



Wild Art

A Wild Read

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Piping up for Plovers!

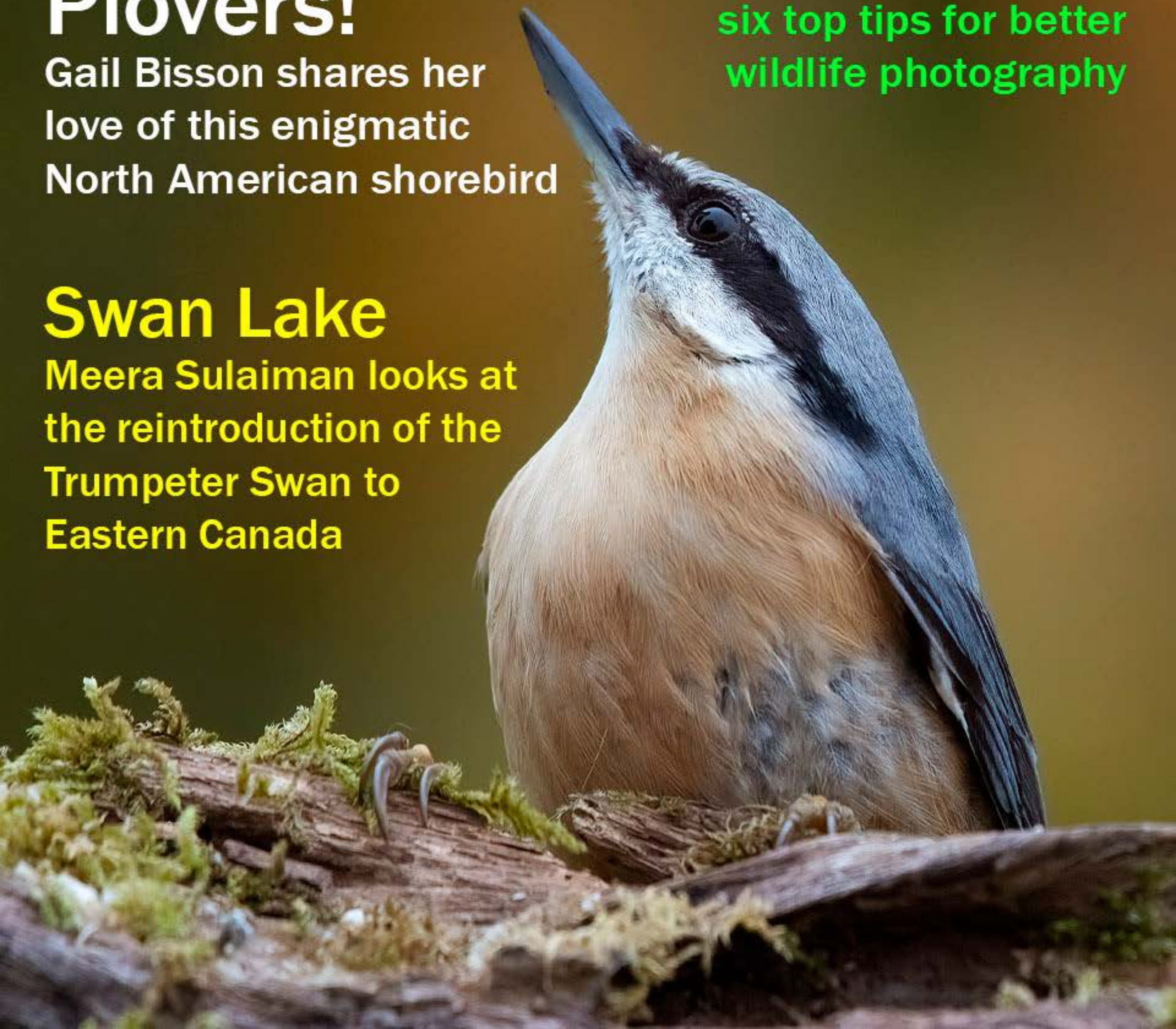
Gail Bisson shares her love of this enigmatic North American shorebird

Swan Lake

Meera Sulaiman looks at the reintroduction of the Trumpeter Swan to Eastern Canada

Top Tips!

Michael Snedic offers six top tips for better wildlife photography



Welcome to the second issue of A Wild Read. As I write this in late November, here in the UK we are in the grip of an early arctic blast following a harsh storm a couple of days ago which whipped the last of the autumn clothing from the landscape, revealing its winter attire. I woke this morning to a light dusting of snow and a heavy frost, not something we get very often in my part of Hampshire, especially when winter is still officially a few days off. An influx of Blackbirds and a solitary Redwing feasting on an apple I put out on the lawn told me that winter really had arrived. There will be plenty of cold days ahead with limited daylight hours, but that northern hemisphere winter light can be superb for photography – if only I had more time to get out in the field.....

This month we have another incredible selection of articles for you to enjoy and my thanks go to all our contributors for the time they have invested in producing these articles and the lovely images that illustrate them. Gail Bisson shares her love affair with the Piping Plover and shows some of her amazing images of this North American shorebird. New contributor Meera Sulaiman looks at the reintroduction of the Trumpeter Swan in Eastern Canada, Michael Snedic shares his six top tips for better wildlife photography, and Ian Parsons explains how to identify both Silver and Downy Birch. Plus much more of course.

By now, many of you will know how passionate I am about my love of wildlife and photography – one of the very reasons behind A Wild Read of course which is just one of the conduits through which I can share this passion. WildArt is developing into a community of people who share these passions, or simply want to know more about the subjects we cover. Inspiring people to love and care for our environment is one of the main aims.

I hope you all have a great Christmas and New Year. Stay safe and see you in the spring!

Rob Read.

Cover Image: Eurasian Nuthatch ©Rob Read

Back Cover Image: Common Frog ©Rob Read

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Piping up for Plovers!

Gail Bisson shares her
life-long love affair
with the Piping Plover



Main Image: Dogs must be kept on a leash on the beach where nesting occurs. ©Gail Bisson

My love affair with Piping Plovers started as a young girl. In 1963, The Canadian Wildlife Federation introduced shorts clips on television called 'Hinterlands Who's Who'. The black and white vignettes, lasting a minute and accompanied by a haunting loon-like melody, introduced Canadians to various birds and mammals. It became an iconic television staple for Canadians and was much more interesting than commercials for laundry detergent! These vignettes were my first introduction to Piping Plovers. As a young girl, I loved how tiny the birds were and how sweet the brooding behaviour was. It may have even been the first time I heard the word 'endangered'.

Piping Plovers are small migratory shorebirds that nest along sandy coastal beaches of the Atlantic Ocean from Newfoundland to South Carolina, the Great Lakes (70 known pairs), and on the Northern Great Plains of the US and Canada.

They have sand-coloured heads and backs that allow them to blend into their environment perfectly; a black 'headband' adorns their forehead and chest, and their legs and beaks are orange. Their feet are turned inwards slightly, making it easy to spot their little footprints in the sand. Their call is a rather plaintive 'piping' sound.

Piping Plovers nest on the beach and rely on their cryptic plumage to blend into their surroundings; their camouflage is so effective that I only spot them if they are moving and feeding on the beach. If a person strays too close to the nest, the parent will move away from the nest and exhibit a broken wing display, a behaviour designed to draw a predator away from the nest and follow a seemingly easy meal of injured Piping Plover.

I am very fortunate to live near a beach with an established pair of Piping Plovers. 'PU' and 'MJ' have been nesting for many years at our local beach in Cape Breton, Nova Scotia. PU is the banded male and MJ is the banded female. They have successfully raised many chicks and I have been privileged to watch over them (photographically) for the past six summers. However, 2021 brought some unexpected change.

PU (the male) usually arrives first in late April followed by MJ approximately two weeks later. There is always a bit of trepidation when awaiting the arrival of PU, so when I heard of his safe return on 22nd April 2021, I was relieved and happy. They are such small birds, and they face an arduous and dangerous journey from the Bahamas to Nova Scotia. When you think about it, the chances of repeated survival during these journeys seems slim.

Two weeks passed and there was no sign of MJ. I checked the beach several times in the following two weeks, but she never returned. I was surprised by my level of sadness as I realized she had likely died during the previous year, and the likelihood of PU finding a new mate seemed low. The species is endangered; there are only an estimated 45 known nesting pairs, and a total of roughly 100 individuals here in Nova Scotia. My head was full of questions. How would PU find a new mate? Would he move on to another beach? The days passed and I stopped checking the beach.

