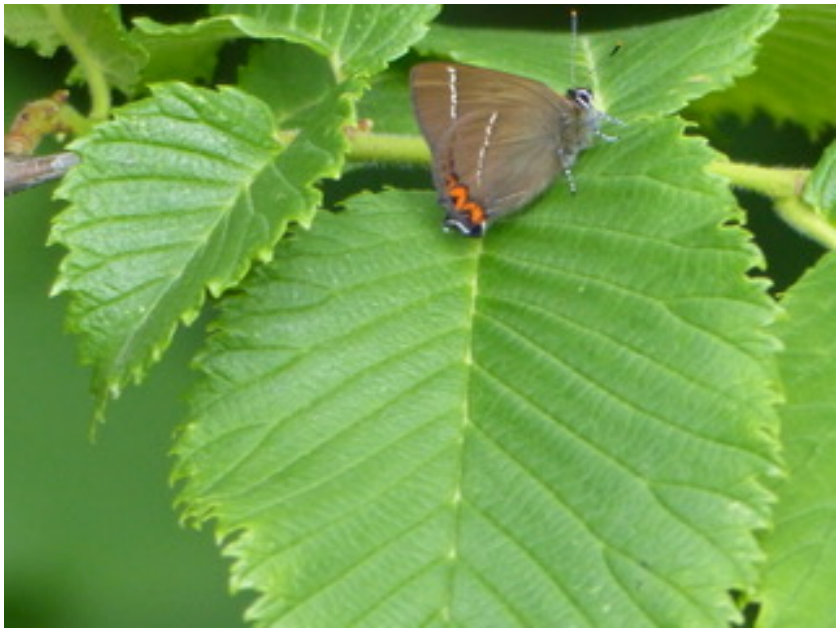
It would appear that the present rise in global temperature is fuelled by man's activities. The industrial revolution polluted the atmosphere and the watercourses which affected both man and the wildlife. Fossil fuels were used to provide energy for the industrial processes. The burning of these fuels released carbon dioxide into the atmosphere. Carbon dioxide can be removed by photosynthesis carried out by green leaves of plants the most important of these being mature trees. Sadly far too many trees have been cleared to provide more farm land and housing for an ever increasing human population

Carbon is stored in rocks, in sediments and in peat bogs. Another site of storage I recently learned about is in the depth of the oceans. We should endeavour not to disturb these stores.

So what can we do? We can think about the energy we use. Do we need to use the car so much? How is our electricity obtained? Some companies get electricity only from renewable sources. We can discourage the felling of trees and plant more. Recycling and reusing of articles also reduces energy expenditure. I expect you can think of more.

Lepidoptera - Brian Wood

Thank you to those members who sent me records of their sightings of butterflies and moths during the very restricted 2020, it would appear that although more people are reporting sightings of butterflies the numbers recorded are falling.
The most numerous species seen early season was Orange Tip, Small Tortoiseshell and Peacock were also well reported through the season, my first sighting of Brimstone was 25th March and I had regular reports of these butterflies going into the summer. Butterfly Conservation report that due to due to climate change some species are on the wing earlier than “normal” leading to problems when the weather deteriorates. A small number of Painted Lady butterflies were seen but nowhere near the 2019 numbers, this is the usual pattern with this species. President Elect Fleur Miles was fortunate to spot a White Letter Hairstreak in the Baydale area in June, these butterflies frequent the tops of trees and are usually difficult to find.



White Letter Hairstreak

The Barton area produced the most diverse number of species probably due to John Turners regular walk around his patch. I had quite a number of moth species reports from Jill Cunningham and Martin Chisholm, Jill from her many outings and Martin from his garden moth trap. It would appear that climate change is also assisting the movement north of quite a few insect species. Hopefully 2021 will see us able to resume our summer programme outings and enjoy recording our flora and fauna.

Marine Biology - Carole Sobkowiak

Unfortunately we were not able to have any field trips to the seashore this year due to Covid 19. We would normally enjoy paddling around the rock pools with our buckets and nets looking at the marine life.

Here is an example of what we might have seen:

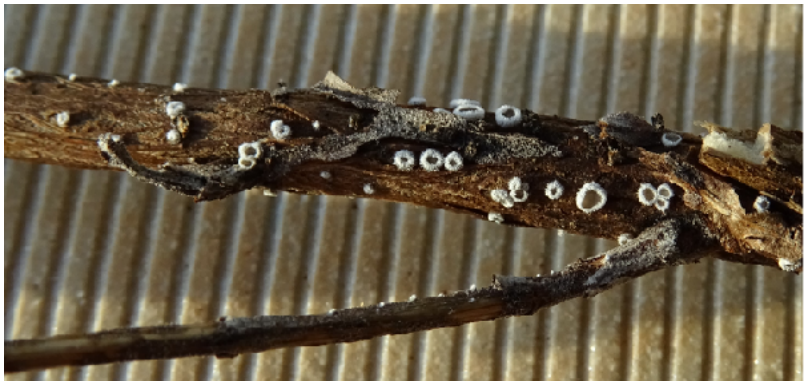
Beadlet Anemone

Sea anemones are sometimes called the flowers of the sea. They are in fact animals closely related to jellyfish and corals belonging to the order Cnidaria. The name is derived from the Latin to mean 'nettle' and all the animals in this group have stinging cells to protect against predators.

Climate change is very much in the news at the moment. The global mean sea level has risen 8-9 inches since 1880 with one third of that in the last two and a half decades. This is due to rising water levels of meltwater from glaciers and ice sheets together with thermal expansion of seawater as it warms. It is predicted that it will rise by 30 cm by 2050.

