

East Lothian Council Countryside Rangers

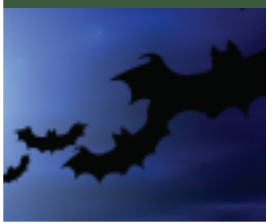
# MUD in your EYE

May/June 2022

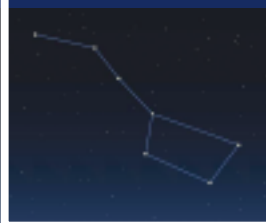


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Welcome to the 57th Edition of  
'Mud in Your Eye'

We'd love to hear from you!  
Email: [ranger@eastlothian.gov.uk](mailto:ranger@eastlothian.gov.uk)  
or follow us...

 @ELCrangers

 East Lothian Countryside  
Ranger Service

Published by East Lothian Council's  
Countryside Rangers

## Editorial

April was rather cool and unusually rain free. Despite a couple of recent showers the ground remains very dry which may be affecting our native wild flowers. I suspect the gardeners amongst you will have been out with the watering can a lot more over recent weeks too.

So, what will May and June bring? Traditionally, May has been one of the best months weather wise in Scotland often leading into a fairly mixed summer. Weather patterns over the past few years though have been unpredictable to say the least and seem to reflect the climate change we are seeing globally. So who knows! Despite this there is still plenty to see out and about in the countryside and the following articles will hopefully give you some food for thought.

An interesting mix of blue butterflies, screeching terns and parasitic plants as well as some spring stars to look out for, before the nights are too light to really appreciate them!



# Vampires are among us

**There are vampires among us, lurking in the fields, hedgerows and woodlands. OK, enough with the hyperbole already. What I'm trying to say is that the countryside is home to assorted species of parasitic plants, but that sounds much less dramatic.**



*Purple toothwort.*

Floral parasites come in a range of shapes and sizes and make up roughly 1% of plant species worldwide. They can be broadly divided into two categories: obligate and facultative parasites. The former cannot complete their life-cycle without a host, whilst the latter can survive without a host (but prefer not to).

Obligate parasites that you might see in the county include purple toothwort (*Lathraea clandestina*) – a plant which lurks at the base of the trees that it parasitizes. It generally appears as a dense clump of hooded purple flowers, with no green leaves at all. This lack of chlorophyll is down to the plant's ability to grab all the resources it needs from the roots of others, so it doesn't need to bother with photosynthesis.

There are a number of facultative, or hemi-parasitic species out there as well.



*Yellow rattle in flower.*

## Vampires are among us - continued

These include louseworts, particularly common lousewort (*Pedicularis sylvatica*) and marsh lousewort (*P. palustris*).

The term parasitism generally has negative connotations – it can make us think of some fairly unpleasant things, like ticks for example. However, there is a positive side, especially for those of us interested in protecting biodiversity. Some species can actually promote floral diversity through their parasitism. Eyebright (*Euphrasia nemorosa*) is a common sight in fields and meadows with its tiny white flowers, each with dark purple veins and a prominent yellow blob. This species is parasitic on a variety of species, including grasses. Its presence restricts the development of tall rank grasses, which would otherwise come to dominate at the expense of smaller wildflowers.

The star of the show, in this respect, is a small facultative grassland parasite called yellow rattle (*Rhinanthus minor*). It has a similar effect on grasses as eyebright, only more so. As a result, it is widely considered to be one of the most valuable species in grassland management. It can be found in many wildflower seed mixes and it is a species which should be encouraged in pretty much any grassland habitat.

Yellow rattle can grow up to 50cm tall, although it's often considerably shorter than this. It has sparse, toothed leaves which grow from an upright stem. The flowers are, unsurprisingly, yellow. They are also tubular, ending in two lips. The genus name, *Rhinanthus*, means nose flower in Greek and reflects the shape of the upper lip. It was said that when the flowers were in bloom the hay was ready to be cut.