And then some wonderful news - a local birder had photographed a new female at the beach. And so, a new match and union were made! This female was unbanded and I called her Stella. It is amazing that such a rare and endangered shorebird can find a new mate in this vast expanse of Eastern North America. It seems there is no need for dating apps for these birds!



Gail Bisson
PHOTOGRAPHY

Main Image: A Piping Plover chick chasing invertebrates on the beach.

©Gail Bisson

PU and MJ always nested in the same area of the beach, but this new bride wanted her own home and she and PU nested in a slightly different area. The nest is a simple scrape in the ground (made by the male PU) and is lined with rocks and broken shells. The nests are literally invisible to most beachgoers and the area was cordoned off by biologists and volunteers. After a quick visit from “outside the ropes” I waited for the four eggs to hatch.

Hatch day produced three chicks, with one egg lost. As soon as the chicks are born, they are literally off and running, catching various bugs and marine invertebrates. Incredibly, they receive no help from Mom or Dad for food. Both parents spend their time protecting the chicks from predators such as birds of prey, off-leash dogs, foxes, and coyotes. However, there is little they can do about human disturbance like ATV (all-terrain vehicle) use, and careless walkers - one of the main reasons their nesting sites are protected by cordons.

Below: A Piping Plover chick is simply adorable and there is nothing better than watching them jostle for position under the parent's belly. ©Gail Bisson



Both parents take responsibility to brood the chicks to keep them warm, and a brooding patch is found on the belly of each adult. This patch of featherless skin allows the parent bird to provide extra warmth from his or her own body to the eggs in the nest, and to the growing, newly hatched chicks in the first days of life.

There is nothing sweeter than watching the chicks jostle for position under their parent's belly. The young chicks are simply adorable - to me they resemble little cotton balls resting on tall toothpick legs. They quickly lose their down feathers and, as fledglings, start to grow real feathers, transitioning into the ugly duckling/teenager phase of their life. They learn to fly at 25 to 27 days old.

Stella left about two weeks after the chicks hatched, behaviour identical to her predecessor MJ, and left all the chick-rearing to PU. He is an awesome Dad. I last saw the family in late July and all three fledglings were doing well. They have now left the beach and are on their way South. A new chapter for this couple has begun and I am looking forward to seeing them both next summer!



Above: A new female arrived on the scene. As she was unbanded, Gail called her Stella! ©Gail Bisson

Here in Nova Scotia, we have a wonderful group of volunteers who cordon off the plovers' nesting area and erect signs to warn and inform beachgoers. Dogs must be leashed on the beach, and motorized vehicles are forbidden - owners can be fined for ignoring the rules. On a more personal level, simple things like leaving driftwood and seaweed on the beach for the plovers to use for food and cover and picking up garbage to deter predators such as gulls and crows are very helpful. Walking on the beach below the high tide water line will ensure there is no chance of accidentally stepping on the nest.

In 1985, the Committee on the Status of Endangered Wildlife in Canada designated the Piping Plover as endangered, which means that the species is at great risk of disappearing from Canada. The Piping Plover was listed under the federal Species at Risk Act in 2003. Provincial endangered species or wildlife legislation to protect the Piping Plover exists in all Atlantic provinces as well as Quebec.

Below: A Piping Plover fledgling stretches its wings. ©Gail Bisson





In the US, Piping plovers were common along the Atlantic coast during much of the 19th century, but commercial hunting for feathers to decorate hats nearly wiped them out. Following passage of the Migratory Bird Treaty Act in 1918, plovers recovered to a 20th century peak in the 1940s. Increased development and beach recreation after World War II caused the population to decline and led to Endangered Species Act protection in 1986.

The future looked very grim in 1986, with just 790 breeding pairs surviving on the Atlantic Coast, but intensive protection has helped the population more than double in the last 20 years. The work is not yet done, with the most recent surveys still placing the Atlantic population at fewer than 2,000 pairs. In Massachusetts, the population of Piping Plovers has increased by 500%. It feels so good to type that last sentence. Finally, some good news!

Piping Plover numbers are slowly rising, and they are getting a lot of media attention. In 2019, the arrival of a new nesting pair of Piping Plovers at busy Montrose Beach in Chicago has created a huge positive response from the residents. An area of 15 acres has been cordoned off and established for the birds. They have been called Monty and Rose (after the beach) and have had three successful broods. It led to the creation of a 50-minute documentary in 2021 called 'Monty and Rose 2: The World of Monty and Rose.' Pixar's six-minute animated short movie 'Piper' about a plover learning to feed, has garnered numerous awards. Although not specifically a Piping Plover, Piper has introduced shorebirds to a young new audience, just as "Hinterland's Who's Who" introduced me to them, albeit in a much splashier and colourful way. For Piping Plovers, there is no such thing as bad press!

Gail Bisson.

*Main Image: A Piping Plover on its nest on the beach ©Gail Bisson
Inset Image: A Piping Plover fledgling. ©Gail Bisson*

Six of the Best

Michael Snedic outlines six techniques for taking better wildlife photos

Michael Snedic is an Australian wildlife photographer, tutor and founder of WildNature Photo Expeditions. He has been photographing the natural world for the last 25 years. Michael has been writing magazine articles on wildlife and nature photography, since 2001, including 'Australian Geographic', 'Wildlife Australia', 'Birdlife Australia', the UK's 'BBC Wildlife' and 'Australian Photography' (Australia's largest-selling photography magazine) which he has been a feature writer for since 2006. He is also a Nikon School tutor in Queensland, Australia.

<https://michaelsnedic.com/>



Main Image: An African Elephant puffing dust.
©Michael Snedic

1. Choosing The Right Lens. If you can afford it, I suggest you buy the longest focal length lens, with the smallest aperture, for wildlife photography. Telephoto lenses such as the 300mm f2.8, 400mm f2.8, 500mm f4 and 600mm f4 are all incredibly sharp, with super fast focusing. They allow you to shoot at wider apertures which let in more light. The more light, the faster the shutter speed and therefore the sharper the image will generally be.

Zoom lenses such as the 150-600mm, 200-500mm, 100-400mm (to name a few) have smaller apertures (in size) at the longest focal length. One of the disadvantages to these lenses is that it can make hand holding tricky in low light situations such as rainforests. One major advantage, however, is that you have so much more flexibility when composing your subject due to the lenses having the option to zoom.

2. Lens Stabilising Options. I have always been an advocate for using a monopod with a dedicated monopod head, when needing to stabilise a heavy lens. This allows you to shoot at much lower shutter speeds and still get sharp shots. If you don't own a monopod and are out walking in the forest, you can also lean the camera and lens against a tree. You will be amazed at how much more stable your gear is, compared to hand holding.

A great option option for extra stabilisation is to use a photographer's beanbag. This can be filled with beans, wheat or rice (not polystyrene) and used to nestle your camera and lens on a fence post or fence, on a rock, on your car bonnet or placed on top of a half-opened car window. It is quite impressive to see how much more stable a beanbag is compared to hand-holding. When presenting my photography workshops in Africa, my guides know automatically to supply beanbags for my guests!

Another way to stabilise a heavy camera/lens is to use a sturdy tripod with a gimbal (such as a Wimberley). This is especially useful for situations where wildlife are fairly stationary such as bathing, preening, feeding or performing a display ritual. That way you can set up in one spot and not lug the heavy gear around. I always use a small camp chair to sit on, for extra comfort.

3. Shoot At Eye Level. From the first time I picked up a camera some 25 years ago, my photography mentor mentioned the importance of getting as close to eye level as possible. Being at eye level creates a much more pleasing image, rather than photographing a subject from a height, looking down on to it. The same goes for looking straight up at an animal. If you can, position yourself so that there is less of an angle. If you are shooting wildlife with a tripod and a gimbal (such as a Wimberley), I suggest you splay the tripod legs to as low as possible. In some cases, you can remove the tripod's centre column, so that it doesn't limit how low you can go.

4. Focus On The Eyes. It is important to focus on the eyes, when shooting wildlife. The first thing a viewer generally looks at when looking at a wildlife image is the eyes, so if they aren't sharp then the image doesn't work. If the subject is a fair way away, it isn't always possible to focus on the eye, but if the subject is closer then that's where you should place your camera's focus point. If you are going for an abstract image, such as motion blur, then this rule need not apply.

