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Welcome to the 51st Edition of 'Mud in Your Eve'

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f East Lothian Countryside **Ranger Service**

Published by East Lothian Council's Countryside Rangers

Editorial

It's spring and the days are getting warmer and longer. There is a general air of optimism too, now that we seem to be gradually easing lockdown restrictions. It's an important time of year for our wildlife too. Having survived the winter, our summer bird visitors are returning and beginning the hard work of finding a mate, building a nest and rearing this year's brood. Find out about some of them in our article on warblers. Bees are on the wing now and we have a short article on bee identification to help you distinguish bees from other similar insects. We continue the bee theme with our poem and a short bee related quiz. Also in this issue, discover more about East Lothian's county flower and how it may have got its name; and looking to the skies, we have a supermoon and a partial solar eclipse to look forward to. Happy reading.



Poets' Corner

With this issue carrying an article on bees, I thought it might be nice to have a bee inspired poem to go with it. This particular poem is about wisdom, and learning from nature. It was written by John Godfrey Saxe and is a story from the visit of the Queen of Sheba to King Solomon. Saxe was a nineteenth century American poet who mostly wrote satirical poems, but this non-satirical piece seemed apt.

King Solomon and the Bees - John Godfrey Saxe A Tale of the Talmud

When Solomon was reigning in his glory, Unto his throne the Queen of Sheba came, (So in the Talmud you may read the story) Drawn by the magic of the monarch's fame, To see the splendors of his court, and bring Some fitting tribute to the mighty king.

Nor this alone; much had her Highness heard What flowers of learning graced the royal speech;

What gems of wisdom dropped with every word; What wholesome lessons he was wont to teach In pleasing proverbs; and she wished, in sooth, To know if Rumor spoke the simple truth.

Besides, the queen had heard (which piqued her most)

How through the deepest riddles he could spy; How all the curious arts that women boast Were quite transparent to his piercing eye; And so the queen had come—a royal guest— To put the sage's cunning to the test.

And straight she held before the monarch's view, In either hand, a radiant wreath of flowers; The one, bedecked with every charming hue, Was newly culled from Nature's choicest bowers; The other, no less fair in every part, Was the rare product of divinest Art.

"Which is the true, and which the false?" she said,

Great Solomon was silent, All-amazed.

Each wondering courtier shook his puzzled head, While at the garlands long the monarch gazed, As one who sees a miracle, and fain, For very rapture, ne'er would speak again.

"Which is the true?" once more the woman asked,

Pleased at the fond amazement of the king; "So wise a head should not be hardly tasked, Most learned liege, with such a trivial thing!" But still the sage was silent; it was plain A deepening doubt perplexed the royal brain.

While thus he pondered, presently he sees, Hard by the casement,—so the story goes,— A little band of busy, bustling bees, Hunting for honey in a withered rose. The monarch smiled, and raised his royal head; "Open the window!"—that was all he said.

The window opened at the king's command; Within the room the eager insects flew, And sought the flowers in Sheba's dexter hand! And so the king and all the courtiers knew That wreath was Nature's; and the baffled queen Returned to tell the wonders she had seen.

My story teaches (every tale should bear
A fitting moral) that the wise may find
In trifles light as atoms in the air,
Some useful lesson to enrich the mind,
Some truth designed to profit or to please,—
As Israel's king learned wisdom from the bees!

A bee or not a bee?

Fascinating us from the youngest age and earning respect for their honey production, stinging potential and their roles in food and flower pollination, we all know what a bee looks like, right?



Red mason bee.

Our eight regularly encountered bumblebee species of East Lothian's greenspaces (24 species nationally), are most familiar and can with a bit of practice be easy to differentiate. After that though, the lines become less distinct. Honey bees, famed for services to dentistry throughout the ages, and the only other 'social' bee, are relatively easy to recognise too, but when we include our solitary bees (more than 200 species) identification becomes slightly trickier! In fact, beyond the humble bumble, deciding that what you are looking at is a bee at all requires attention to a few key but fortunately easily remembered features:

- They don't have the extreme pinched waist of a wasp (think balloon modelling), although it does narrow considerably in comparison to flies.



