







Mud In Your Eye

May - June 2023

Welcome to the 63rd Edition of *Mud in Your Eye*. *In this issue:*



Rangers on Wheels	3 - 4
Encouraging wildlife to your garden	5-6
Heavens Above	6
Igneous Rock	8-9
Ticks	10-11
Quick-ish Crossword	12
Poetry: 'Charming Spring' by Patricia L. Cisco	13
Cryptic Crossword	14
East Lothian Countryside Volunteers	15

Editorial

The days are getting longer, there's some warmth in the sun and we are seeing so many signs of spring; wildflowers emerging, birds singing and seabirds returning to nest. Spring is here!

In this edition you can find out more tips of how to help wildlife in your own garden, as well as testing your grey matter with the quiz!

We'd love to hear from you!

Email ranger@eastlothian.gov.uk or follow us...

f East Lothian Council Countryside Rangers 🗹

Mud In Your Eye is published by East Lothian Council's Countryside Rangers





East Lothian's countryside rangers have travelled by various modes of transport since the service first started in the 1970s.

Back then patrolling took place in 4 wheel drives, by foot and at some point a horse! But as the team expanded the Ranger service took on the vans you see around sites today and even a ranger bike at Aberlady! With that said there is a new kid on the block - the Cargo Bike. Becoming increasingly popular in urban areas for transporting services and goods, they are on the rise and have been rolling into more rural areas and communities. Bringing opportunities for trialling them for organisations, businesses and even councils to help expand rural active travel and a more sustainable way to travel.

This is where the Ranger service comes in. In 2022, the team identified that domestic transport is still the biggest emitting factor in Scotland. Therefore they wanted to reduce mileage of their

transport in vans and increase their use of more sustainable transport options. The opportunity came along to trial cargo bikes, in partnership with Sustrans and Raleigh. The trial saw 2 different cargo trikes arrive in East Lothian at the end of August 2022. For 6 months trained rangers used to bikes for various tasks around the county to see how it fit in within their daily working.

How did it go?

"I was quite enthused with the cargo bike trials. The training was excellent and good fun. In an urban environment, nipping around town on tarmac roads I think they could be really useful."

"Agree that the training was good and the idea behind it all good. The handiest part of using the box front bike is that it is straight forward to just jump off and grab your stuff or litter picker or whatever, when I was litter picking the railway walk stop starting all the time that was handy"



The challenges

"I didn't use the bikes as much when during busier times and further sites and in winter! They also feel quite out of place in the countryside sites too if that makes any sense?!"

"The bikes were heavy and cumbersome. They were just too big. Poor turning and travelling along a fairly wide path (Railway Walk) I frequently had to stop, pull over and let oncoming people pass me."

What next?

The trial was valuable in seeing how cargo bikes could fit into the service, and increased the interest in alternative ways to travel around the county. There has been shared interest from other local authorities and ranger services,

with East Lothian being the first trailblazing Guinea pigs.

The next steps could see other services within the council's trialling the bikes for services that are based within local communities, as well as community groups and organisations. The Ranger service are keen to try other types of e-cargo bikes like Tern GSD, as well as other general electric bikes with trailers, as they may be handier for nipping around larger countryside sites on different terrain. This trial was just the start over wider potential cargo bike movement in East Lothian, not just for local authorities, but for domestic use, for communities, businesses and organisations. If you want to learn more about Cargo Bikes check out the Sustrans website and their Cargo Bike project in Scotland.



May

May is a great time to plant sunflowers in the ground. They are fabulous seed sources for birds so it is well worth adding them to your wildlife garden.

Why not have a section of the garden that is for wildflowers? They do sometimes need a different soil type from the rest of the garden as they usually like a much less nutrient-rich soil for them to grow happily.

Why not check out the great selection at

Scotia seeds for a **Scottish supplier '** as what grows down south may not do well up here, and less miles for delivery.

Lawn lovers, if you have been brave enough to leave a few dandelions, how about leaving a section of lawn to grow long? Wildflowers and invertebrates love the longer grass and even small mammals like voles and field mice use it for important cover in a garden.

Wildlife 5



June

We know that it is really tempting to reach for the pesticides in June, when all your lovely plants appear to be under attack from aphids.

However, these chemicals don't just attack the aphids, but kill all the invertebrates that you have been working so hard to encourage to your garden. So why not try mixing a weak washing up solution with water in a spray bottle and schooshing those pesky aphids off your plants!

Aphids are tenacious though so you might need another approach. Did you know that aphids are the favourite food of ladybirds? And who doesn't like ladybirds! So encourage more ladybirds into your garden and to eat your aphids by making them a ladybird house ...