Mycology - Jill Cunningham

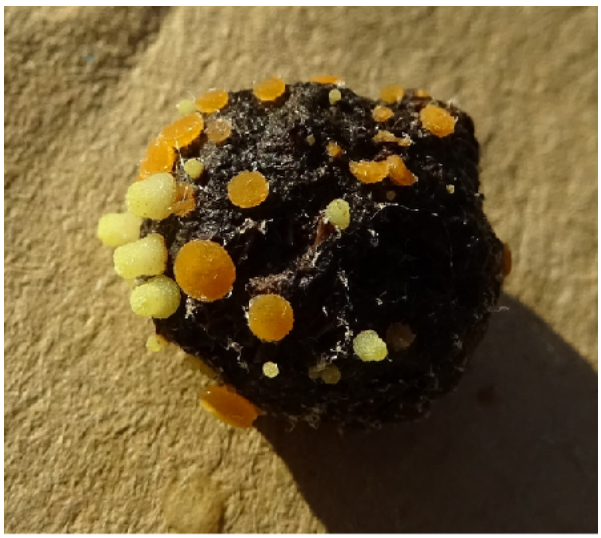
Over the year Covid restrictions have forced many to do ‘walks from home’ and club members have found a surprising array of fungi in their local area including Collared Earthstars, Orangepeel Fungus, *Bartholeta* paradoxa on Ginko biloba leaves, Oyster Fungus growing on a litter bin and ‘Bear’ shaped Shaggy Brackets near Baydale.



Lavender stem with *Lachnella villosa*

The early Lockdown and the national ’Fungi in your Garden’ week encouraged me to delve more deeply into the world of Mildews and to familiarise myself with their microscopic growth forms. Powdery Mildews generally form in dry conditions and Downy Mildews in wet, both taking hold of plants under stress. *Peronospora dipsaci*, the Downy mildew on Teasel, at Merrybent was a rare find.

Curiously even rusts and mildews found around Cockerton have microscopic parasitic fungi on them; *Tuberculina sbrozzi* in Vinca rust and *Ampelomyces quisqualis* in Herb Bennet mildew - I don’t think I can go much more micro than these! Larger notable fungal species have been Bleach cups, *Disciotis vinosa*, along the Back Path; Toads Ear, *Otidea bufonia*, at Corbridge and Wrinkled Peach, *Rhodotus palmatus*, at Blackwell Grange as well as ‘pre-lockdown’ Gorse Crampballs, *Daldinia fissa*, found on Burnt Gorse at Castle Eden Dene and Rainton Meadows.



Rabbit dung with *Cheilymenia granulata*

Late autumn produced the tiny caps of *Arrhenia rickenii* on moss at West Park, Staindrop Road and Cockerton – these urban finds were unexpected as this is a rarely recorded fungus. A walk round the Skerningham Woodlands in December gave the highlight of the year – Fenugreek Stalkballs, *Phleogena faginea*, infesting a dead Oak trunk and a very rare sight north of Warwickshire.

Slime mould
Diderma hemisphaericum

Fenugreek Stalkball
Phleogena faginea

Sadly all group walks, along with the Fungus Foray, had to be cancelled due to Covid restrictions but club members have emailed photos for identification and on a positive note it has enabled me to focus on the local area and research, investigate and microscope the micro-fungi in the time spent at home.

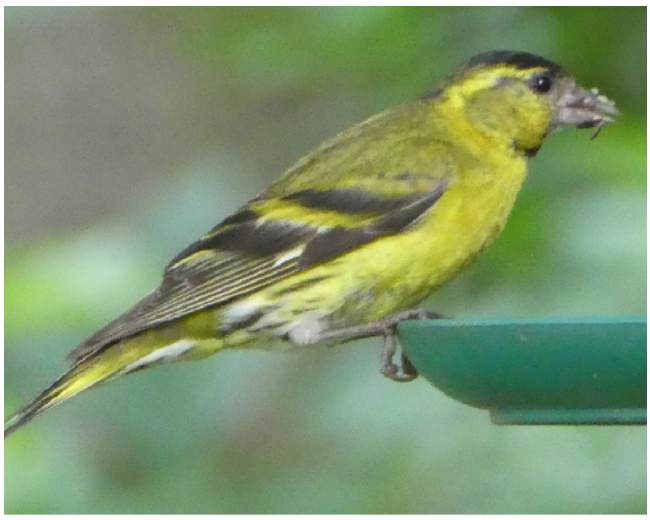
Ornithology - John Turner

The last three quarters of 2020 were probably the most disruptive in the club's
history, except for the two world wars, due to the Corona virus pandemic. The first lockdown prevented all meetings inside and outside for three months, followed by restrictions on the numbers who could meet indoors and outside and the year finished with another total lockdown. This precluded all group activities of the club for the remainder of the year and will almost certainly prevent these activities for the start of 2021. Fortunately members took advantage of the allowed half hour of outside exercise to be become more familiar with the habitats and wildlife surrounding their homes and were able to send reports of their local birds, insects and flora to the respective leaders in the club.

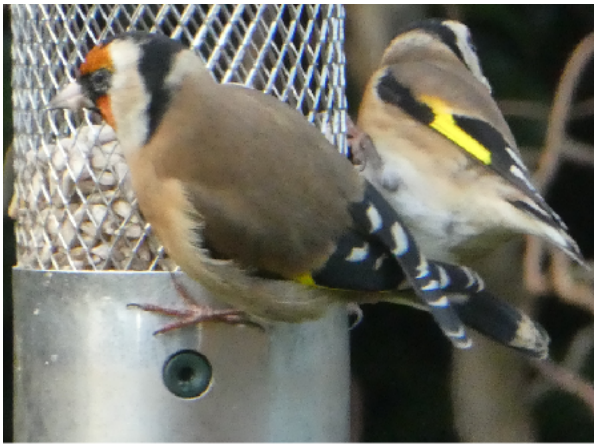
FIRST QUARTER – JANUARY TO MARCH
For most of this quarter the weather continued the pattern from the previous months with mild temperatures and heavy rainfall leading to severe flooding in the fields all around our area. Farmers estimated that they would loose about 30% of autumn sown cereals and oilseed rape and this eventually turned out to be correct when arable fields had large barren patches at harvest time. These patches initially attracted Skylarks and other ground nesting birds in the early spring, but later heavy dosing with weed killer and insecticide drove many birds away.
Despite the poor weather the winter visitors arrived and large flocks of Fieldfares and Redwings were to be seen in fields and hedgerow trees. Few were recorded on Darlington green spaces and in gardens. Winter water birds were well represented with large flocks of Widgeon, Teal, Golden eye, Shelduck and Shoveler on the local lakes. Flocks of Whooper swans were recorded grazing on fields and on the water. The surrounding wet meadows had large flocks of Lapwings and Curlews with a few Black tailed godwits in the pools.

