

East Lothian Council Countryside Rangers

Jan/Feb 2022



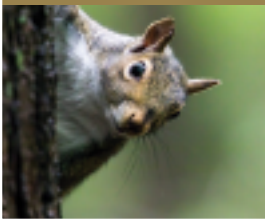
# MUD in your EYE



**Birds**

**Surviving Winter – Pages 4/6**

**Poetry**



**Heavens above**



**Warden Award**



Cover: *The jay, the most colourful member of the crow family.*



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Welcome to the 55th 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

### Welcome to our first edition of MIYE for 2022.

As we are now in the depths of winter we have articles on how wildlife survives this bleak time as well as a specific look at a creature common in both rural and urban environments. We have our regular look at the night sky plus an important message from Historic Environment Scotland. In addition, find out what Rangers get up to when they get together!

Congratulations are also due to John Harrison on being presented with the Bob Saville award – details are on the next page.

Finally, I made a mistake in the last issue (not uncommon!). In the editorial I mentioned winter as a time for pupping common seals. This of course should have been pupping grey seals.



*The pretty native red squirrel.*



*The more prolific grey squirrel.*



# John Harrison awarded the Bob Saville Award

**Every year, The Wildlife Information Centre (our local records centre) presents an individual or organisation with the Bob Saville Award. Bob Saville was one of the founders of The Wildlife Information Centre, and a well-known face in biological recording in Scotland until his death in 2010.**



*A very proud John Harrison.*

The Bob Saville Award was established in his memory, to recognise individuals who make an extraordinary contribution to biological recording and nature conservation. At the TWIC conference in November 2021, our own John Harrison (Aberlady Warden) was presented with the award.

Due to Covid, the conference was held online, however Sarah Eno (TWIC Chair) was able to share some of John's achievements since joining ELCRS in 2007. John has wide ranging skills in species identification, but with a special interest in birds and moths.

He has used these skills to undertake a comprehensive programmes of species recording and monitoring at Aberlady Bay LNR (and further afield), and has so far contributed a whopping 12,500 records to TWIC over the years. Many will also be aware that John collates and submits records on behalf of ELCRS and volunteers, which now number 14,000 records thanks to John's enthusiasm and dedication.

On receiving the award, John said, "Thank you so much to everybody at TWIC for the award. I am honoured to receive it, particularly knowing the illustrious list of previous recipients. I very much enjoy wildlife recording and want to thank the East Lothian Council Countryside team for the support that enables us to still do this. Many Ranger services throughout Scotland are no longer able to do survey and monitoring work, so I appreciate their support. The work of our volunteers is absolutely tremendous! Having the best outdoor classroom in the area (nay the world!) helps a lot in inspiring new people to get involved. I'd also like to acknowledge the work of TWIC, who collate all the data, make good use of the records, and engender a community of friendly and welcoming people – there's always someone there to help you get involved with recording projects". Many congratulations John!

# Ranger Rendezvous

**It takes a certain kind of person to work as a Countryside Ranger and this is no more in evidence than when you get a bunch of them together (unofficially known as a 'rabble') and, from like-minds, conversations and ideas flow!**



*A 'rabble' of Rangers.*

One such 'rabble' is known as the Ranger Rendezvous. This is a national conference organised by the Scottish Countryside Rangers Association (SCRA), which serves as an umbrella organisation, bringing all Rangers and Ranger Services together across Scotland. Postponed from 2020, the 2021 Ranger Rendezvous was held in Cairngorms National Park in November and involved a series of talks, workshops and site visits around the subject of the climate emergency and biodiversity loss. As stewards of the Scottish countryside, Rangers are passionate about its conservation and the buzz and energy from conference delegates to understand and

tackle the challenges of climate change was great to see. We all went away enthused by everything from the latest research into managing forests to cope with increasing instances of drought in Scotland (yes, really!), to the benefits of swapping a diesel van for an electric trike. The conference was attended by a number of Rangers from East Lothian, who were able to demonstrate the work already being done in the County to tackle the challenges that climate change brings. There is still much we need to do, but so much to gain in how we do it. Keep an eye out for news on developments over the coming months.

# How do birds survive the winter?

Winter is a difficult time of year for birds. The days are short, limiting the amount of time available to search for food. Nights are long and cold, so keeping warm is challenging. So just how do they manage to get through the winter?