5. Photographing Wildlife Behaviour. Whether photographing birds in flight, a cheetah going for a kill, a polar bear leaping over ice or young elephants playing, the important thing is to use a fast enough shutter speed. For birds in flight, for example, I recommend a minimum shutter speed of 1/2000th of a second (and even higher for fast-flying birds). To capture a whale breaching, including freezing the water surrounding its body, I regularly use 1/4000th of a second or similar. Quite simply, a faster shutter speed gives you a far greater chance of capturing those special wildlife 'action' shots.

The fast shutter speed should be coupled with using auto focus and continuous shot or 'burst' mode. By half-pressing your shutter button and locking the camera's focus point onto a moving animal, then moving with that animal while keeping the focus point on it, you have a greater chance of capturing stunning wildlife behaviour shots. Once you are ready to take the shot, hold the camera's shutter down and allow the continuous shot to work.

Left: Fast moving subjects like this breaching Humpback Whale require fast shutter speeds. ©Michael Snedic





6. Do Your Research. One of the best pieces of advice I was given some 25 years ago when I started photographing wildlife, was to do some research before you actually start shooting. For example, where are the best spots to photograph certain species? What is the best season to photograph them? What particular movement predates a particular behaviour (for example, some raptors nod their head a few times before launching into flight) or where is the best position to set up in order to achieve the best light on your subject.

Prior research really does pay dividends. For instance, if you are planning to walk a few kilometres in the dark before sunrise to get to your subject(s), then do a 'reccy' beforehand, so you know the terrain and aren't tripping over in the dark. Also, certain behaviours will only occur at specific times of the year. Research when these behaviours happen so that you are fully prepared.

Most of all, enjoy getting out there with your camera. With so many types of wildlife, found across the world in every imaginable environment, you certainly won't run out of subjects!

Michael Snedic.

Left: Getting the camera at eye level to the subject creates a more intimate connection for the viewer.
©Michael Snedic

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Publication will be in January 2022 and for every copy sold prior to publication, WildArt will donate £5 to the conservation causes supported by our judges in 2021. Buy your copy now and help us raise another £5,000 for conservation.



Collection 1

Foreword by Robert Irwin

A Second Chance

Meera Sulaiman
looks at the
reintroduction of the
Trumpeter Swan
in Eastern Canada



Originally native to Ontario, the Trumpeter Swan disappeared from Eastern Canada early in the 20th century due primarily to hunting. They were hunted for their feathers, meat, and even the leather on their feet.

In 1982 biologist Harry Lumsden initiated the Ontario Trumpeter Swan Re-introduction Programme. A long multi-year process involving creating breeding pairs, obtaining licenses and permissions to release birds into appropriate summer habitats, and initially rendering the birds flightless so they could establish familiarity with their breeding grounds, were just some elements of the reintroduction process.

The first Trumpeter Swans were hatched in Mute Swan nests – the females didn't object to the newcomers, but unfortunately the males did. They attacked the trumpeter cygnets, which were a silvery colour compared to the brown mute cygnets. To protect the little trumpeters, Lumsden ingeniously tinted the feathers, so they were darker

in colour to make them look like Mute Swan cygnets, and that seemed to satisfy the male swans.

With excellent wetlands and archeological evidence showing the historical existence of Trumpeter Swans in the Midland, Ontario's Wye Valley, the Wye Marsh Wildlife Centre became the home to the first captive breeding pair of Trumpeters in 1988. "Big Guy" and "Lady Girl" as they were called, successfully raised the first cygnet "Pig Pen" in 1990. In 1993, Pig Pen and her mate became the first wild nesting pair of Trumpeters in the province of Ontario in over 200 years. Pig Pen and her cygnets were also the first Trumpeters to winter at LaSalle Park in Burlington, now the province's premiere overwintering location for these birds.

Through these conservation efforts, the Ontario population has reached around 1,500 self-sustaining Trumpeter Swans, with at least 131 breeding pairs.

Every healthy individual and breeding pair is an extremely valuable asset to the Trumpeter Swan Restoration Program as their success will largely influence the continuation of an increasing population.

Trumpeter Swans learn how to migrate from their parents. This learned behaviour becomes behaviour that they repeat for the rest of their lives. But if parents have been bred and raised in captivity, the migratory patterns are lost; and their offspring don't have peers from which to learn the migration routes.

Ontario's Trumpeters chose their own winter locations. Today, about 200 Trumpeter Swans, one fourth of Ontario's population, choose the LaSalle Park area as their overwintering grounds. This is the largest concentration of wintering Trumpeters in Ontario.

LaSalle Park seems to be an ideal location for the Trumpeters because it has shelter from northerly and easterly winds. It also has an abundance of aquatic vegetation, which is what they feed on, and it grows at the correct depth. Swans don't dive to feed like ducks, they dip their necks underwater, therefore, the vegetations needs to be relatively shallow. Further, it also has a beach, enabling them to get out of the water easily and rest on the beach. The most important thing is that the wave action tends to keep that water open for most of the winter. Elsewhere, human encroachment around the Great Lakes, the draining of wetlands, and development have practically eliminated suitable overwintering grounds for the Trumpeters. Without LaSalle, they have nowhere to go.

Main Image: Trumpeter Swans over-winter at LaSalle Park. Note the wing tags. ©Meera Sulaiman



Yellow wing number tags mean Trumpeters are from Ontario. Marking birds is an important tool in the reintroduction programme. The Trumpeter Swan restoration groups main banding station is at La Salle Park in Ontario. The winter concentration there usually peaks at about 200 birds.

They are hand caught for banding by the licensed volunteers from the Swan Restoration Group. Swans are fitted with two yellow wing tags, one on each wing, plus a leg band. Males receive a band on the right leg and females on the left. Volunteers band the swans and register tag numbers in order to identify them, track their nesting and migrating patterns, their mates and offspring, their longevity, and their health. They also rescue those that have become sick and injured.

Data from tagged bird sightings allows biologists to produce a genetic family tree and to record changes in the population and range. They now band 50-100 swans every winter at La Salle Park. Today, after over 30 years of effort to bring back the Trumpeters, the population in Ontario numbers just over 1,500 birds. There are several reasons why their population remains low. Trumpeter populations across North America are closely monitored for lead poisoning, which is a major cause of death. Lead shot from hunting waterfowl has been discharged for many years into the waterbodies where swans and other waterfowl feed. Similarly, the use of lead shot for fishing, plus discarded line, hooks, and other tackle, have all contributed to fatalities.

Fishing line is a serious problem for birds and every year many are rescued with fishing line, hooks, and lures attached to them. Some birds die as a result. Others are lost to collisions with power lines and, occasionally, some are shot by hunters - although it is illegal to do so as they are protected under the Migratory Bird Convention Act 1999.

The most serious threat to the continued well-being of the Trumpeter Swan is the loss of habitat, especially of wintering areas, which greatly impacts their restoration.

How You Can Help

Use Lead-Free Fishing Tackle - When a swan ingests a lead sinker while tipping and feeding, they die a slow and painful death.

Prevent Fishing Line Fatalities - Fishing line is a serious problem for birds. Every year there are many birds rescued with fishing lines, hooks and lures attached to them. Some birds have been euthanized that have accidentally ingested them.

Always dispose of your fishing line properly. You could be saving a bird's life!

Meera Sulaiman.



Main Image: Trumpeter Swans at Lasalle Park. Inset Images (top) Harry Lumsden (bottom) Volunteers banding. All images ©Meera Sulaiman

Silver or Downy? Know your Birches

by Ian Parsons

Most of us think we know a Silver Birch when we see one.

Ian Parsons suggests that we look again!

Virtually everyone can recognise a birch, one of the UK's most common trees. But which one are you looking at? It may not be the Silver Birch most people presume. Ian Parsons takes a look at the two species common to the UK and guides us on how to tell them apart.

*Main Image: A Birch displaying its glorious autumn colours. But is it a Silver or Downy Birch?
©Rob Read.*

Many people can recognise a Birch tree, the white bark is as beautiful as it is distinctive, but the name birch is the family name, the surname if you like. There are around fifty species of birch in the world (I say around, no one can quite agree!), but here in Britain we have just two native species, the Silver Birch and the Downy Birch; so when you see a birch tree, which one are you looking at?

The Silver Birch and the Downy Birch are both very common and widespread trees, but when it comes to recognition it is fair to say that the Downy is very much in the shade of its close relative. In my experience, almost everybody thinks that every birch tree they see is a Silver Birch; I have known foresters, professional naturalists, arborists and wildlife television program presenters all call a Downy Birch a Silver Birch. They are superficially similar, but they are different and those differences are clear to see if you look a little harder at the tree.