The hoverfly, not a bee.

- Eyes are not huge and don't dominate the face, they are more proportionate and spaced out.
- Bees are variably hairy but hairs are branched unlike wasps, a feature harder to see.

You may not be able to pin a name on what you find as many species require a lens or even microscope to differentiate. Hopefully though, by using the above you'll be a step or two closer to deciding whether what you are looking at is indeed a bee. For help with species identification, the Bumblebee Conservation Trust website, and for a deeper delve into related insects, the Bees, Wasps and Ants Recording Society both have a wealth of information to explore.



The tree bumblebee with unmistakenly ginger, black and white banding on bloody cranesbill.

Bee Quiz - continuing the bee theme, here's a small quiz for you to have a go at.

| 1. | | many eyes does) 5 | a bee have? b) 6 | c) 8 | d) 12 | | | |
|---|--|---------------------------------------|--------------------------------------|--|------------------------|--|--|--|
| 2. | | many honey bee <mark>) 50</mark> | es could you find i b) 100 to 200 | n a healthy colony, a c) 1,000 to 2,000 | | | | |
| 3. | 3. How many pairs of wings does a bee have? | | | | | | | |
| | а |) 1 | b) 2 | c) 4 | d) 6 | | | |
| 4. | 4. How many types of bee are there in the world? | | | | | | | |
| | а |) About 25,000 | b) About 15,000 | c) About 10,000 | d) About 100 | | | |
| 5. | 5. Which of these foods is not pollinated by bees? | | | | | | | |
| | |) Blueberry | • | • | d) Pumpkin | | | |
| | cons | tructs the egg co | ells for its nest? b) The leaf- | c) The hole | d) The plant | | | |
| | | saw bee | cutter bee | cutting bee | cutting bee | | | |
| 7. | What | do bees collect | from flowers? | | | | | |
| | а |) Milk and honey | b) Nectar and other insects | c) Nectar and pollen | d) Sugar and nectar | | | |
| 8. | How | much honey car | n a single honey b | ee make in its lifetin | ne? | | | |
| | |) About a twelfth of a teaspoon | | c) About a gallon | | | | |
| 9. How many times per second do bumble bees beat their wings? | | | | | | | | |
| | |) 100 | b) 200 | c) 500 | d) 1000 | | | |
| 10 |). H | low many specie | es of bumblebee a | re there in the UK? | | | | |
| | |) 12 | b) 18 | c) 24 | d) 30 | | | |

Answers can be found on page 7

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East Lothian's County Flower

Back in the dim and distant past (okay, it was 2002) the conservation charity Plantlife asked people around the UK to vote for their favourite flower to represent their county. This inevitably produced some repetition, for instance Yorkshire, Antrim and Dumfriesshire all chose the harebell.



Vipers bugloss flowers.

Some went down the very traditional route - Lancashire choosing the red rose, for example. Others chose a more esoteric approach; Tyne & Wear picked the nonnative (and invasive) monkey flower. Here in East Lothian, as many of you will be aware, our county flower is the viper's bugloss - an ugly name for a beautiful plant. It's a plant which blooms between May and September and produces tall spikes of flowers. These start off as pink buds, which vaguely resemble bunches of grapes, but open into rich, vibrant blue funnel-shaped flowers. The rest of the plant is covered in rough hairs, whilst the leaves, which are clustered on the lower stem, are long and strap-like.

Viper's bugloss can be found in a variety of

habitats, including meadows, verges and dunes. It prefers alkaline conditions and is particularly well-suited to drier areas as it has a long root which allows it to reach deep into the soil for water that is beyond a lot of other plants. As a result, the best places to see this wildflower in East Lothian are in the dune grasslands that grace our coastline.

The plant's common name is derived from its supposed serpentine appearance. Which particular part of the plant inspired this is up for debate. The seeds are said to look like a snake's head, whilst the flowers themselves have a certain viperish quality – the red stamens protruding like a flickering snake's tongue. Even the rough stem was thought to resemble snakeskin.