*Bird feeders, great to watch and important to survival.*

## Feathers

Their down feathers provide plenty of extra warmth that is necessary when the temperature drops. Many birds will even grow extra down feathers in the months leading up to winter so they are better prepared.

## Preening

Wet feathers can prove disastrous in cold weather. Birds have oil-producing glands, and as they preen they are coating their feathers in this oil to waterproof and insulate their down feathers. In addition, you'll often see birds fluffing their feathers to create air pockets that trap body heat to keep them warm.



*Fieldfares, winter visitors.*



# How do birds survive the winter?

## Continued



*The colourful goldfinch.*

### **Legs and feet**

You might think that a bird's bare legs and feet get very cold but a cunning adaptation of their circulation system prevents this. The arteries that carry warm blood from their heart pass right alongside the veins carrying cold blood from the legs, heating them up. In hot weather the flow of warm blood to the legs increases, so the bird can lose unwanted heat and keep cool.

### **Torpor**

Birds can enter a state of torpor to survive cold periods of reduced food availability. They lower their body temperature, which in turn decreases their metabolic rate. It sends them into a trance-like state and conserves their energy and heat for hours, days, or even weeks at a time. However, this seemingly lifeless state can make them more vulnerable to predators and other emergencies because reaction times are slower.

### **Food glorious food**

Hard winter weather may mean a change in behaviour rather than a change of location for many birds as they attempt to find enough food to build and maintain adequate fat supplies. But unlike other animals they cannot afford to lay down too much extra fat as this would hamper their

ability to fly and put them at risk of predation. Daylight foraging is reduced to 8 hours or less, compared to over 16 hours during the summer. BTO research has shown that small birds must spend over 85% of daylight hours just foraging for food to be able to consume enough calories to survive the long night. So only small amounts of fat are stored, perhaps just enough to keep them warm for a single night. In fact, small birds can lose over 10% of their total body weight during a single winter night.

Hoarders such as jays turn to the 'larders' they prepared in autumn when food was plentiful and dig deep in the snow to find the stores of acorns they stashed.

### **Migration**

Some of Britain's resident birds, like partridges, never move more than a kilometre from their birthplace, but more than 40 per cent of the world's bird population are migrants. Their migration journeys coincide with the changing of the seasons, with Britain's winter residents arriving during autumn from colder countries to the north and east. They're attracted to Britain for its milder winter temperatures, which makes food easier to

# How do birds survive the winter?

## Continued

find, before returning to their breeding quarters in spring. Many of these migrants are species that we don't see at any other time of year, such as pink-footed geese or waxwings. However, many winter migrants are more familiar species such as blackbirds, and their arrival boosts our resident populations.

### Night time challenges

Avoiding becoming someone else's dinner becomes even more challenging at night. Starlings congregate in their thousands at fairly predictable winter roosting sites. But before they settle down for the night, they often perform great swirling sky-dances, called murmurations. Not only is it remarkable to witness, but it is also a means of confusing predators, as well as jostling for the best roosting position and sharing information about where best to go foraging the following day.

Other species can be seen moving to their night-time roosts; gulls move from their daytime feeding site to a reservoir or lagoon, where they will spend the night on the water alongside ducks and geese.

Rooks and jackdaws also gather in their hundreds in farmland woods.

### Safety in numbers

Flocking together in winter improves the chances of locating food and huddling together during the critical night-time period helps conserve body heat. By sticking together, they also improve their chance of survival, because together they are far more likely to spot a predator, like a sparrowhawk, before it's too late. Long-tailed tits form loose flocks ranging from 5 to 50 birds, often flocking with other tit species.

They are regular visitors to garden feeders, especially suet balls from which they can easily extract small berries and seeds with their tiny black bills, so you may not even need to leave home to see them!

### So how can we help?

Whilst it's understandable that we can be concerned for birds, and other wildlife, at this time of year we needn't worry. They are well adapted to coping with the cold weather. That being said, it doesn't mean there isn't anything we can do help make things easier for them.

**Food and water** - Providing clean water and a variety of food for our garden visitors can help them through the winter. Foods such as peanuts, suet and mealworms offer high energy and fat resources.

**Be untidy!** - Not being too tidy in your garden also helps them out; leaving seed heads offers another valuable winter food source for birds such as goldfinches.