Gadwall

Siskins were recorded on garden feeders while Goldcrests scavenged for insects in nearby shrubs in many gardens.



Siskin



Goldfinches

Sadly Yellowhammers were again scarce, although about 10 years ago they were frequent in hedges and even at garden bird feeders, only one was recorded in a Darlington garden. Reed buntings were recorded on garden bird feeders well away from the reed beds.
This first quarter was notable for many rare species either as vagrants from North America and the East or as potential new breeders from the nearby continent. While most of these were recorded at coastal observatories, there were some interesting examples in our locality. The Little egret roost at Bolton on Swale Lake regularly had a Western cattle egret and two or three Great white egrets in the early morning just after dawn. There was also a Ring-necked duck on the water, swimming in a small flock of Tufted ducks. Nosterfield reserve continued to host the American Lesser yellow legs that had appeared the previous year. This reserve also recorded a Scaup and a female Smew. A Long-tailed duck was recorded on Hartlepool harbour.

Common Sandpiper

Avocet

On February 22nd the Club had a coach rip to WWT reserve at Caerlaverock after the original date a week earlier had to be cancelled because the reserve was completely flooded. As always the highlight of the visit was the feeding of the swans and ducks. Parts of the reserve were still flooded but members were able to walk around most of the reserve to see a Hen harrier, a small flock of Yellowhammers the big flocks of wintering Barnacle geese and a wide selection of ducks.
By the end of March Blackbirds and Song thrushes and other small birds were in full song and some seen carrying nesting material. We also enjoyed the start of the warmer, drier weather that continued to become the record breaking warm dry spring.

THE LAST NINE MONTHS OF 2020
During this period many members recorded the birds seen around their homes in Darlington and some of the surrounding villages. Some gave full lists and photographs of their local birds while many others gave individual sightings
We were able to collect valuable data on the birds of Darlington, Barton, Gainford, Croft and Welbury. This made it possible to produce detailed monthly
reports of the birds in these places. While no rarities were found its is interesting to see the differences and similarities between the different places. One interesting point was the effect that a large pond or river has in increasing the variety of birds in its vicinity. It is also clear that villages such as Barton that are surrounded by mainly arable farmland have fewer species than such as Gainford that has more woodland and the River Tees. This does seem to illustrate the serious effect that modern arable farming is having on wildlife.
Finally I would like to thank all those who sent in their sightings during this difficult year.

Projects - Carole Sobkowiak

Darlington Wildlife Explorers

Unfortunately we were unable to hold any events this year for young people and their families due to Covid 19.

Durham Wildlife Trust Conservation Committee

I was invited to become a member of this new committee at its inaugural meeting on November 16th 2020. The purpose of the group is to identify the need and opportunity for the delivery of habitat and species conservation projects across the Durham Wildlife Trust operational areas.

Bright Water Landscape Project www.discoverbrightwater.com

In the summer of 2020 I was invited to join the Board of Bright Water. This is a Landscape Partnership Scheme centred on the catchment of the River Skerne in Southern County Durham and Darlington. It extends from the Durham Magnesium Limestone Plateau in the north to the Tees Lowland in the south.
The Project is generously supported by the Heritage Lottery Fund (HLF) and was initially granted a budget of £2.6 million leading to a budget of £3.2 million.
It is called Bright Water because the Norse word “skirr” which gave its name to the River Skerne, means “bright and clear” and describes how the area would have looked when first settled by the Vikings – a vast Brightwater wetland.
It aims to restore and celebrate the natural and cultural heritage of the area surrounding the River Skerne and its tributaries. The heritage includes Neolithic, Iron Age and Roman settlements. There are deserted medieval villages and the remains of a Bishops castle with deer park walls and a swannery. There is an abundance of flora and fauna along beautiful riverside walks. It is hoped to make further developments in Darlington. Dafydd Jones, who is the Natural Environment and Access Projects Coordinator for Bright Water gave a most interesting talk to the Field Club on October 12th 2020.

Snipe Pond

The Friends of Snipe Pond group was set up in 2013 and has worked hard to transform this rundown and overgrown former Victorian Reservoir into a beautiful place where families bring their children to enjoy picnics and the wildlife. We have been assisted in the management by the Durham Wildlife Trust.

It can be approached from the Blands Corner roundabout at thebottom of Carmel Road South where you can turn into Snipe Lane signposted Blackwell Golf Club (formerly Stressholme). The lane runs paralell to the A66 bypass and at the end is a small car park. Go through the gate and you will see a meadow to the left but carry straight on through a small wood and you will come across the pond.
The meadow has been mown each year and had a good raking. In 2020, with the help of volunteers we had a great effort to remove the poisonous hemlock. In the past some trees have been coppiced and rough areas cleared for the planting of snowdrops and English bluebells.
Many other volunteers have helped with the pond where giant hogweed has been removed and the pathways improved. In the summer hundreds of tree whips were planted along the boundary fence with the golf club thanks to a most generous donation from the Badminton Club of Hummersknott School.

In the autumn we planted many bulbs along the path to the pond to again include bluebells,snowdrops with the inclusion of wood anemones and fritillaries. Wild daffodils have been planted on a bank of the pond.
We are incredibly grateful to all those who have given their time most generously to help create the lovely haven for the community to enjoy. I hope that you will be able to visit in better times to look out for the signs of spring.

