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a word from the chair.....

The River Roding is the ninth longest tributary of the Thames (at 50km) and, along with its own tributary, the Aldersbrook, one of the two rivers / major streams in our recording area.

As many of us know, the Roding forms much of the boundary of Wanstead Park and some of the most accessible parts locally are in the Old Sewage Works which is also where the Aldersbrook rises/appears out of the City of London Cemetery.

Over the years, the Roding has been home to interesting wildlife. There are Trout as well as more

commonly-found coarse fish such as Chub and Roach. The Roding is the best place locally to see Kingfishers locally - that shrill call and a flash of blue up and down river. Little Egret regularly fish in it as well and the explosive call of the Cetti's Warbler can sometimes be heard from the vegetation around the river. If you are even more lucky you may see or hear a Water Rail on the river.

Just occasionally, the river is home to even more interesting birds, especially in winter as it is less likely to freeze over than the local standing water bodies. In recent years locally-rare ducks such as Smew and Goldeneye have been found on the river.

Sometimes, the wildlife is less welcome, such as when I found the invasive Chinese Mitten Crab in the Roding; that had probably found their way up from the Thames where they had been carried by container ships from the far east.

At the other end of the 'welcome' scale, we were all delighted recently when we started to hear about reports of Otter on the Roding. Some of us may have even been a little sceptical at first, but the reports kept coming and local birder, Tony Brown, recently captured a wonderful photo of an Otter in the Old Sewage Works (see cover image).

The Roding has struggled with pollution in the past and, if we want continue to enjoy fantastic wildlife like Otters and Trout and Kingfishers, we must do what we can to protect the river. The Wren Group has worked, and will continue to work even more closely, with other organisations such as the River Roding Trust - led by local lawyer and activist, Paul Powseland (keep an eye out for further engagement with Paul).

James Heal Chair Wren Group



Male kingfisher hunting and flying with fish into nest bank. Could be feeding the incubating female, 5 visits with fish in the space of 40 minutes. Great to see! On the Roding boarding Wanstead park - pic by Pranav Khetia

bell heather returns to epping forest

A delicate heathland plant has returned to Epping Forest as part of a new conservation project. Erica cinerea, otherwise known as bell heather, is believed to have disappeared from the Forest in the 1960s. It has struggled to survive in Essex and its only known location in the county is Tiptree Heath near Colchester. Bell heather has specific habitat needs, making it vulnerable and rare in the East of England. It thrives on dry, free-draining acid heathland and stands out with dark purple-pink and bell-shaped flowers.

Tanith Cook
Head of Conservation, City of London, Epping Forest



After an absence of 50 years, bell heather (*Erica cinerea*) can once again be found in Epping Forest. Known for its vibrant pink-purple flowers, this heather species is adapted to acidic, dry, well-drained soils.

Widespread in other parts of the UK, today it has a very limited range in Essex and London. The species was reintroduced to a suitable location in the Forest in November 2024. The plants were carefully propagated from *Tiptree Heath Nature Reserve*, the last remaining site in Essex where all three native heather species survive.



Bell Heather growing on Tiptree Heath Nature Reserve. It's hoped that cuttings from the heath will make Epping Forest their new home.

This project resulted from a partnership between the City of London, Epping Forest and the Essex Wildlife Trust. This happily provided an opportunity to collaborate with my predecessor Dr Jeremey Dagley in his role as Director of Conservation at the Trust. The impetus however came from botanist Paul Fletcher working with the Essex Botanical Society_recorder Ken Adams. Paul was inspired by Essex Field Club archive materials which detail an arc of sands and gravels running from London to a now largely disappeared expanse of ancient heathland around Colchester. This arc once supported a widespread bell heather population. Many years experimenting with multiple propagation techniques followed, including seed germination and shoot cuttings, before he landing on a method involving root cuttings that yielded encouraging results. This year eight strong plants were judged ready to make Epping Forest their new home.

Working with Essex Wildlife
Trust, Dr Jeremy Dagley we're
really pleased to reintroduce
bell heather back into
EppingForest after more than
50 years. Thanks must go to
Paul Fletcher who came up
with the idea of propagating
cuttings from Tiptree Heath
Nature Reserve.