**Shelter** - Having a variety of good winter cover helps them out too. Plants such as ivy not only provide winter berries for many bird species, but the dense foliage provides shelter for them overnight.

**So now you have the perfect excuse to be a slightly untidy gardener, and sit back with your cup of tea and enjoy watching the birds flocking to your feeders, happy in the knowledge you are helping them out this winter!**

# Where have all the swallows gone?

**We're probably all familiar with the concept of migration – birds fly south for winter, don't they? Inevitably, it's a bit more complicated than that. There's actually a large east – west element to many migration routes and this is especially true in our part of the world.**



*Waxwings in Haddington.*

Being an island on the western edge of Europe (remember Europe?) means that our climate is greatly affected by the sea and more importantly the Gulf Stream. Now, whilst it can get chilly in East Lothian, it's worth remembering that we're on roughly the same latitude as Moscow, where it gets considerably chillier. As a result, many of our winter visitors have come to us from mainland Europe in order to bask in our relatively mild winters. I suppose one of the most important questions to ask about migration is: why bother at all? After all, it can be a long, arduous and downright dangerous process. It's thought that migration is the highest cause of mortality in many species, so there must be good reasons for taking the risk.



*Pink-footed geese (A. Marland).*

Inevitably, it's all down to sex and food, or, in more Darwinian terms, being able to maximise the chances to reproduce successfully.

Migration is effectively an evolutionary adaptation in response to seasonal changes in climate and availability of food. This is especially important for insectivorous birds such as swifts, swallows and martins. Over the summer there are abundant flying insects for them (and their young) to feed on, but this resource all but vanishes over the winter. It's no coincidence that these species have become almost iconic with regard to their arrival and departure. The signals that tell birds when to migrate vary from species to species – it may be a response to temperature, or day-length, or a combination of both.



*Painted Lady.*

You may hear reference to “calendar birds” and “weather birds”. The former arrive and depart on or around a set date every year and presumably are more dependent on day-length to trigger their migration. The latter, as the name suggests, decide when (or indeed, if) to migrate based on climatic conditions.



# Where have all the swallows gone?

## Continued

In Scotland our summer visitors include assorted warblers, which appear in late spring from their wintering grounds far to the south. Along our coastline you can also see terns and these include some real long-distance migrants. Arctic terns breed in high northern latitudes, including Scotland, but spend their winters (or rather, our winters) in Antarctica. It's estimated that in their lifetime the average arctic tern migrates over two million miles. Pretty impressive.



*House martins (A.Marland).*

In winter we're visited by geese, ducks and wader species. In a sense these are the high profile winter attractions for many of us – witness the number of people who regularly gather to see the thousands of pink-footed geese arriving along the East Lothian coast. However, numbers of our most familiar resident birds may also be boosted by migration.

Each year thousands of starlings arrive from eastern Europe, looking for respite from the harsh winters and dwindling food supplies.

Passage migrants are those which neither breed nor winter in the UK, but are seen on their way either to or from their breeding grounds. These include green sandpipers, little gulls and skuas. However, it's worth noting that individuals of the same species can behave differently.



*Willow warbler.*

Some dunlins, particularly those that breed in Greenland or Iceland, are passage migrants, stopping off to fuel up on their way to Africa.

Those that arrive here from Scandinavia or Russia tend to stay for the winter.

Migration is a complex, wonderful solution to the issue of seasonality and it's not just birds that have evolved to do it. Some of the most accomplished migrants are marine creatures such as whales and turtles. Some bats, amphibians and invertebrates also make regular migrations. In most cases it's a remarkable feat, although it can be less inspiring at times.

The blue grouse of North America manages to migrate from mountainous pine forests to lower mixed woodlands. This involves a vertical distance of about three hundred metres – admittedly, the actual distance moved may be a little more than this, but it's still thought to be the world's shortest migration.



*Dunlin (Jim Wood).*

# Where do squirrels bed down for the night?

**With the green modesty veil long removed in the depths of winter, the wonderful structures, colours and textures of tree trunks and branches are revealed.**

Casting your eye around the upper reaches of the trunk will before long reveal the occasional large ball of intertwined leaves & sticks nestling into a supporting fork in the tree. There is a good chance that these are squirrel dreys, with those in use at this time of year being cosy double insulated winter abodes.