East Lothian's County Flower -Continued

Just to extend, and perhaps confuse, the animal-based comparisons, bugloss is derived from the Greek for "ox's tongue" which the large, rough leaves are supposed to resemble.

The scientific name, Echium vulgare, also reflects the plants appearance - echis being Greek for viper. Incidentally, the species name, vulgare, simply means that this is a common plant. Indeed where it's found it can be in large numbers forming impressive swathes of blue.

Like most common wildflowers viper's bugloss has a long history of being used in herbalism. The Doctrine of Signatures is based on the idea that if a plant resembles part of the body then it can be used to treat ailments relating to that area. By extension, viper's bugloss was thought to be effective in the treatment of snake bites. Ironically, the plant has been shown to contain alkaloid toxins which can damage the liver, although there are no records of actual poisonings.

Herbalists have also used this plant to treat fevers and chest infections, and as a diuretic. It's also on record as being an aphrodisiac - make of that what you will, I'm saying nothing.

Herbalism is all fine and well, but rational adults will surely be more interested in the ecological value of the plant, which is considerable. The flowers are very popular with a variety of insects - moths and butterflies, especially painted ladies which are attracted to the pollen-rich flowers.

Hoverflies and bees are also big fans of this plant. Buff-tailed and red-tailed bumblebees, as well as mason bees and honeybees are all regular visitors. Sometimes, on warm summer days a bank of viper's bugloss will host so many bees that the buzzing can be heard from several metres away - and that's got to be a good

Vipers bugloss, thriving in dune grassland.

thing.



Quiz - answers

1. A

2. N 3. B 5. C

7. C

6. B

8. A

9. R

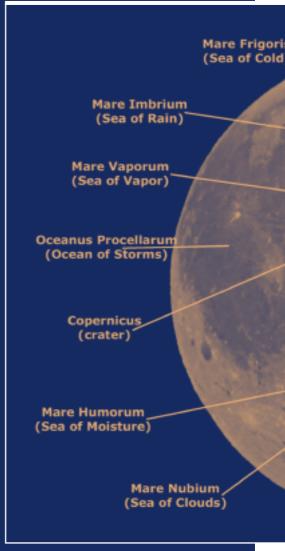
10. C

Heavens Above - May/June 2021

On the 3rd and 4th of May, just after sunset, the planet Mercury will pass close to the Pleiades (see the previous issue for more on this group of stars). Venus will also be visible just below Mercury. This is happening close to the north-west horizon, so you will need an uninterrupted view. Venus is relatively easy to spot, being one of the brightest objects in the night sky.

Although much fainter Mercury is visible to the naked eye, binoculars will give you a better view. The first week of May gives the best opportunity to see it at its brightest, before it begins to fade over the next few weeks. Venus will be seen as a bright 'evening star' in the west during June and July. It is gradually moving towards Mars, at least as we see it, and they will appear very close to each other in mid-July.

There will be a partial eclipse of the sun on June 10th. Beginning from about 10am, up to 30% of the sun will be eclipsed by the moon. If you want to see a full eclipse, then you will need to travel to northern Canada, Siberia or the North Pole! Please don't look directly at the sun, even during an eclipse, otherwise you could damage your eyes. There are ways to observe this phenomenon safely, the best being to project the light from the sun onto a sheet using a pinhole projector, which you can make yourself. Details can be found on-line. Talking of bright celestial objects, the biggest and brightest full moon of 2021 will occur on 26th May. Known as a supermoon, the moon will be just over 357,000 km away and is 30% brighter than the faintest full moon. The moons orbit of the Earth is not circular. Instead it forms an ellipse that takes it from just over 357,000 km away at its closest to us to just over 406,000 km away at its