Thanks to:

Friends of Snipe Pond
Durham Wildlife Trust
Park Rangers of Darlington Borough Council
Tees Rivers Trust
Darlington Forest Project
Groundwork
Badminton Club of Hummersknott Schoool
Field Club Members

New Discoveries and Individual Reports

Foxglove Tree: *Paulownia tomentosa*, Cockerton, Darlington,
GPS=NZ27484 15302, Recorder=Falgunee Sarker.

It took me ten years to complete the identification of this infrequent and beautiful tree in Darlington. In Covid year 2020 the tall tree was displaying abundance of mauve coloured flowers. This is the first time I have seen the flowers of this tree.
A native tree of northern China. Introduced in the U.K in 1838.It is a member of Figwort family, *Scrophulariaceae*.
The bark is smooth with some grey striation. The crown of tree is dome shaped, with a height of about 25-30m. Twigs are glandular and pubescent.
Flowers arrive in middle of April to early May but the tree does not flower every year and it is also deciduous.
The leaves arrive after flower and are extremely large. They measure about 35 cm, opposite, deeply cordate at base, acuminate, three lobed, entire, two large acuminate teeth near the base of leaf, green with prominent veins. The underside of the leaf is pubescent. Flowering starts in the leafless tree, usually at the top (use binoculars), visible in mid-April and May. Flowers are purple-blue, campanulate in shape, zygomorphic, bisexual, ovary superior. Each flower is trumpet shaped, 5.5cm long with five lobes. The lobes are divided into lips. Two lower lips are larger than three upper lips. Sepals and petals are densely pubescent with simple and glandular hairs. Five sepals are equal in length 1.5cm. The sepals are jointed at the base and the tip is free, golden brown in colour and very softly pubescent. The superior ovary is white, urn shaped. The stigma is capitate, white with an aperture, densely covered with glandular hair. Four deep brown anthers with white filaments attached at the base of petals (adnate). Anthers develop first and when pollination is completed the stigma develops; the style elongates to receive the pollen from other flower. This prevents self fertilisation and enhances genetic variation.

Fruit is glossy brown, ovoid, constricted to a broad curved beak. It splits open to release seeds.
There are few simple hairs but mainly fluid-filled glandular hairs are present in the inflorescence. Members of this family contain many powerful Glycosides. The question remains what do these fluid filled glandular hair contains? These hairs are sticky and are really to stop aphids and other phytophages from attacking the sensitive parts of the plant. The glands contains glycosides.

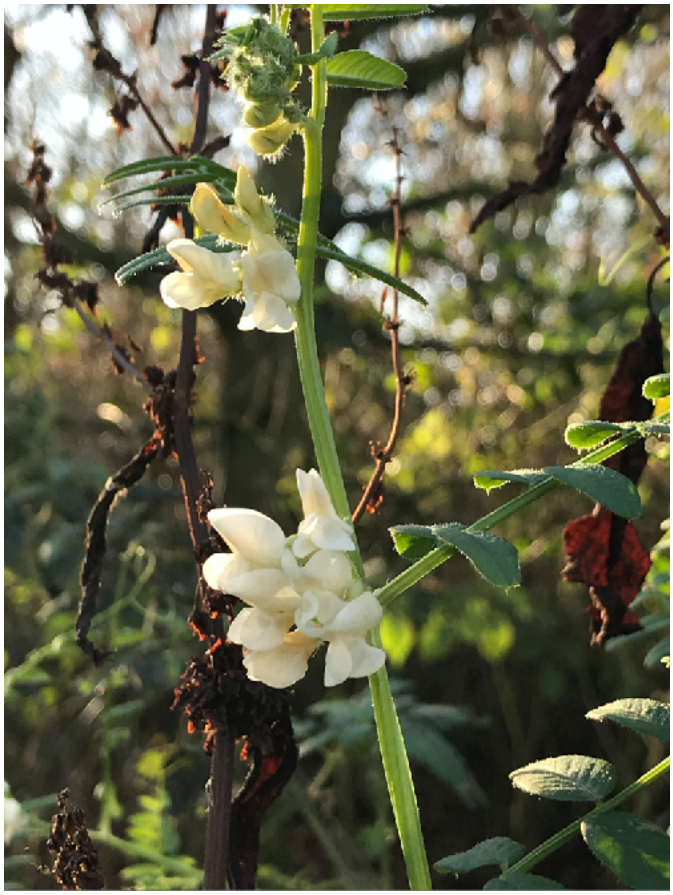
I would like to acknowledge my thanks to Lynne Heslop for discovering seed and conveying information of flowering time at this difficult time of isolation due to Covid-19. Also to Dr.Keith Gunning for photographing the flowering tree and for collecting different stages of floral specimen.
Ref; A Field Guide to the Trees of Britain and Northern Europe by Alan Mitchell.
Falgunee Sarker

Bush Vetch: *Vicia sepium var.ochroleuca.*
Common name: Bush Vetch white form.
Family: Fabaceae.

A plant first recorded by Fleur Miles on 22-11-2020 at North side of Merrybent community woodland. GPS NZ25081470.This is the first record for CO Durham and 38th record in U.K.
DET by Jill Cunningham and Falgunee Sarker.
Habitat: Grassy place, thickets.
Associated plant communities, Bush Vetch *Vicia sepium*, soft Rush *Juncus effusus*, Common Mouse-ear *Cerastium fontanum*, Bramble *Rubus agg*.