Dreys can be confused with bird's nests, especially magpies whose nests are also spherical, but the latter are mainly built a greater distance from the trunk. They are also bigger than dreys which tend to fall between c.20-50cm in diameter. Just to be unhelpful to the gravity stricken observer, squirrels will occasionally adapt old bird nests too.

These winter residences are augmented in the summer by other more airy constructions which give overnighting options away from the winter drey.

Breeding however will often take place in the more substantial 'winter' drey which gives the young that extra bit of protection from the elements, but squirrels will also use tree cavities and bird boxes if they are large enough.

Like many birds, squirrels will line the interior of their drey with moss, grass or feathers to increase the hygiene and comfort of their winter pad. Both grey and red squirrels construct their dreys in similar fashion, though native reds, of which a population still hang on in East Lothian, are often smaller and neater looking.



*Grey squirrel drey.*

# Squirrel -

## by Finn Farnsworth

**This poem won second-prize in the People Need Nature challenge, which was set and judged by Gboyega Odubango on Young Poets Network in 2020. Finn Farnsworth composed this while attending a creative writing club at school.**

Swift and agile  
Sleek and prehensile –  
Skittering across bark  
And as dexterously over brick –  
Squirrel.  
The arch survivor –  
A thief in woodland  
A bandit of suburbia,  
Beautiful peanut pirate.  
You skim the rigging of  
Rotary washing lines  
And old telephone wires:  
Your sail-tail  
A Spinnaker of balance –  
A back garden acrobat.  
Grey down of fur covers  
The machine of sinew  
Tendons tight

Like bowstrings  
Wired to shoot across  
Fence top,  
Gate post, sign post,  
Post box – post haste.  
The highwayman of the high street,  
Terror of the terraces  
Ply your profession –  
Livelihood in the manmade Landscape.  
A narrow escape  
With a clutch of grapes  
Hijacked from garden vine  
Jam-packed with sweet juice.  
You make a getaway  
Into ornamental spruce  
Where you have your hideaway.



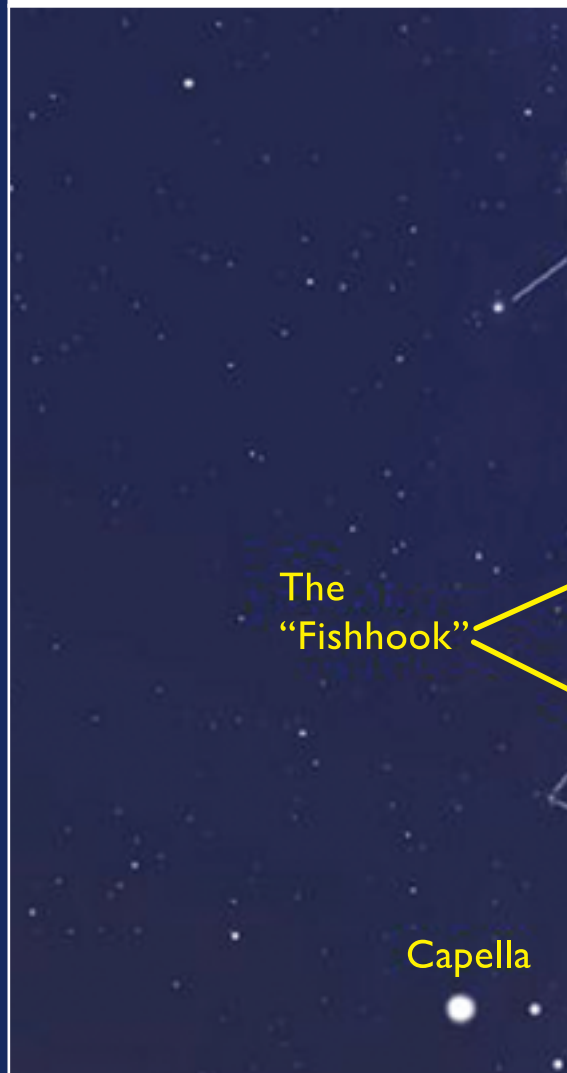
# Heavens Above - Perseus.

If you read the article in the last issue of MIYE, you should be able to find Perseus relatively easily in the night sky. As a reminder though, it is to the left and slightly below the W shaped constellation of Cassiopeia. Its main stars form a rough T-shape, with the brightest star Mirfak at the join between the stem and the cross piece of the T.