So how do you tell which birch you are looking at? Well you can get a good idea even from a distance, especially if the tree is growing out in the open.

Main Image: Downy Birch ©Rob Read

Below: The bark of the Silver Birch (left) compared with Downy Birch (right) ©Ian Parsons



The scientific name for Silver Birch is *Betula pendula* and it lives up to that name, its shape is indeed pendulous in nature, long branches arcing gracefully back towards the ground at their tips, no matter what the season is, this pendulous habit of the branches is clear to see. An open grown Silver Birch is one of our most beautiful trees.

The Downy Birch on the other hand lacks this graceful shape, its branches don't arc back down towards the ground, its form is pretty much the same as most other trees. Basically it lacks the finesse and grace of the Silver! As you get a bit closer to a birch tree, the bark can also guide you in identification. Both species have the characteristic white trunk when mature, but it is how that bark is marked that is the key to knowing which birch you are looking at. As Silver Birch gets older the lower part of the trunk gets ever more rugged, dark vertical diamond and arrow shapes appear in it and the base of the trunk grows ever more vertically fissured as the tree ages. The Downy Birch doesn't have this ruggedness; instead of vertical dark marks appearing on the trunk it develops horizontal grey marks, like dashes, as the tree ages, so these dashes can form grey bands, but they are horizontal rather than vertical.





When the trees are saplings, they don't have white bark and it is unlikely that they will have started to form any shape as yet, but you can still tell them apart, even in the winter when there are no leaves present. Take a look at the twigs, those of the Downy Birch, as its common and scientific (*Betula pubescens*) names suggest, will have very small and fine 'hairs' on them; and whilst these are more prevalent in the spring season of new growth, you should still see some even in the winter months. The twigs of the Silver Birch have no hairs at all, instead they have warts!

An alternative name for the Silver Birch is the rather less glamorous sounding Warty Birch, all over the new twigs and even on the stems of the young saplings will be raised white 'warts' that feel rough if you run your finger over them. These of course aren't actual warts, they are 'lenticels' (a sort of pore on the bark), but the name is a good one for helping you remember this distinguishing feature. The Downy Birch may not have the graceful shape of the Silver, but it also doesn't have the warts of its relative either.

In the spring, as both trees burst into life, new shoots and new leaves erupt from the small pointy buds; these delicate green leaves of the two species are also distinctive, and you can easily learn how to tell the two trees apart from just the leaves themselves. Silver Birch have very triangular shaped leaves with double teeth along the margins and their stalks are completely hairless. In comparison, the leaves of the Downy Birch are much more rounded triangles, almost heart shaped; the teeth around the leaf's margin are singular, rounded and less angular than those of the Silver, and the stems of the leaves are as downy as the tree's name.

Above: The shape of the leaves and the downy or warty twigs are both ways of telling Silver from Downy Birch with certainty. Top: Silver Birch. Bottom: Downy Birch. ©Ian Parsons

Main image: A Silver Birch in full summer leaf. ©Rob Read

Main image: Silver Birch leaves.
©Ian Parsons

When learning to identify any wildlife, be that a tree, a bird or a dragonfly, the best way is to get out there and do it. Birds fly away, dragonflies never seem to sit still long enough, but trees don't move! You can get up close and personal with a tree and really get to know its features.

Away from gardens and arboretums, the only birch species you are likely to encounter are the Silver and the Downy, they are both equally common and will even grow next to one another, so have a good look at them the next time you are out and see if you can spot a Downy in among the Silvers. The Downy Birch is one of our commonest trees, but it is also the one that rarely gets recognized; hopefully, after reading this you will be able to.

One final titbit and one that can help you remember bark markings. Downy Birch is also the source of the sap used in making birch sap wine; it is a nice drink, but can be rather potent, so enjoy it in moderation - it is a drink that can leave you as horizontal as the marks on the Downy Birch's bark!

Ian Parsons.

In conclusion, here's a reminder of the four key characteristics that will enable you to tell the two species apart:

1. FORM:

Silver Birch: Pendulous, the ends of the branches droop downwards

Downy Birch: Non pendulous, often forming a rounded shape when in full leaf

2. BARK:

Silver Birch: White with vertical fissures, often forming diamond and arrow shapes

Downy Birch: White with small horizontal dash-like markings, forming greyish bands as tree ages

3. TWIGS:

Silver Birch: Hairless with slightly raised white warts

Downy Birch: Finely haired, no warts

4. LEAVES:

Silver Birch: Sharply triangular, double toothed, hairless stem

Downy Birch: Roundly triangular, single rounded teeth, downy stem



Hey Shortie!

by Rob Read

Rob Read admits to a boyish excitement when it comes to owls. Winter is the perfect time to see the Short-eared Owl, a species that flies and hunts during the day. Add this superb species to your bucket list and see if you can find one this winter.

Main Image: Short-eared Owls hunt during the day - an amazing sight to watch ©Rob Read

I think most people have a fascination and deep fondness for owls. They have this rather mystical quality matched with an almost human-like face; those big saucer-like eyes accentuated by their large facial discs. And they fly silently, drifting ghost-like across meadows and through woodland. No bird gives me more of a boyish thrill to see than an owl. And I am blessed to live in an area where it's possible to see all five UK species if you are lucky and put in some effort.

During lockdown in the spring of 2020, for a week or more a Barn Owl flew regularly around the same field every evening not half a mile from the house. I see Tawny Owls at close quarters regularly during the dark late autumn and early winter evenings as I walk the dog after sundown. If I open my bedroom window, they often punctuate my sleep with their classic 'tewit-tewoo' duets as they sit on the roof or in the surrounding trees. Some of my neighbours tell me tales of Little Owls in the village, and I have heard them call but have yet to see one – I should try harder. Long-eared Owls are the masters of camouflage and are extremely tricky to see, but I have it on good authority they nest not far from me and I'm sure will be in the wood only yards from the house. And then there are the Short-eared Owls that are the subject of this article.

If you have never seen a Short-eared Owl, then take it from me that its an experience you'll not want to miss, and it should be on everyone's wildlife bucket list. Breaking with typical owl tradition, this is a species that hunts in daylight hours – most often from early afternoon through to dusk in the winter months. It is a species of open grassland, moorland and scrubland, where it hunts mice, voles and other small mammals. The grasslands of the Hampshire coast and the chalk downlands of Salisbury Plain are perfect habitat for this diurnal owl – both a short car journey from my home.

The Short-eared Owl is one of the most globally widespread of all owls and it has a large breeding range that extends in a broad band across Eurasia and North America, even having populations in South America. Its taxonomy is quite complex and displays a degree of regional variation. Some of the isolated island forms have little or no contact with their mainland cousins and will no doubt be classified as separate species in time.

In the UK, although it is a resident species with a breeding population, this is mainly confined to the north. The best time to encounter them in Britain is in the winter months when numbers are swelled with birds migrating from the harsh winter conditions in Russia, Scandinavia and Iceland. Indeed, the Short-eared Owl is a very well-travelled species. A survey of ten owl species conducted in Finland discovered that the Short-eared Owl travels the furthest of all the species studied. In fact, their average range was double that of any of the other species. Travelling 1,500km in search of good feeding grounds is not unusual it seems.

I well remember my first encounter with this bird as I walked the North Norfolk coastline in search of one of my avian nemeses, the Shorelark. It was mid-afternoon when I spotted this large bird drifting in off the sea, over the dunes and coming to rest in the grassy scrub behind. It being November, no doubt this bird was fresh in from Scandinavia, seeking winter refuge in more temperate conditions. Such a beautiful bird which sat proudly on a grassy tussock well within binocular range. I spent an hour just looking at it, completely mesmerised.