A trailing, pubescent, 80cm tall plant. Pinnate leaves are narrow egg-shaped leaflets wider near the base. Leaflets 5 paired on a stalk. Each leaflet (10-25)mm x (5-8)mm, leaf tip mucronate. Dark green above and light green below. Tendrils branched at the end of each pinnate leaf. Leaflets are hairy on both side and have short white hairs all round the edge. Bipinnate leaflets are alternate on the hairy square ridged stem. Stipules half arrow shaped with extra floral nectary.
Flowers are 14cm in length, shortly pedicellate, pedicel is pubescent, flowers brilliant white in colour. Each flower is bilaterally symmetrical. Calyx light green, unequal, lower calyx teeth longer than upper calyx and very hairy. Petals are hairless. Flowers in racemes. Pod is 25mm long and in the axils where a leaf bi-pinnate branches off. Pod is lanceolate, beaked, pubescence, black when ripe. Seed 3-4.
Thanks to Keith Robson, recorder VC66 for providing the record.
Falgunee Sarker

It was on a lovely blue sky, sunny, Sunday - 22 Nov 2020 - that Jill Cunningham and I went on a socially distanced walk from Cockerton to Merrybent Woodland via the popular Baydale Beck walk from Staindrop Road to Coniscliffe Road.

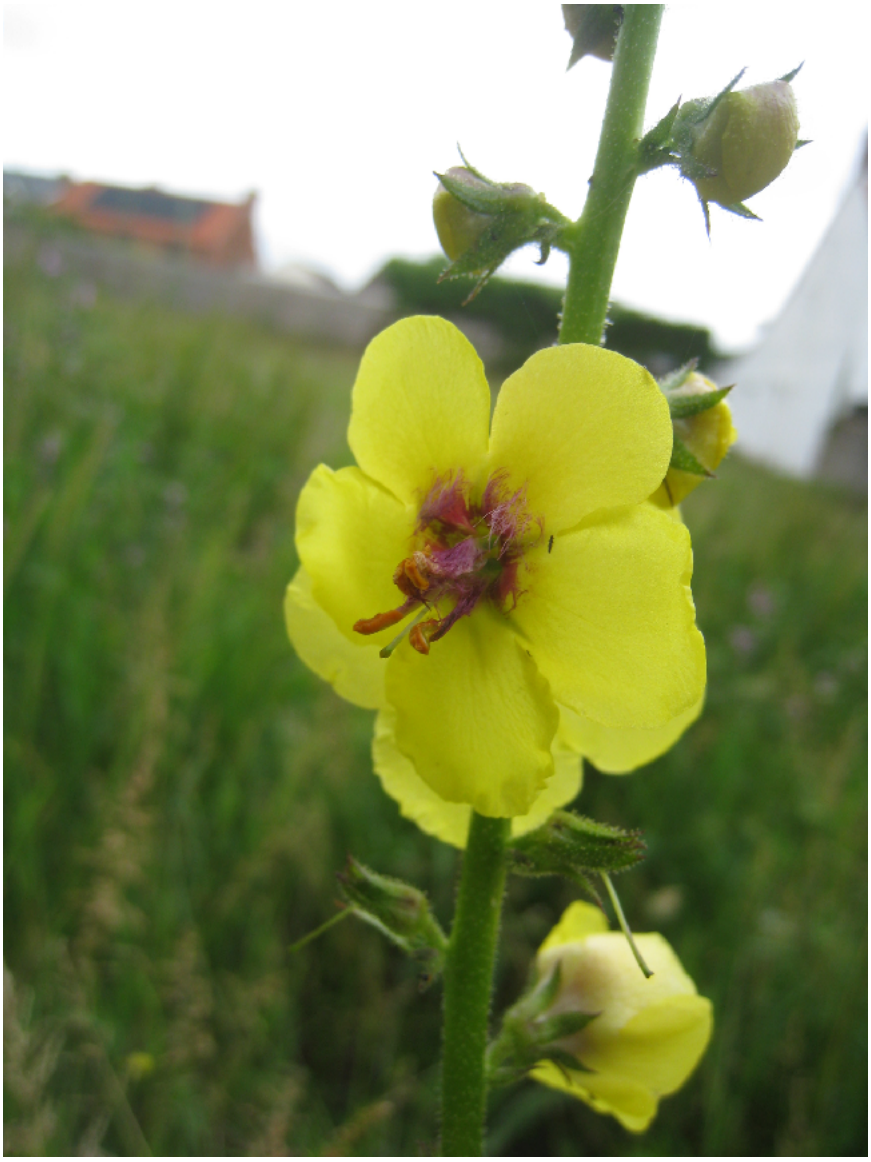


We walked to the western edge of the Woodland to the long line of conifers planted as a wind break/noise barrier at the top of the huge Merrybent Retaining Wall on the A1(M). It was here that Jill found the wide long verge of Spring Beauty.

After following a circular route to look at some fungi amongst a row of Railway Popular trees in the west not far from the line of conifers, we walked east, then north in the direction of Coniscliffe Grange and then east along the perimeter path of the Woodland. It was whilst we were keeping ourselves safe at the path edge, from quadbikers also using the path, that I spotted the White Bush Vetch flowering alongside the normal lilac blue Bush Vetch. It was amazing seeing the White Bush Vetch, having never seen one before. Falgunee Sarker checked out the Vetch for herself and recorded me as the first person to discover White Bush Vetch in County Durham on the Botanical Society of Britain and Ireland database.
Fleur Miles

Twiggy Mullein: *Verbascum virgatum Stokes.*
Family Scrophulariaceae, Figwort family.
GPS NZ24941371. Date=01-07-2020.
Recorder:Falgunee Sarker. DET: Keith Robson,VC66 BSBI recorder.

The plant was the first record in Darlington. This was recorded in Low Coniscliffe village, by Fal in an anthropogenic habitat. There were only two plants in flower. The height of the plant was 1m, has a basal rosette of leaves, stem-leaves alternate and have auricles. All parts of the plant are covered with glandular hairs. The glands contain a sticky viscous fluid that makes the plant sticky. Mulleins have 6 petals, single style and 5 unequal stamens. Upper 3 stamens are shorter than lower 2. Lower stamens have purple hairs only on the lower section and the upper 3 stamens are covered in purple hairs all the way up, a distinguishing characteristic of Twiggy mullein. The fruit develops first on the lower flower with the style attached. Calyx, fruit and stem all are covered with glandular, some simple and stellate hairs.
Falgunee Sarker



Wildlife Field, Welbury, North Yorkshire - Sue Bradley

In late 2012 we purchased an acre of fallow agricultural land behind our 1/3 acre garden. Initial intentions were not especially altruistic. Though there was only an outside chance, we wanted to be sure the land could not be built on.