Nettles are not top of the list for many gardeners, but they are the vital foodplant of the comma, peacock and small tortoiseshell butterflies. If you leave a small patch of nettles in your garden, then these caterpillars will chose to eat the nettles and not your favourite plants (fingers crossed!). If you want to grow a big patch of nettles, try making some nettle tea or nettle soup- go on, it is better that you might think, promise!

Heavens Above

As we gradually move into summer, the night sky viewing opportunities can sometimes be a little thin.

The bold winter constellations disappear and the shorter nights mean less time for viewing.

A bit of perseverance can still bring some very rewarding sights however.



May's 'Flower' Moon



The Virgo Cluster



On the 5th of May the full moon known as the Flower Moon will occur, so named because of its connection with the blooming of spring flowers. On the following evening is the peak of the Eta Aquarid meteor shower. The shower occurs as the Earth passes through the debris left by Halleys Comet. The meteor shower appears to originate from the constellation Aquarius and is named after one of its stars Eta Aquarius. The point of origin will not appear above the horizon in the east till about 3am on the 7th, so to get the best views you will need to wait till then!

We are going to move from one zodiac constellation to another now. Many of the zodiac constellations are difficult to see either because they are too faint or because they lie too far south to see from our northern location. Virgo is one of the larger constellations and can be difficult to see fully unless the sky is particularly dark. Its brightest star, Spica, is relatively easy to find though. First locate the Plough which is quite high overhead at the moment. Follow the curve of the handle and continue the curve down to

the bright star Arcturus. Carry this curve on down to the next bright star which is Spica. Spica is actually two stars that are so close together they are egg-shaped instead of spherical due to the huge gravitational pressures. Spica means spike, and refers to an ear of grain carried by Virgo herself. Virgo means maiden and in many cultures she was depicted as a goddess of the harvest such as Demeter in Greek mythology.

My favourite part of this constellation though is that it contains so many deep sky objects. On Virgo's northern edge lies a large group of galaxies known as the Virgo Cluster. There maybe as many as 2000 in this group, but five giant elliptical galaxies are visible through telescopes. One, named M87, is 51% larger than the Milky Way, being 132,000 light years across. The Virgo Cluster is part of a super cluster that contains our own Milky Way galaxy. It is worth remembering that only 100 years ago it was thought that our galaxy was the only one in the universe. We now know of course that there are billions of other galaxies, and that space is so much bigger than we ever imagined.



Picture the Earth 4.5 billion years ago (or thereabouts). In all probability it would have been a ball of molten material, which gradually cooled – at least at the surface – to form a solid crust. This crust consisted of the first rocks and this process of cooling and solidification continues to this day. Rocks formed in this way are referred to as igneous rocks – the term is derived from ignis – the Latin for fire.

Modern igneous rocks are formed when molten material (magma) from the upper mantle forces its way upwards into the crust. They can be classified according to where the magma ends up cooling and hardening. Extrusive rocks are formed when magma reaches the Earth's surface - basically they're the solidified version of anything that comes out of a volcano, whether that's lava, ash, dust or whatever, Intrusive igneous rocks result from magma cooling underground, before reaching the surface. Both types are made up of interlocking crystals, but the size of these crystals (or grain-size, to use a technical term) can give a clue as to which category a rock falls into.

Extrusive rocks tend to be more finegrained, as their surface exposure led to relatively rapid cooling. Intrusive rocks, cooling slowly underground, have more time for their crystals to grow and are often relatively coarse grained.

Igneous rocks can be further categorised by the amount of silica they contain. Or, to put it another way, how much of the mineral quartz is present. Those, like granite, which contain high quantities of quartz tend to be light in colour. Conversely, igneous rocks with little or no quartz, such as basalt, are dark.

Most of the igneous rocks found in

the county are of the darker, silicapoor variety. Fine-grained basalt and
medium-grained dolerite can be found
in a number of locations across the
county. They are often found within
structures known as sills and dykes.
These features are both types of
intrusions, but are formed differently.
Sills occur when magma squeezes
between the layers of the surrounding
rock, resulting in horizontal (or close
to it) formations. Dykes are formed
by magma forcing its way vertically
upwards, cutting across other strata,
creating walls of igneous rock.

Basalt can also be found as an extrusive rock, in lava flows such as those in the Garletons. An example of columnar basalt – formed when lava cools and contracts into regular hexagonal shapes – can be found at Dunbar Battery. It's not quite the Giant's Causeway, but it's still worth seeing.