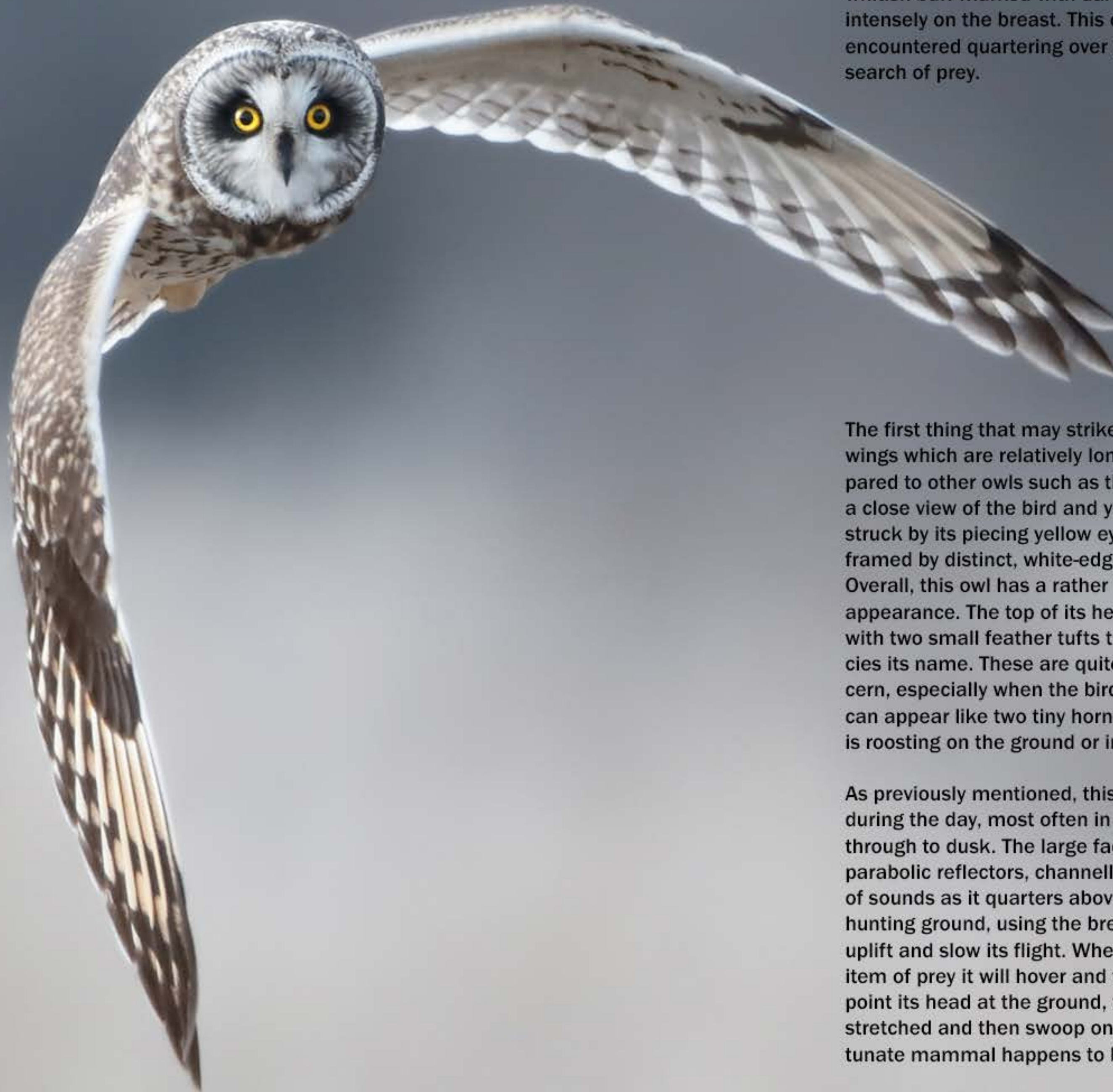
Cont...

Main image: Short-eared Owls have a large geographic range - this is a bird from North America. Note the small feather 'ear' tufts that give the species its name.

©Josh Galicki



Main image: Note the long wings and the piercing yellow eyes of the Short-eared Owl. ©Josh Galicki



The Short-eared Owl is a medium-sized owl that measures between 33-42cm in length. It is mottled sandy brown in colour, a perfect match for the dry grassland habitats in which it hunts and roosts. The underside is a lighter whitish-buff marked with dark streaks, most intensely on the breast. This owl is most often encountered quartering over grassland in search of prey.

The first thing that may strike you are the wings which are relatively long when compared to other owls such as the Barn Owl. Get a close view of the bird and you will also be struck by its piercing yellow eyes which are framed by distinct, white-edged facial discs. Overall, this owl has a rather menacing facial appearance. The top of its head is adorned with two small feather tufts that give the species its name. These are quite difficult to discern, especially when the bird is in flight, but can appear like two tiny horns when the bird is roosting on the ground or in low scrub.

As previously mentioned, this species hunts during the day, most often in the afternoon through to dusk. The large facial discs act as parabolic reflectors, channelling the smallest of sounds as it quarters above its chosen hunting ground, using the breeze to maintain uplift and slow its flight. When it spots an item of prey it will hover and then twist to point its head at the ground, wings fully outstretched and then swoop on whatever unfortunate mammal happens to be below.

It's beautifully graceful to watch and even more amazing when there are two or more birds hunting in the same area. Short-eared Owls will often hunt in small groups and will also roost together on the ground.

Its prey is comprised primarily of Field Voles, although other small mammals up to the size of a small rabbit will be taken, plus other ground-dwelling birds should the opportunity arise. It is also not unusual for these owls to be harassed in flight by Kestrels and other raptors after a successful hunt as they attempt to steal their prey.

This is a species that chooses to nest on the ground in a shallow grassy depression and quite often several pairs will nest in close proximity to each other. The female will typically lay a clutch of between five to ten eggs. Interestingly, Eurasian birds tend to lay more eggs on average than their North American counterparts. The eggs are laid individually a day or two apart ensuring they hatch over a longer period of time and cover a wide age range. The older chicks will outcompete the younger ones should food supplies run low.

The Short-eared Owl is a stunning and majestic owl. It can be difficult to find, but by keeping an eye on the bird reports in your local area it should be possible to see given a bit of luck and persistence. There are some traditionally reliable and well-known locations, but owl numbers do vary from year to year. If you do get lucky, I promise you that you will be mesmerised as I was on that day on the north Norfolk coast and will be back for more of this beautiful and graceful bird. I shall certainly be out looking for these daytime hunters this winter. When I find one, I shall once again bask in the intoxication of boyish excitement.

Rob Read.



A Really Wild Read

Rob Read



A Really Wild Read

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During 2020 lockdowns, I wrote a number of wildlife articles, the aim to entertain some of my fellow villagers during the dark days of the global pandemic. A Really Wild Read brings 23 of those articles together in an eBook beautifully illustrated with amazing wildlife photography.

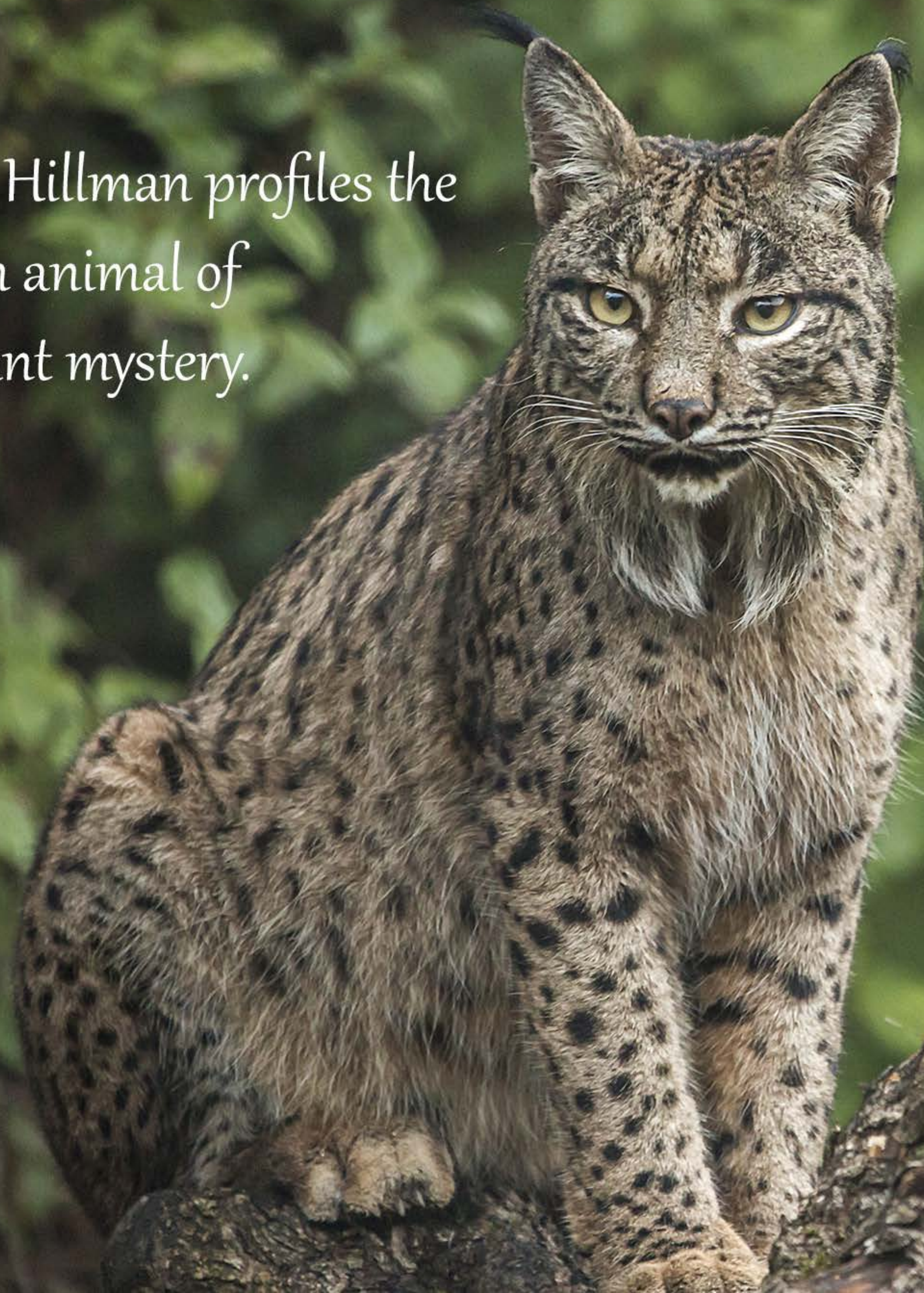
Perfect to pick up for a quick read during your coffee break, A Really Wild Read is the perfect bite-size injection of nature when you need a little escape. And you can take it with you wherever you are to read on your phone or tablet.