In late summer the flowers develop into dry capsules, containing loose seeds which rattle – giving the plant its common name. There are a number of grassland management programmes across East Lothian, including grazing projects at Aberlady and North Berwick and Traprain Laws. We've also brought in cutting regimes devised to promote biodiversity at Levenhall Links, the Pencaitland Railway Walk, Gullane and elsewhere. In each case the aim is to limit the growth of highly competitive plants, but whatever the method used, a little help from our parasitic friends is always welcome.



*In late summer the flowers develop into dry capsules, containing loose seeds which rattle.*

# Terns of Endearment

**Seabirds are a common sight along the coast – that’s why they’re called seabirds, obviously. We’re all familiar with gulls, whilst gannets have become almost iconic in the county. One family of birds perhaps less well known are the terns, several members of which are regularly seen flying and feeding offshore.**



*Arctic Tern - A.Marland*

All the UK’s terns are migratory, coming to Britain (and elsewhere) in the summer to breed. One species, the Arctic tern, has one of the longest migrations of any bird, spending the winter months in the Antarctic. They are predominantly ground-nesting birds, preferring to group together in large colonies where their numbers and aggressive, noisy displays deter all but the most determined predators. Their food consists mainly of small fish, such as sand eels, which the terns catch in a plunging dive from a few metres.

Terns have broadly similar plumage to gulls, in that they are a combination of white, grey and black. They are easily distinguishable from gulls in that they are generally smaller and more graceful in flight.

Indeed, their aerobatic agility has led to them being known as “sea swallows”. Two of our tern species can be very difficult to tell apart – the Common and Arctic terns. Both have a black crown and bright red legs and bill. On the ground Arctic terns tend to look a bit more compact due to their shorter legs, whilst in the air they can have a more buoyant, bouncy appearance to their flight. The best way to tell the two apart is by getting a good look at their bills (easier said than done).



## Terns of Endearment Continued



*Sandwich Tern - A. Marland*

Common terns have a relatively long orange-red bill with a dark tip, whilst Arctic terns have shorter blood-red bills. Even experienced bird watchers sometimes struggle to tell the two apart and when in doubt will record a bird as a “commic tern”. This is what passes for humour in ornithological circles.

The third common (as opposed to Common) tern seen along our coast is the Sandwich tern. Fortunately, it's a bit easier to tell apart from its relatives. Larger than either the Arctic or Common tern it has an altogether chunkier look and a stronger appearance in flight. It also has black legs and a mainly black bill, but with a bright yellow tip. The Sandwich tern also has a distinctive call, a harsh kierrick kierrick (or something like that).

To be honest, none of the terns will win any prizes for the sweetness of their calls – they all tend to emit some kind of screeching, grating kind of noise. Despite this, they are one of the sure signs that summer is on its way and an absolute delight to watch as they swoop and dive above the waves



*Arctic Tern - J. Wood.*

# Heavens Above – Spring Stars.

Regular readers will know that I have a tendency to refer to characters in the Harry Potter series in these articles (I make no apologies for this). JK Rowling seemed keen to name many of her characters after astronomical objects, in particular members of the Black family. One such person is Regulus Arcturus Black. He features in the final book of the series and is Sirius Black's brother. His name is made up of two stars that are prominent in the spring sky; Regulus in the constellation of Leo and Arcturus in the constellation of Boötes.

Regulus is Latin for Little King and is the brightest star in Leo. The ancient Arab scholars called it Qalb-al-Asad which means The Lions Heart. To find Leo, first locate the plough which is high in the late night sky at the moment. If you imagine it as a saucepan, then putting a hole in the saucepans base would leak the contents directly onto Leo's head.

The front end of Leo looks like a reversed questions mark, which is known as The Sickle. Regulus is at the bottom of the sickle.