The cliffs at Dunbar also features another igneous rock known as tuff. This is formed from volcanic ash and rock fragments produced by an explosive eruption. A similar (ish) rock can be found in hummocky outcrops at Yellowcraig. This is agglomerate, formed when volcanic debris collected and solidified in small vents.

If you want a really special igneous rock get yourself along to Traprain Law. This laccolith – a mass of magma which cooled underground – is made of phonolite. This name comes from Greek, meaning "sounding stone" and is derived from the clear, metallic ringing sound produced by hitting the rock. Musical geology – what more could you ask for?









TICKS by Lisa Crossley of Lyme Resource Centre



What is a tick? Have you ever seen one with your own eyes?

Have a look at this image of this human fingertip and you'll see just how small and difficult they are - especially the tiny newborn nymph tick.

Ticks are tiny blood-sucking arthropods who need humidity and shade to survive. They are found in woods, fields and moorland but may survive in urban parks and gardens if conditions are suitable, including East Lothian but even areas of Central London.

Ticks are more active from April to October but may remain so throughout the year in warmer parts of the UK. Lyme disease can be transmitted to humans by at least three species of hard-bodied tick – and that's why we all need to know about them and how to stay safe!

There are a few key things
you should know: firstly how
to spot them: they often jump from
longer grasses and undergrowth onto
humans or animals as they brush past.
Then they move to warm moist places in
your body – like inside elbows, behind
knees and in the groin. In children, they

can move towards the neck and ears too. But if you try to flick off your skin once embedded, they won't move. So, how do you remove them safely?

Watch **THIS** \checkmark video on how to remove a tick using tick removers. Or **THIS** \checkmark video.

Don't be tempted to use oil or alcohol or set fire to a tick embedded in your skin as you could force the tick's stomach contents into your bloodstream. Only 10-15% of ticks carry bacteria and viruses that can cause Lyme disease and other tick-borne infections but you cannot tell which ones!

Once removed, you need to watch for signs of any Lyme disease infection – often as a summer type 'flu', or a reddish bullseye type rash. This rash (called an Erythema Migrans or EM rash) is often not very circular, and can appear anywhere on the body - often 3-30 days after the bite. In fact, less than

40% of those bitten experience any rash, and sometimes it's so faint you wouldn't even notice. You'll find some examples **HERE** \$\overline{\pi}\$.



Lastly, if you experience 'flu signs or an EM rash, even if you don't remember a tick bite (since most people don't) you should contact your medical practice and let them know you are concerned it could be Lyme disease. No test is needed as Lyme disease is a clinical diagnosis; that means the doctor or prescriber will take account of whether you've been bitten or in a tick-infested area, and importantly your symptoms. An EM rash means you do have Lyme disease so they will prescribe the correct antibiotics for the right length of time (usually 3 weeks according to the NICE guidance for the NHS).

So how can you protect yourselves and get outside to fully and safely enjoy the great outdoors? Here's some tips:

- Avoid brushing against vegetation (as ticks jump on as you brush past)
- Wear long trousers and tuck them into socks
- Wear light coloured clothing so that ticks are more easily noticed
- Insect repellents containing DEET and picardine are effective against ticks
- Carry out tick checks regularly after being in grasslands, parks or known tick areas - especially on children and domestic animals
- Remove any ticks promptly

You can find much more information on the Scottish registered charity website of Lyme Resource Centre (LRC)

www.lymeresourcecentre.com

Lyme Resource Centre have devised and are now putting up hundreds of signs across Scotland to help people know and understand how to protect themselves against ticks. They also educate health professionals about recognising and treating Lyme disease, and work alongside Scottish Government and outdoor organisations to improve public awareness of ticks and Lyme disease.

East Lothian is a very beautiful part of our country with amazing spaces to enjoy outdoor pursuits and adventures – or simply a day in our recreation parks in villages and towns.

LRC's aim is for us all to fully and safely enjoy what East Lothian, and indeed the whole of Scotland, has to offer.

Would you like to help LRC to raise awareness of ticks and Lyme disease?

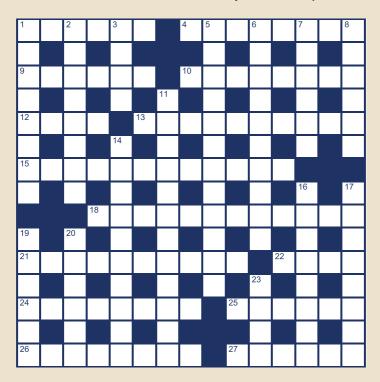
Could you support LRC with much needed funding through fundraising or donations?