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THE BOOK**

Victoria Hillman profiles the
Lynx, an animal of
significant mystery.

A Purrfect Predator

by Victoria Hillman



Main Image: Iberian Lynx ©Victoria Hillman

The Lynx is one of the most widespread medium-sized cats of which there are four recorded species, the Eurasian Lynx (*Lynx lynx*), Iberian Lynx (*Lynx pardinus*), Canadian Lynx (*Lynx canadensis*) and the Bobcat (*Lynx rufus*). The Lynx is the largest felid found in Europe; in fact, is the third largest predator in Europe behind the Brown Bear and Grey Wolf. It inhabits mountainous and forested regions, historically ranging from Central Asia and Russia, through to Europe. Unfortunately, the populations in Western Europe were greatly reduced or completely eradicated due to hunting. Although listed as least concern on the IUCN Red List with populations now considered stable, these population estimates vary hugely and there are resulting concerns about the future of the Lynx due to increasing human pressure, habitat fragmentation and continued hunting.

The classic cat, the Lynx has a short body, long legs and large paws equipped with long, sharp and retractable claws which are perfect for hunting. The paws characteristically have five toes on the front feet and four on the rear. The large paws also come into their own during the winter months acting as perfect snowshoes. The two most notable identification characteristics are its large, tufted, black-tipped, triangular ears and its short, black-tipped tail. The body length of the Eurasian Lynx ranges from 70cm to 130cm and it stands at around 70cm at the shoulder. There is pronounced sexual dimorphism; the males are much larger and weigh between 18kg and 30kg, the females are lighter with an average weight of just under 18kg. The pelt can be highly variable both between and within different regions - there are three main coat patterns, spotted, striped and unspotted, with pale, creamy white colouration under the neck and belly. Like many mountain mammals, the Lynx has a winter and a summer coat. The winter coat is much thicker and adopts a more silvery-grey colour, replaced in the summer months by a thinner reddish-brown coat.

The Lynx is a solitary animal with each occupying their own relatively large territory (generally between 98-759km² for females and 180-2,780km² for males) and they only come together to breed, although there is often some overlap of ranges - typically two females sharing the much larger home range of the male. This large territory size is one reason that achieving accurate population estimates is so difficult. Territories are marked with gland secretions, urine and occasionally faeces. Lynx are predominantly crepuscular (active at dawn and dusk) and nocturnal, spending most of the day sleeping in dense foliage or up trees, although can be active in the day during the rutting season.

Females reach sexual maturity at around two years and males normally breed for the first time at around three years. Both sexes are sexually active for many years, females typically reproducing up to the age of 14 and males to around 16 years. The mating season starts in February and lasts through to mid-April; the female will only come into oestrus once during this time, although it lasts between four to seven days. If the first litter is lost, then the female may come into oestrus a second time. The male will accompany the female for the entire oestrus period and will mate with her several times. Gestation usually lasts between 67-74 days after which a litter of typically 2-3 kittens are born around late May in secluded dens. These are often constructed under tree roots and lined with feathers, fur and dry grass. At birth, the kittens weigh 240-300 grams and are blind and helpless, first opening their eyes at around 10-12 days. They will suckle initially and begin to eat solid food at six to seven weeks when they also venture out of the den for the first time. The kittens are fully weaned at six months at which time the den is abandoned, but they will remain with their mother until the next breeding season, by which time they will be around 10 months old and weigh 9-14kg.



Main Image: Note the black ear tufts and black-tipped tail of the Lynx. ©Victoria Hillman

Mortality rates are high amongst young Lynx with only 50% or so reaching adulthood. The main causes of death are diseases (commonly rabies and parvovirus), road accidents, hunting and poaching. There are also sporadic cases of Lynx being killed by other predators.

Lynx prey on deer, chamois, wild boar and grouse; although they will take smaller mammals and birds if the opportunity arises, or their preferred prey is scarce. The Lynx also shows seasonal variation in prey types; smaller and young prey are often taken in late spring and summer months, with larger prey being taken during the autumn and winter months. The average meat consumption for a Lynx is 1-2.5kg per day and it may take several days for a larger prey item to be consumed. The Lynx hunts using its exceptional hearing and sight, utilising high vantage points such as outcrops or high trees to scan an area. They stalk their prey, ambushing it rather than giving chase.

Compared to other large mammals encountered in Europe such as the Brown Bear and the Grey Wolf, the Lynx is a relatively unknown species with few myths or legends attached to it. It generally avoids human habitation unless forced to venture closer due to a reduction in prey availability and harsh weather, perhaps adding to its mystery.

The shy and elusive nature of the Lynx has resulted in poor historical data surrounding its distribution and inclusion in human culture. Despite the relative lack of awareness for this animal, to many farmers and hunters it has a similar, if not worse, reputation than its counterparts and is portrayed as a ferocious and merciless killer. Most livestock issues are the result of poor animal husbandry as opposed to deliberate targeting by the Lynx, but it is still persecuted and hunted in the more remote countryside. In such countries, schemes have been put in place to compensate farmers for the loss of livestock, help in reducing future losses - encouraging the message that living with large carnivores does not result in significant financial loss.

The Lynx poses no real threat to humans - there are only a handful of cases of attacks and these involved animals that were injured, captured or sick. There are no reported incidences of Lynx spontaneously attacking humans even when a female is separated from her kittens; however, they have been known to attack dogs that approach them.

So, what does the future look like for this animal?

The most obvious threat is that of habitat loss and degradation, but with socio-political changes and accelerated development occurring there is the potential for conflicts to arise and aggravate conservation efforts. But with careful planning, the correct information, clever conservation strategies and the involvement of all parties, comprises can be reached. There is a strong feeling that is growing about the importance of the natural world, and increasingly people are looking to enjoy such wildlife rich areas. But there is a need for detailed independent research into this species to properly inform proposed management plans and enable both the effective conservation of this animal and the ecosystem of which it is part.

Victoria Hillman.

Main Image: The Lynx is a notoriously elusive animal and to get the opportunity to see one in the wild is a special experience. Pictured is the Iberian Lynx, one of the world's rarest wildcats but with the dedication and determination of scientists and conservationists their numbers have gone from 94 in 2002 to over 500 individuals today. ©Victoria Hillman





Magnetite

We are not so much of the earth, even,
as the most microscopic jewel-toothed chiton,
the single-minded sperm whale, the Atlantic salmon.
Even the birds. Especially the birds.

They are tethered by the same element
that silvers the backs of their eyes, lodestones that stud
their skulls, or spines, while we wander song-lines, desire-lines,
remake maps, charts, the base metal of our words.

*This poem is one from Matt Merritt's collection of
the same title. Combining amazing photography
and beautiful poetry, the collection features 30
poems centred on Matt's favourite subject birds.*

*Available as an eBook that you can carry with you
everywhere, click the book link opposite to
purchase your copy. Price £7.99*

Main Image: The colourful Waxwing is a winter arrival on Shetland from Scandinavia ©Rebecca Nason

Wax Lyrical

by
Rebecca Nason

Rebecca Nason is hoping 'museums of intoxication' arrive on Shetland in the shape of the colourful Waxwing, as winter begins.