The field is bounded by domestic gardens on two sides. Small, similar status paddocks occupy another side with agricultural land, rotated between sheep/ cereal crops/fallow beyond the final boundary. Soil is well drained, friable loam with distinct ridges/furrows. It slopes gently and faces south west. Central areas can be hot and dry in summer; some boundary areas are well shaded and quite damp.

With a keen interest in conservation, we decided to try to “improve” the area for wildlife. The garden is chemical free, apart from specific weeds e.g. ground elder; this policy was extended to the field. During an initial 12 months’ observation, various attempts (mostly in vain) were made to obtain management advice. Our own research and recording told us that no management pattern suits every species.

Out of desperation, I researched plant species that support multiple breeding insects. Nettles, various grasses and hawthorn topped the list, are present in abundance and each summer support a variety of (mostly unidentified) insects. Three triangles separated by mown walkways were created. One is cut regularly, one in early spring and late summer, both weather permitting; the third is left fallow. We planned to rotate them but that hasn’t happened yet.

Creating thick hedges for breeding birds seemed obvious. Most of the field is bounded by relatively thick but not always healthy hawthorn hedges. Blackberry, nettles and cleavers are allowed to grow along the base and in gaps to protect nesting birds. The former is pruned to ground level annually apart from a couple of larger patches pruned in rotation to promote new growth. Nettles are trimmed several times a year to encourage new growth. Cleavers is removed before seeding.

Six springs ago hedge gaps were planted with a hundred plus juvenile hawthorns which now produce blossom and berries. The old hedges and some hawthorn trees produce good blossom/berry crops though coverage varies. Mature hollies, a damson tree and various elders, flourishing again after hard pruning, add to the crop. Elderberries and damsons aren’t particularly bird popular.

Various mature and smaller trees circle the boundary at intervals. Four mature ash trees all show signs of die back but have so far (thankfully)

continued to maintain their annual cycle. Some less mature, self-seeded ashes, seem less affected. Silver birches are next most numerous though two of the three mature trees are in the garden. A large, sickly sycamore dominates one boundary draining resources for little ecological reward. Possible removal is a challenge as it overhangs an adjacent garden.

One corner was recently opened up with the removal by neighbours of a dead sycamore and by us of several of the strip of oversized silver poplars. This area is currently left to nettles for insect breeding and cleared once a year. It is low lying and, with the increased light, could be suitable for a pond.

Adjacent to one shady boundary, a strip has been planted with hazels and dog roses, both well established, plus transplanted, self-seeded oaks and yews. These will develop into a controlled height copse with further additions planned in due course.

When the “improvements” began, we had no idea how much time just maintaining an acre takes. Cleavers has exploded in recent years with milder winters. It stifles other more delicate plants and is controlled in the grass sections – very time consuming. Nettles, brambles and cow parsley can easily dominate and also require appropriate control.

Seeding of broadleaved docks and thistles is minimised. Ragwort is a dilemma. The one individual that flowered was the most insect popular plant we’ve had. However a number of neighbours have horses so care is needed not to allow seeds to spread.

After much research, we decided not convert extended areas to “wildflower meadow” because of the disturbance to large numbers of insects and small mammals already present. Instead one area, with hindsight, not the most suitable, was converted to “beds” for plug plants, grown from local seed, and donated plants.

Any plant in the garden that I’m not sure about matures to the point of identification to be moved to the field if appropriate. This first area has developed sufficiently to be left for the introduced plants to mingle naturally. However grasses are very invasive and will probably need to be controlled. A second hedge side strip has been ear-marked for similar diversification, possibly this year.

Species Summaries
Species identified on our property since 2008. NB Domestic cats are number one predator of small mammals/birds. We employ sonic deterrents but I think they only deter them from small areas. Species fluctuations have been common over the last 12 years but I don't have space here to expand on those.

Amphibians
Key: R = regular in season; O = occasional; 1 = once only.
Frog, Common (R); Newt, Common (1); Toad, Common (O).