Perseus was the Greek hero responsible for killing the gorgon Medusa as well as rescuing Andromeda from the sea monster whilst riding on the winged horse Pegasus. The constellation is supposed to represent him holding up the decapitated head of Medusa.

Although Mirfak is the brightest and most obvious star, another slightly fainter star with the name Algol is more interesting. It can be seen towards the base of the stem of the T. It is famous to astronomers for being what is known as a variable star, that is, one whose brightness dims and brightens on a regular basis. In the case of Algol, it is not the star itself that changes in brightness. What was originally thought to be one star, has been shown to be an eclipsing binary. In other words, there is another star that revolves around it, passing in front of it and reducing its apparent brightness. In fact, the hot main star (Algol A) is eclipsed by a larger but cooler and fainter star (Algol B). Each eclipse lasts for about ten hours and occurs every 2.8 days. The reduction in brightness can even be seen with the naked eye by comparing it with neighbouring stars.

Strictly speaking the two stars revolve around each other in a sort of celestial dance. We see the orbital plane almost edge on so can spot when one star passes in front of the other.



# Heavens Above - Perseus - Continued

The two stars are only about 9.2 million miles apart. In comparison, the Earth lies 150 million miles from our sun, so the two stars are incredibly close together. So close in fact, that astronomers can detect that Algol A is

gradually stripping away the outer layers of Algol B.

Algol is known as the Demon Star, probably because it represents the head of Medusa. Did the ancient star gazers think it was Medusa winking her eye?





# Be vigilant against Heritage Crime

Across East Lothian, Historic Environment Scotland (HES) have a responsibility for caring for a number of properties, both staffed and unstaffed:

- Tantallon Castle (staffed, open all year)
- Dirleton Castle (staffed, open all year)
- Seton Collegiate Church (staffed, open summer only)
- Hailes Castle
- Dunglass Collegiate Church
- Doon Hill
- Preston Market Cross
- Ormiston Cross
- Chesters Hill Fort
- Lauderdale Aisle, Haddington
- St. martin's Church, Haddington

In recent years there has been a growing trend in petty damage, illegal metal detecting, vandalism, graffiti, fire setting and general antisocial behaviour.

Heritage crime carries significantly more severe penalties than vandalism; the maximum fine for damage to a scheduled monument is £50,000 and between six months and two years' imprisonment. In a recent prosecution case that came to court, two individuals were fined a total of £36,000.

We want to get the message across to everyone that any level of criminality on a HES site or scheduled monument needs to be recorded and reported as soon as possible.



*Tantallon Castle.*

## Be vigilant against Heritage Crime – Continued

If anyone comes across an incident please inform the staff on site, who will take photographs of the evidence of damage or disturbance and add these images to their internal reporting. If no staff are on site, incidents should be reported to Police.

Heritage crime is defined as any criminal activity which causes damage to a heritage asset. This includes metal theft, vandalism, and intentional damage to both historic buildings and monuments. As the regulator of works on scheduled monuments, and the enforcement authority, HES has a key role in the investigation of heritage crime. HES also promotes the importance of tackling heritage crime with Police Scotland.

Heritage crime has gained a higher profile with authorities since it was highlighted as one of the seven priorities in the Scottish Partnership Against Rural Crime Strategy. To support this, a Heritage Crime Group was established in 2019 as a partnership body to raise awareness of the impacts of criminal damage and to strengthen information sharing between partners.



*Dirleton Castle.*



## volunteer diary dates

Where	Day	Date	Time	Action
Yellowcraig	Thu	06 Jan	10:00 - 15:00	Pirri pirri survey & removal
North Berwick	Tue	18 Jan	10:00 - 12:30	tbd
Dunbar	Wed	26 Jan	10:00 - 12:30	tbd
Levenhall Links	Tue	25 Jan	10:00 - 13:00	tbd
Yellowcraig	Thu	04 Feb	10:00 - 15:00	Pirri pirri survey & removal
North Berwick	Tue	15 Feb	10:00 - 12:30	tbd
Levenhall Links	Tue	22 Feb	10:00 - 1300	tbd
Dunbar	Wed	23 Feb	10:00 - 12:30	tbd

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