Or would you simple like to know more? Contact admin@lymeresourcecentre.com

Ticks 11

Quick(ish!) Crossword

The answers here are the same as the Cryptic Crossword (p14) – so if you get stuck you could always look at those clues! You can also click HERE 'to complete online. (The solution is on p15)



Across

- 1. Rabbie's mother lived & died here (6)
- 4. Home of The Dons (8)
- 9. Countryside carer (6)
- 10. Invite trouble for yourself (3,3,2)
- 12. Dull pain (4)
- 13. Unable to read or write (10)
- 15. A 9 (5,7)
- 18. Plant which burns skin (5,7)
- 21. Like crocodiles (10)
- 22. Multi-coloured horse (4)
- 24. Universal (8)
- 25. Dwarf ornamental tree (6)
- 26. Needed when operating the Great Dane (8)
- 27. Creepy (6)

Down

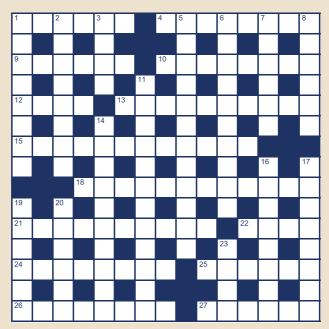
- 1. Type of goose (8)
- 2. Not a short flight (4,4)
- 3. Comply with (4)
- 5. Large harmless plankton-eating fish (7,5)
- 6. Practice shooting area (5,5)
- 7. Remove for better hearing (6)
- 8. A spice (6)
- 11. No middle position (3-2-7)
- There's one next to the Scottish Seabird Centre (6.4)
- 16. Small cutting device (5,3)
- 17. Establish what something is (8)
- 19. Socially awkward (6)
- 20. Woodlouse (6)
- 23. Domesticated male pig (4)



Poetry

Cryptic Crossword

The answers here are the same as the Quickie Crossword (p12) – so if you get stuck you could always look at those clues! You can also click HERE 12 to complete online. (The solution is on p15)



Across

- 1. Supplementary home of Agnes Burns (6)
- 4. A second letter to the Queen about need for coastal city (8)
- 9. Really enrage park keeper (6)
- 10. Request trouble? (3,3,2)
- 12. Pain from stomach examination (4)
- 13. I'll say it again can't read nor write (10)
- 15. A gradual soul is transformed into a 9 (5,7)
- 18. Very large pig takes cannabis plant (5,7)
- 21. Gorillas at war like crocodiles (10)
- 22. Horse ran round ring (4)
- 24. Chaotic start to life makes it all-embracing (8)
- 25. It's a small tree in Gabon, said expert (6)
- 26. They stop noise but are about to repeatedly mention start of sound (8)
- 27. It's creepy to shed tears about law reform (6)

Down

- 1. Concocted conic cuppa coffee (10)
- 2. Replaces words in bad taste, risky sentences (8)
- 3. Take (wool?) to the cleaners (6)
- 4. Cut tail off snipe (4)
- 5. Windflowers are names one makes up (8)
- 6. Dreads writhing snakes (6)
- 7. Courage in under-going rite of passage (4)
- 13. Key principle of hate networks (5)
- 15. Tennis a lot is played in this town (4,6)
- 17. Blame one's mixture of fertiliser (8)
- 18. Grey-ish brown mirror found near Bilsdean (8)
- 20. Japanese woman she got involved with a GI (6)
- 22. Lizard in Guiana? (6)
- 24. Frog in to a duchess? (4)
- 25. Travel on horse-back in opposite direction (4)

Volunteer Diary Dates

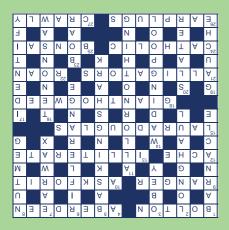


Remember to save the date!

Where	Day	Date	Time
Yellowcraig	Thu	4 th May	10:00-15:00
North Berwick	Thu	11 th May	13:00-15:30
Levenhall Links	Tue	30 th May	10:00-13:00
Dunbar	Wed	31st May	10:00-13:00
Yellowcraig	Thu	1 st June	10:00-15:00
North Berwick	Tue	8 th June	13:00-15:30
Levenhall Links	Tue	27 th June	10:00-13:00
Dunbar	Wed	28 th June	10:00-13:00

For information on all events please contact ranger@eastlothian.gov.uk

Crossword Solution



Get in touch

We'd love to hear from you!

Email us at ranger@eastlothian.gov.uk or follow us...

- @ELCrangers
- @ELCrangers
- f East Lothian Council Countryside Rangers