Is there any bird in the UK to rival the striking plumage of a Bohemian Waxwing (*Bombycilla garrulous*).

Their dapper attire includes a black facemask and chin surrounded by fiery orange, a tail seemingly dipped in sunshine yellow paint and wing tips with shocking red nail extensions. Their silky body plumage is an iridescent mix of “sulking room pink” (Farrow & Ball No. 295) and taupe, all topped off by an ever-moving crest, rising and falling with the gentlest of breezes and a bright chestnut vent under the tail.

Here on Shetland the arrival of winter is often met with the piercing, buoyant “trill” of the first waxwing arrival, our Islands the first port of call for migrating birds making their way south for the winter. We do not have breeding Bohemian Waxwing in the UK and numbers of wintering birds varies considerably year to year depending on the harshness of the weather and food availability in their coniferous Scandinavian homelands. Some winters we only get a few individuals moving south, presumably due to milder northern winters and a plentiful food supply that meets their population demands. Other years are known as “irruptive years” when literally thousands of Waxwing make their way south, moving through Shetland and streaming down the east coast of the UK to the delight of birders and photographers alike.

Main Image: Waxwings are often found in urban environments like this bird feeding on berries on a housing estate in Ipswich.
©Rebecca Nason

Roughly the size of a Starling, Waxwings are gregarious birds, often found roaming in small flocks to find food and seemingly as happy in housing estates as open countryside, homing in on their favoured foods of berries, particularly Rowan, Hawthorn, Cotoneaster and Rosehips. They can smell ripened apples from miles around too, either windfall fruit or deliberately put out apples by bird lovers. Once a food source has been located, be it berries or apples, birds can feast for hours, even days whilst the food source remains. Waxwing have often been noted as behaving intoxicated from a belly full of fermented fruit and a cotoneaster bush laden with ripened red berries will be a target until stripped bare!

The name waxwing refers to the splendid, bright red wax-like droplet-shaped appendages on their secondary feathers. Adult males have the biggest number of red tips which are also the brightest, whilst females and 1st winter birds have fewer, duller tips. The difference between 1st winter and adult birds is easy to identify in the field once you know, adult birds have yellow edges to their outer primary feathers, which becomes white and curve around the feather tip creating an angle, rather than in 1st winter birds which lack this yellow and white edging to the wing. Adult males and females can be told apart by their black bibs, males having a sharp border and females a sometimes subtly diffused border.

The collective noun for a group of Waxwing is a ‘museum of waxwing’ or an ‘ear-full’ of Waxwing. Though my delving in to the origins of these terms has yet to find me answers, an ‘ear-full’ is perhaps an obvious reference to their high-pitched, loud trills which often alert us to their presence.

On the other side of the Atlantic in the USA, the Bohemian Waxwing has an equally stunning, cousin, the Cedar Waxing (*Bombycilla cedrorum*). Very similar looking but with a stronger black face-mask surrounded by white and a plainer wing, still with the red tips but lacking the yellow and white detail. The under-tail is also white not chestnut brown. They have occurred in the UK as a mega rarity, the first was on Shetland in 1985, with only a handful of records since.

There is a third waxwing in the world, the Japanese Waxwing (*Bombycilla japonica*) again strikingly similar in general size, shape and colour but with several plumage differences including the black mask band extending right through the face and up into the crest and tail tip shocking pink rather than bright yellow.



Main Image: This is an image I took on Fair Isle at the start of what became a big irruptive year. A big 'museum' arrived on the isles on a calm October day and many birds homed in on apples we had stuck out in the observatory garden plantation in hope of their imminent arrival. We were not disappointed. These birds had no fear of humans at all, probably having never encountered one before. Amazingly, we were holding out apples in our hands and had bird after bird perch on our arms, hands and even our heads, to get a go at the ripened fruit.

This image shows nicely the plumage differences of a pristine adult male above and duller, less marked 1st winter bird below. ©Rebecca Nason

Opposite Centre: The red wax tips to the secondaries of waxwings are projecting waxy secretions from the central shaft of the feather, coloured by astaxanthin, a carotenoid pigment. They are thought to be an important status symbol, showing age, condition and social status, thus playing important roles in mate selection and hierarchy. I took this image with a macro lens when helping with ringing waxwing in Suffolk some years ago. It is one of my favourite natural abstracts and shows the exotic wing patterns on a pristine adult male. ©Rebecca Nason

Below Right: Always a 'trill' to see, a flock of Waxwing perched on a town aerial during a cold snap one winter in Cambridge, scouring the city for potential food sources. ©Rebecca Nason.

Right: Gregarious in nature and reasonably comfortable around people and urban habitats, good waxwing years can see birds roaming around towns and cities searching for berries. A common garden plant, the cotoneaster is a favourite common attraction. Many cotoneasters are planted in new estates and in supermarket car parks, where many sightings of waxwing are reported. These images were taken from the car in a housing estate in Ipswich when I lived in Suffolk. Over 50 birds put on quite a show for a week until food became scarce and they moved on. ©Rebecca Nason





This image is a 1st winter Bohemian Waxwing and was photographed last year from my living room window in Lerwick, Shetland.

We first ringed it in the garden a week before and it stayed feasting on ripened apples and roosting, we think, in a nearby conifer all week. Last year was not an irruptive year, with our bird being the only bird reported in the UK for a couple of days that week. There were also reports of a single bird in Lothian and three in Northumberland over the same week. Quite a contrast to other years when over 12,000 have been reported in the UK!

It got through over 24 apples during its stay with us and had us dashing out in a panic for more apples when stocks became low! On the evening of the 2nd December, the bird appeared in fine healthy condition and eager to feed, not leaving the garden apples all day, fending off starlings and hopeful blackbirds, even staying to feed well past darkness. It was clearly getting ready to migrate. Later that evening a cold front moved in, the night sky was clear with a bright big moon and the next morning the Waxwing had gone as we predicted. We hope this bird enjoyed a warmer winter south before returning to the coniferous forests of Scandinavia to breed this spring.

Rebecca Nason.

Main Image: This Waxwing got through a few apples during its brief stay in Rebecca's garden on Shetland. ©Rebecca Nason.

WAXWINGS

*Four Tao philosophers as cedar waxwings
Chat on a February berry bush
In sun, and I am one*

*Such merriment and such sobriety—
The small wild fruit on the tall stalks—
Was this not always my true style?*

*Above an elegance of snow, beneath
A silk-blue sky a brotherhood of four
birds. Can you mistake us?*

*To sun, to feast, and to converse
and all together –for this I have abandoned
all my other lives.*

By Robert Frances.



Lord of the Flies

by Rob Read

One in ten of all described species on the planet is a fly. Rob Read looks at some of the fascinating facts about this part of the natural world.

Main Image: Flies - most people find them rather disgusting and pretty annoying, but they are fascinating insects. ©Kamphol Phorangapai/Shutterstock

Flies. Most people find them annoying at best and at worst they can bring disease and even death. Many of us will happily exterminate them using various methods from swatting to electrocution. Hardly a surprise perhaps, visions of them throwing up all over our food fixed firmly in our brains generally bringing an intense feeling of disgust toward them. But flies are fascinating creatures about which there is still so much to learn.

One in ten of all described species on the planet is a fly. Think about it – one in ten, that's a lot of different species. Around 160,000 have been described at the latest count, but there are thought to be hundreds of thousands more just waiting to be discovered and documented. When you consider there are roughly 6,400 species of mammal currently extant on the planet, you can see how wide-ranging and diverse flies really are. They inhabit virtually every part of the globe and have developed a vast range of habits and specialisations that just blow your mind – and just think of what we don't yet know about them and what's waiting to be discovered.

In this article I thought I would share with you just a few fascinating facts and interesting anecdotes about flies and their amazing individual and collective specialisations, and how we have come to utilise some of these to our advantage. They may make your skin crawl, they may make you feel physically sick and you may never learn to love them, but I hope that you will come to respect their diversity and see a little wonder in their unique lifestyles and adaptations.