Regulus is actually a multiple star system with at least four stars discovered so far all orbiting each other. The most prominent is Regulus A which is a large blue coloured star about 3.8 times the size of our sun and 288 times as bright. It spins very fast, so much so that it appears shaped like an egg due to the tremendous forces affecting it. If it was spinning much faster, it would rip itself apart! The other three stars so far discovered are all dwarf stars.



# Heavens Above - Spring Stars

## - Continued

Arcturus is the brightest star in the constellation of Bootes, The Herdsman. The constellation looks a bit like a kite in shape and can be found by using The Plough again. If you follow the curve of the handle of the Plough and continue on you will reach Arcturus.

It is the fourth brightest star in the sky and the brightest in the northern sky, a combination of being a red giant and relatively close to us at a mere 37 light years away. Arcturus is about 25 times

the diameter of our sun and somewhat cooler than it, although 4,000 degrees Celsius is still pretty hot! Take time to look at it now though. Along with a group of other stars it is moving pretty fast. Scientists think it is more or less at its closest point to Earth but will start to move away from us, disappearing from naked eye view in about 150,000 years!





# Butterfly season

**Butterfly season is on us, and so too comes that deeply frustrating feeling of not quite catching enough identification detail from a blurry glimpse of a butterfly as it whizzes by on its aerial adventures.**



*Holly Blue - A.Marland*

If you have been lucky enough, however, to even glimpse a blue butterfly in mid-spring of late, this will likely be one of an expanding population of holly blue butterflies, one of 9 butterfly species to have expanded its range into the county from the south over the last 40 years. Flitting through head high habitats of gardens and parkland as they peruse the foliage searching for opportunities to egg-lay, bask or drink the sugary rear-end secretions of aphids (and why not!), these early emergers are on the wing much earlier than the superficially similar, and widely encountered common blue, which they share a flight period with later in the year. Also, fortunately for the observer, the holly blue has a reputation for approachability giving the observer a sporting chance of admiring the uniform pale blue wash and black spotting of the under-wing, which lacks the orange detail of the common blue.



*Male common blue - A.Marland*

The female seeks out holly buds for laying her eggs on in spring, with ivy being the species of choice for the second late summer brood. The only other limiters for their expansion seem to be a suitable climate and the presence of a tiny but parasitic wasp (*Listrodoumus nycthemerus*). It is this deadly wasp that the holly blue has been engaged in an evolutionary struggle with, which, for the moment at least, it seems to be winning.

The common blue butterfly could be booming in the UK thanks to recent spells of hot weather, according to a conservation charity.

Experts are predicting that the July heatwave and Met Office forecasts for above-average temperatures in August might mean that the common blue has its "best ever summer", Butterfly Conservation said.

The butterfly has been "struggling for the last 40 years", according to the charity, but common blue populations increased by 104% in the summer of 2018 compared with the previous year thanks to warm weather.

# Blue Butterfly Day -

## by Robert Lee Frost

It is blue-butterfly day here in spring,  
And with these sky-flakes down in flurry on flurry  
There is more unmixed colour on the wing  
Than flowers will show for days unless they hurry.  
But these are flowers that fly and all but sing:  
And now from having ridden out desire  
They lie closed over in the wind and cling  
Where wheels have freshly sliced the April mire.





## volunteer diary dates

Where	Day	Date	Time	Action
Yellowcraig	Thu	05 May	10:00-15:00	Path and Viewing platform repair
North Berwick	Tue	24 May	10:00-12:30	tbd
Dunbar	Wed	25 May	09:00-12:30	tbd
Levenhall Links	Tue	31 May	10:00-13:00	Bird reserve habitat management
Yellowcraig	Thu	02 Jun	10:00-15:00	Woodland mangement
North Berwick	Tue	21 Jun	10:00-12:30	tbd
Levenhall Links	Tue	28 Jun	10:00-1300	Butterfly habitat conservation
Dunbar	Wed	29 Jun	10:00-12:30	tbd

for information on all events please contact [ranger@eastlothian.gov.uk](mailto:ranger@eastlothian.gov.uk)