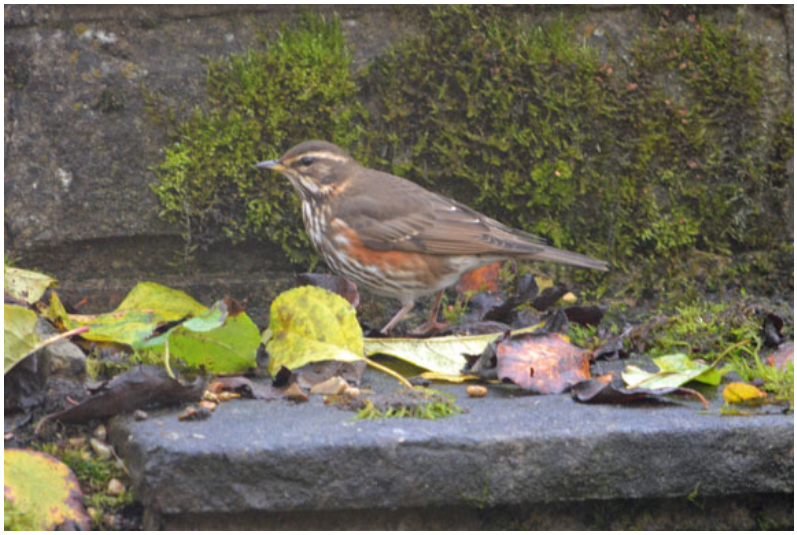
Birds
Key: R = resident; S = summer visitor; W = winter visitor; O = occasional; 1 = once only; OH = overhead only; H = heard only.
Blackbird (R); Blackcap (S/O); Brambling (W/O); Bullfinch (O) Brambling (W/O), Buzzard (OH/O); Chaffinch (R); Chiff Chaff (S); Cormorant (OH/1); Crow Carrion (R); Cuckoo (S/O/H); Curlew (H/O); Dove, Collared (R); Dove, Stock (O); Dunnock (R); Fieldfare (W); Flycatcher, Spotted (S/1); Goldcrest (O); Goldfinch (R); Goose, Canada (OH); Greenfinch (R); Gull, Black-headed (OH); Gull, Herring (OH); Heron (OH/O); Jackdaw (R); Jay (O); Kestrel (OH/O); Lapwing (OH/1; H/O); Magpie (R); Mallard (O); Martin, House (S/OH); Moorhen (O); Nuthatch (O); Owl, Tawny (R/H); Oystercatcher (OH/O); Pheasant (O); Pigeon, Wood (R); Redpoll (O); Redwing (W); Robin (R); Siskin (O); Snipe (W/1); Sparrowhawk (O); Sparrow, House (R); Sparrow, Tree (R); Starling (R); Swallow (S/OH); Swift (S/OH); Thrush, Mistle (O); Thrush, Song (S); Tit, Blue (R); Tit, Coal (R); Tit, Great (R); Tit, Long Tailed (O); Treecreeper (R); Wagtail, Grey (O); Wagtail, Pied (O); Warbler, Garden (S); Warbler, Willow (S); Warbler, Wood (1); Waxwing (W/O); Woodpecker, Great Spotted (R); Wren (R) (64).

Butterflies/Moths etc.
Key: A = annual regular; O = occasional; 1 = recorded once only.
Antler Moth (1); Chimney Sweeper (1); Comma (A); Common Blue (O); Common Wainscot (1); Dusky Thorn (1); Flounced Rustic (1); Holly Blue (A); Gold Spot (1); Grass Moth (A) Sp.; Green Veined White (O); Large White (A); Large Yellow Underwing (1); Meadow Brown (A); Orange Tip (A); Painted Lady (O); Peacock (A); Red Admiral (A); Ringlet (A); Small Copper (O); Small Skipper (A); Small Tortoiseshell (A); Small White (A); Southern Hawker (O); Speckled Wood (A); Straw Dot (1); The Magpie (O) (27).

Mammals
Key: R = regular in season; O = occasional; 1 = once only.

Bat, Common Pipistrelle (R); Fox (O); Hedgehog (R); Mole (regular evidence, not seen); Mouse, Wood (R); Rabbit (O); Rat, Brown (O); Shrew, Undefined (only deceased seen); Squirrel, Grey (O); Stoat (1); Vole, Bank (1).

Plants/Flowers
Ash; Birch, Silver; Blackberry; Black Medick; Blackthorn; Bugle; Burdock; Buttercup, Creeping; Buttercup, Meadow; Campion, Pink; Campion, White; Chickweed; Cinquefoil, Creeping; Cleavers; Clover, Red; Clover, White; Cow Parsley; Cranesbill, Cut Leaved; Cranesbill, Doves Foot; Cranesbill, Meadow; Cranesbill, Shining; Crosswort; Daisy; Damson; Dandelion; Dead Nettle, Pink; Dead Nettle, White; Dock, Broad Leaved; Dock, Curled; Elder; Foxglove; Garlic Mustard; Ground Elder; Ground Ivy; Groundsel; Hawthorn; Hazel; Hedge Woundwort; Herb Bennet; Herb Robert; Hogweed; Holly; Ivy; Knapweed, Common; Knot Grass; Lady's Smock; Mallow, Musk; Mayweed, Scentless; Meadowsweet; Meadow Vetchling; Mouse-Ear, Common; Mugwort, Greater; Nettle, Common; Nipplewort; Oak; Oxeye Daisy; Petty Spurge; Pignut; Pineapple Weed; Pink Purslane; Plantain, Greater; Plantain, Ribwort; Poplar, Silver; Redshank; Rose, Dog; Selfheal; Shepherds Purse; Silverweed; Sorrel, Common; Sow-Thistle, Prickly; Sow-Thistle, Smooth; Speedwell, Common Field; Speedwell, Germander; Speedwell, Ivy-leaved; Speedwell, Thyme-leaved; Stitchwort, Greater; Stitchwort, Lesser; Sycamore; Teasel; Thistle, Creeping; Thistle, Spear; Trefoil Birds-foot; Valerian, Red; Vetch, Bush; Vetch, Tufted; Willowherb, Broad Leaved; Willowherb, Great; Willowherb, Rosebay; Willowherb, Short-Fruited; Yarrow; Yew; Yorkshire Fog (91).