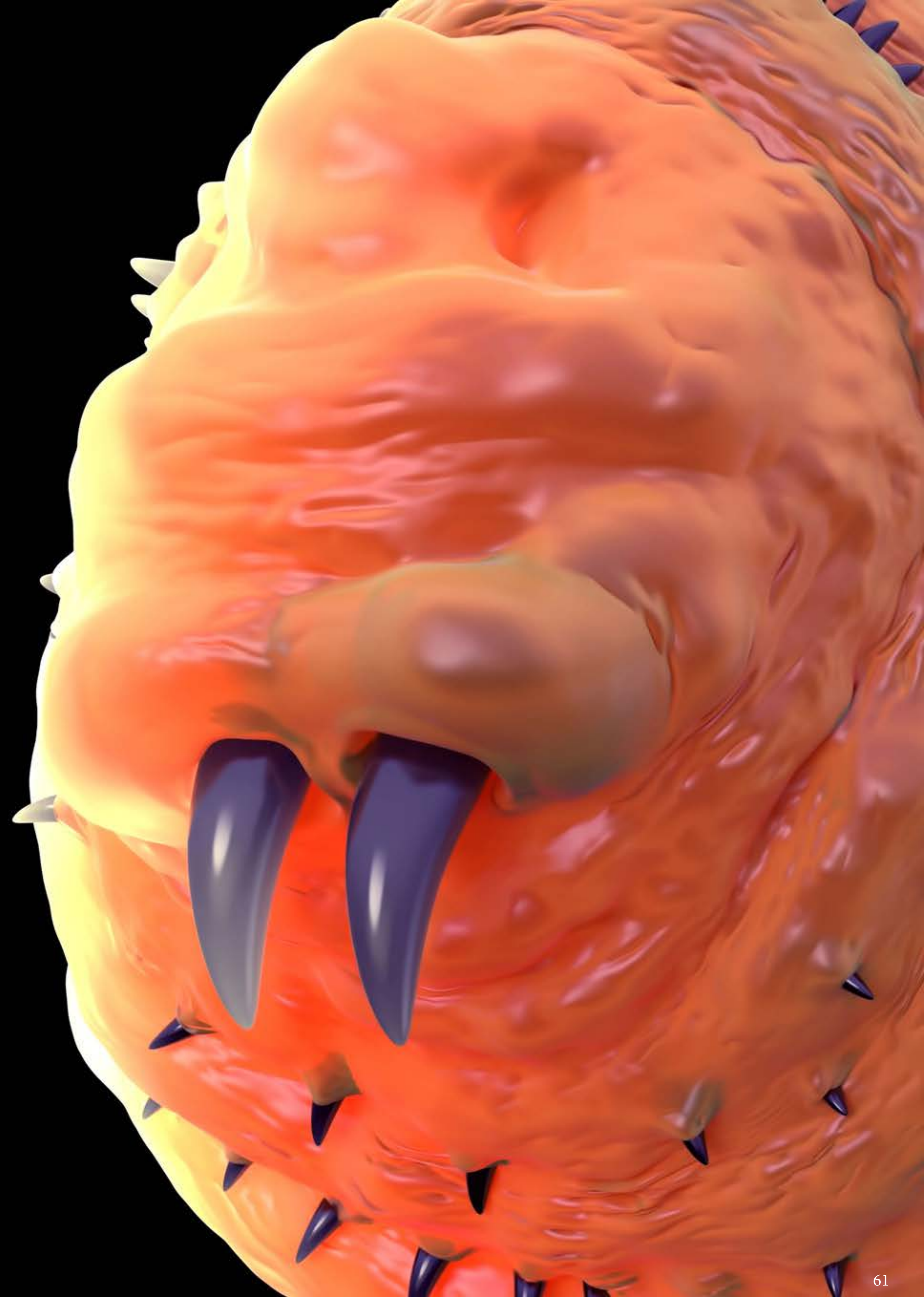
Let's start with chocolate. I have heard that there are some people who don't like it(?!), but let's face it, most of us would agree the planet would be a less enjoyable place without it. Chocolate is the product of the Cocoa Tree or *Theobroma cacao* to give it its scientific name. It relies entirely on flies for pollination; mainly ceratopogonid midges to be precise – amusingly known colloquially as the 'no see ums' presumably reflecting their tiny size and their vicious biting reputation.

So, no flies = no Cocoa beans = no chocolate. Think about that before you swat a midge the next time you are in a South American Cocoa plantation.

During the London Blitz of the Second World War, many Londoners took to sheltering in the London Underground during the bombing raids that devastated the city in the early 1940s. While they may have been relatively safe from the German bombardment, they were often bitten relentlessly by a rather vicious species of mosquito known as *Culex pipiens f. molestus*, which is in the species complex *Culex pipiens*, common across Europe. The two species proved hard to separate morphologically – the 'f' relates to 'form' which indicates a distinct behavioural difference. Indeed, *molestus* only occurs underground and has been found in underground systems around the world. To me, this seems like another excellent reason to avoid using the tube.

Botflies are within a family known as the Oestridae and their larvae are living flesh eating parasites of large mammals including humans. Their system of egg dispersal varies in its ingeniousness, the eggs hatching on immediate contact with warm skin. Some species that occur in Africa lay eggs on damp and drying clothing, the eggs hatching when the garment is worn and they come into contact with the skin. People in affected regions are careful to iron everything to destroy the eggs before they wear the garments for fear of infestation. All the more reason to make sure you do your ironing. But perhaps the most amazing adaptation is the way some species will use other flies and mosquitoes to deliver their eggs to a suitable host for them. Catching a mosquito and cradling it gently, the botfly will lay its eggs on this delivery 'vehicle' and release it so it can feed on a suitable mammal. As soon as the mosquito lands on a host to feed, the eggs hatch immediately and bury into the skin. There they will feast until they are ready to pupate, falling out of the host and pupating on the ground. What on earth led the evolution of the Botfly to develop this strategy in the first place? *Cont...*

Main Image: Close up of the head of a Botfly larva which buries into the host's skin to feed on live flesh. ©Shutterstock



Necrophagous flies, as the name suggests, are species that consume dead flesh – or to be more precise, the larvae do. These flies perform essential corpse clearance services, without which the landscape would be littered with dead bodies. This specialisation for consuming rotting flesh has been used by medical science down the centuries for cleaning infected wounds. Anyone who has seen the movie 'Gladiator' will remember Russell Crow waking from a fever-fuelled slumber to find maggots eating away at a shoulder wound, successfully removing the infected tissue and ensuring his recovery. This method is still employed today in some circumstances, although the maggots are carefully encased in a confining teabag-like mesh pouch that allows them to eat infected flesh when placed directly on it.

Interestingly, there is a predictable succession of flies that arrive at a corpse and this forensic knowledge has been used for hundreds of years to help solve crimes, as fans of the tv series CSI will no doubt be familiar. The first recorded case of forensic entomology involves the classic story of Sung Tz'u, a Chinese lawyer and legal investigator, who wrote up a case in the medico-legal textbook *The Washing Away of Wrongs* in 1235. In a rural village, one of the local farmers had been brutally murdered with a sickle. Aware of the potential of flies to unmask the killer, he invited all the farmers to a meeting and asked them to bring their sickles. He made them wait long enough for certain necrophagous flies to start appearing, all of which congregated on the same sickle, attracted by the minute traces of blood that remained. Sung Tz'u extracted an immediate confession from its shocked owner when he confronted him with the evidence.

Most of us will be familiar with crane flies, the most commonly occurring species in the UK being the Common or European Crane Fly *Tipula paludosa*. The larvae of these flies are grazers in grassland habitats and many of the gardeners among you will be aware of the ability of this 'pest' to ruin lawns and plants. Known commonly as leatherjackets, they live in the upper layers of the soil and can cause large scale damage by munching their way through the roots of grasslands and crops. In particularly wet conditions they can emerge on the surface and start eating the exposed parts of the plant. In 1935, these very conditions resulted in an infestation at Lords Cricket Ground which caused play to be suspended as the culprits were removed. The bald patches that these creatures created played havoc with the predictability of the wicket for the rest of the season. I bet the spin bowlers had a field day.

There are endless interesting stories and anecdotes surrounding flies, and these are just a tiny fragment of the things we know – just think what's left to be uncovered. I hope that some of these have sparked a curiosity and perhaps even an appreciation of these insects in spite of their largely unwelcome habits! I shall certainly enjoy learning a bit more about some of the families and their peculiarities, and I may even share another selection with you.

Rob Read.



Main image: *Culex pipiens* - a form of this mosquito is an underground specialist and bit people relentlessly during the London Blitz.
©Anest/Shutterstock. Inset: A Leatherjacket.
©Henrik Larsson/Shutterstock

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Wild Art

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