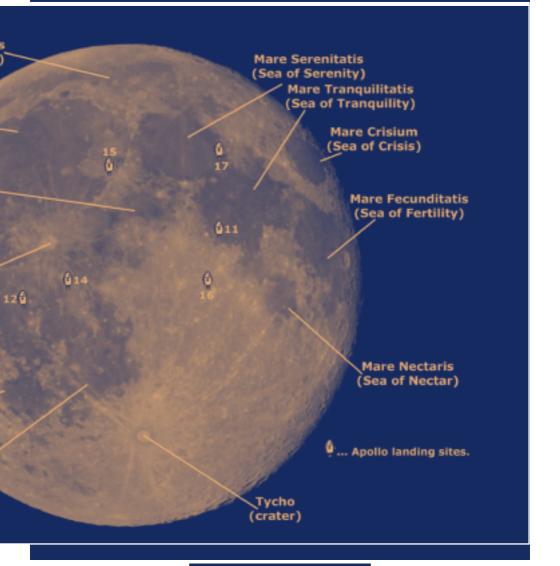


furthest.

Heavens Above - May/June 2021 - Continued

To be honest, it only appears 14% larger at its closest point, which isn't much, but it is nice to say you've been looking at a supermoon, and one or two of the moons features may be slightly easier to make out.

Take a look at the picture and see if you can spot any of the features mentioned. This supermoon is known as the flower moon. Not a surprising name, given the association with the flowering of spring plants in May.



Spring arrivals

May is probably the most exciting month for birds. The boys are all out to attract the girls and it's showtime! All our breeding warbler species have arrived from southern Europe and Africa and numbers of them will build through the month, ever enriching the dawn chorus. One particularly impressive songster to keep an ear out for is the sedge warbler. Now this plucky little bird has made an epic, non-stop migration from south of the Sahara and still has energy left to sing



The Sedge Warbler is one of 10 species of warbler which nest in East Lothian. Photo © Jim Wood

In fact, so focussed is it on getting its territory established in a prime area of marshland, some males make this 4,000-kilometre journey non-stop over four days! Take that Mo Farah! The sedge warbler's loud and raucous song has a certain buzzy quality to it, but it can mimic many other birds, throwing in a bit of swallow, pied wagtail or perhaps a reed bunting. A real DJ mash-up! And the more impressive the repertoire, the greater his chances of attracting a female.

Unlike most other birds, sedge warblers can be heard singing during the night as well as the day.

Among the trees and scrub throughout the county, keep an eye out for our commonest species of warbler: the willow warbler. Over a million of these birds come from West Africa to Scotland every year to nest. In appearance they look extremely similar to another warbler species: the chiffchaff. However, very helpfully, the males are easy to tell apart when they sing. The willow warbler song is made up of a beautiful series of descending notes which gladdens the heart on a summer's day, while the onomatopoeic chiffchaff belts out lots of 'chiffs' and plenty of 'chaffs' in its song.



Willow Warbler in a willow tree. They aren't always this helpful! Photo © Jim Wood

Spring arrivals - Continued

If you're lucky, you may spot two of our more secretive warbler species, which are rarely seen but much more commonly heard. In scrubby marshland areas, the atmospheric 'reeling' of the grasshopper warbler (and it really does sound like a grasshopper!) will drift through the still evening air. A classic LBJ (Little Brown Job) these birds have a tendency to skulk in the bushes and will stop singing once they've

paired up with a female. Another bird which gives up singing once it's found a mate it the lesser whitethroat. East Lothian is just about as far north as this species breeds in the UK. Another scrubland breeder, listen out for its scratchy song, the start of which is reminiscent of someone trying to get an old car started. Well, with a bit of imagination it is!



The chiffchaff.

| Arriva | ls & | Dep | artures |
|--------|------|-----|---------|
|--------|------|-----|---------|

| Flight | Bird | Arriving From | Destination |
|---------|----------------|---------------|-------------|
| SS 4139 | Sanderling | North Berwick | Greenland |
| W 8265 | Wheatear | Nigeria | Cairngorms |
| CN 1387 | Common Tern | Senegal | Leith |
| WW 3141 | Willow Warbler | Ivory Coast | Haddington |

Sites across East Lothian act as an international hub for avian travel!