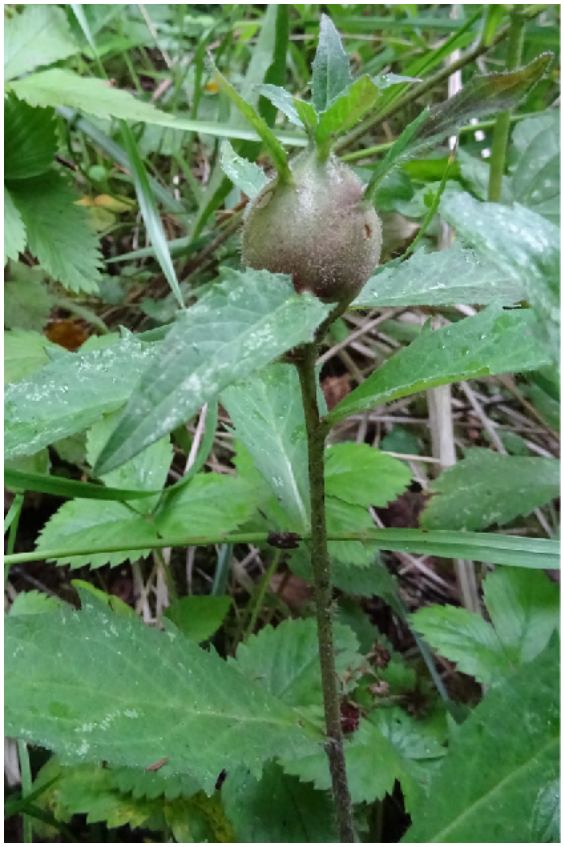
Redwing

Local Cecidology – Plant Galls - Jill Cunningham

My interest in Plant Galls has continued and I am now familiar with over 300 fungal and insect gall causing species found in the north east. Steve Robbins, NE Coordinator for the British Plant Gall Society has been an invaluable tutor! Plant Galls, abnormal cellular growths often in distinct forms, are under recorded and there are few official records in the UK; many are classed as 'Southern'; some only arrived in the UK recently and are moving north, so it is always a joy to discover them locally. The Oak galls of *Andricus gemmeus*, (little red-gold starry 'buds' on trunks); *Andricus grossulariae,* ('tufted' acorn galls); and *Andricus aries* (pointy Ram's-Horn galls) are now marching their way up into Durham since first seen in Cockerton and Preston Park in 2019.

Spruce gall
Adelges cooleyi

Steve took me to see the following rarities:- *Aulacidia hieraci* galls on Hawkweed that make the stems swell as if they had 'swallowed a marble' on the Hart to Heswell rail path; flask shaped shoot tip galls on Juniper caused by *Oligotrophus juniperinus* at Low Force; and the tiny leaflet galls of *Dasineura rossi* on Purple Milk Vetch at Teesmouth. Most impressive were the *Pontania dolichura* galls, like pouting crimson lips, on the leaves of Tea Willow at Low Force in July, as well as the huge 'elongated pineapple' galls of *Adelges cooleyi* aphids on Spruce at Wynyard.



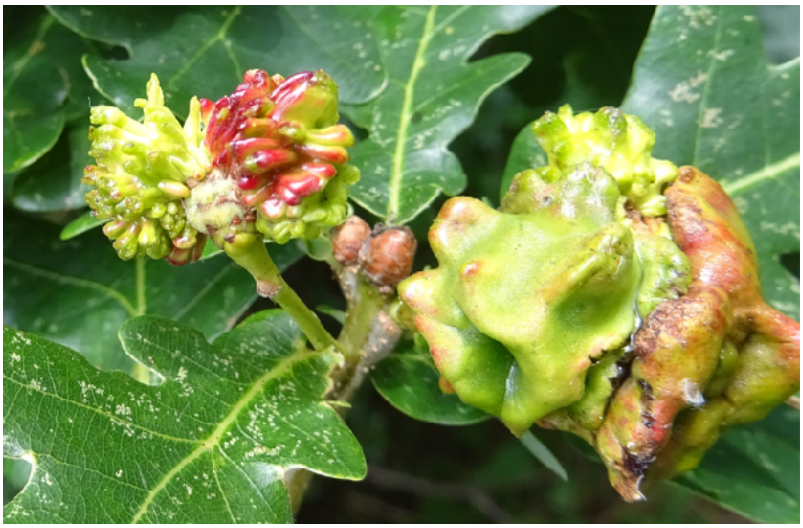
Hawkweed gall
Aulacidea hieraci

Topping my own lists were *Dasineura alpestris* galling the shoot tips of the Garden Arabis in my own garden in July and the rarer *Janetiella lemeei* pimple galls on leaves of Wych Elm in the A67 Low Coniscliffe lay-by in June. Whilst on a walk with Fleur I spotted *Dasineura gleditchiae* galls 'podding' the leaves of Honey Locust next to the café at Southpark, a first record for Durham. The Whinnies gave another first, *Dasineura ranunculi* swelling and bunching the base of Creeping Buttercup leaves and finally in November I found Red Valerian on Woodlands Road with rolled swollen crimson leaf edges caused by *Trioza centranthi psyllids*, classed as rare but now moving north and enjoying the sunny embankments.
With many more to find I look forward to 2021.

Oak galls

Left
Andricus grossulariae

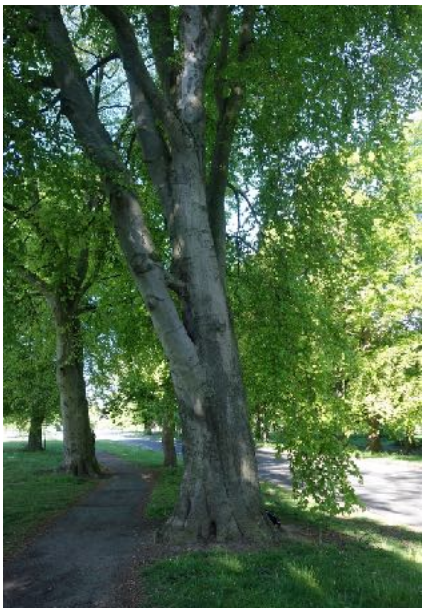
Right
Andricus quercuscalicis



Inosculation in the Common Beech: *Fagus sylvatica* - Lynne Heslop

Inosculation is a natural phenomenon in which the trunks, branches or roots of two trees, or the same tree, grow together. This usually occurs when they are touching each other and movement, by the wind for example, causes the thin bark layers to wear away and the underlying cambium cells to fuse together. The tissues continue to grow producing some interesting structures.

This can be clearly seen in a Common Beech tree situated on Staindrop Road, Darlington.
Grid Reference NZ 26453 15558



The photos beneath are examples from along Baydale Beck where inosculation may occur at a later stage.The photo on the left shows two different species of tree, often referred to as a marriage tree and the one on the right is of two limbs of a young beech tree.