Tanith Cook



After extensive trials with different propagation methods, root cuttings were found to be the most successful, resulting in eight healthy bell heather plants transplanted into Epping Forest's dry heathland – pic Andrew Wakefield

Why it matters

The return of bell heather is about more than just one species, it's about enhancing the wider ecosystem. As an early bloomer, bell heather provides nectar for pollinators like bees and butterflies before common heather (*Calluna vulgaris*) comes into flower. This extended foraging period can better support pollinator populations and, by extension, the entire heathland food web.

Looking Ahead

We will be closely monitoring the bell heather in coming years, taking soil samples and evaluating their condition and establishment. Should they take then next steps may include scrapes to enable natural spread and further cuttings.



Bell heather planting at Epping Forest from left to right: Dr Jeremy Dagley (Director of Conservation, Essex Wildlife Trust), Andy Froud (Biodiversity Officer, City of London Corporation), Paul Fletcher (Botanist), Tanith Cook (Head of Conservation, City of London Corporation) – pic Andrew Wakefield

While the initial reintroduction site is in the north of the Forest, if successful, this population transplant may enable wider reintroductions. Areas recorded as being in bell heather's historic range, including sites in the south, such as Leyton Flats. A thriving heathland habitat has the potential to further enhance biodiversity and strengthen ecological resilience in the face of the many challenges facing the Forest.

This reintroduction is one piece of a larger effort to restore Epping Forest's heathlands. Despite losing approximately 72% between 1830–1980, England remains the custodian of a large proportion of Europe's heath habitat. This decline means innovative approaches to restore and improve what remains are needed more than ever.

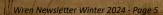
The <u>Habitat Restoration Programme</u> is working to reclaim and rejuvenate these vital ecosystems.

Like so much good work in the Forest, the return of bell heather relied on passionate volunteers, effective partnerships, and perseverance.

I hope you all have a joyful festive period and look forward to more of all three in 2025.

Tanith Cook
Head of Conservation,
City of London, Epping Forest

"Put your phone away - look up not down....
....because this world is amazing."





Starlings in Winter

by Mary Oliver

Chunky and noisy, but with stars in their black feathers, they spring from the telephone wire and instantly

they are acrobats in the freezing wind. And now, in the theater of air, they swing over buildings,

dipping and rising; they float like one stippled star that opens, becomes for a moment fragmented,

then closes again; and you watch and you try but you simply can't imagine

how they do it with no articulated instruction, no pause, only the silent confirmation that they are this notable thing,

this wheel of many parts, that can rise and spin over and over again, full of gorgeous life.

Ah, world, what lessons you prepare for us, even in the leafless winter, even in the ashy city.
I am thinking now of grief, and of getting past it;

I feel my boots trying to leave the ground, I feel my heart pumping hard. I want

to think again of dangerous and noble things. I want to be light and frolicsome. I want to be improbable beautiful and afraid of nothing, as though I had wings.



sing a blunt three month tool, would mean that November was largely excluded from 'Autumn', or equally unsatisfactorily, Autumn lasts four months.

Taking it in its broadest sense, we recorded a reasonably impressive 124 species of bird from the beginning of August until the end of November.



Red-crested Pochard, Wanstead Park - pic by James Heal

Overall, it seemed a relatively late year for Autumn migrants with our first Autumn Wheatear this year returning back through on 25 August compared with 1 August last year. The end of the main passage migration period could be taken on 16 October with our last departing Swallow.

Some of the Autumn highlights included the following:

 For many of us, the bird of the Autumn, and quite possibly bird of the year, was a Nightjar found by a visiting birder roosting in the Old Enclosure to the immediate east of Long Wood on 9 September, and our first record in at least 100 years, although swiftly followed by a couple of other sightings from a different (female) bird by Nick Croft on 21 and 23 September.

- One measurement of 2024 will be that this
 was the year that Barn Owl shifted from
 a local mega rarity to a bird seen quite
 regularly with at least one individual clearly
 roosting and hunting locally.
- Wryneck records were reported from 3 12 September; presumably of the same bird.
- Bob and Nick found a female Red-crested Pochard on Heronry on 19 November and it is still present at the time of writing (8 December).
- Hawfinch (October 31) and Short-eared
 Owl (4 November) were two late Autumn records which added to the year list.
- A single flyover Marsh Harrier on 5 October and an even more enigmatic set of brief calls from a heard-only Dartford Warbler on 15 October also helped bolster the year list.
- Four records of Great White Egret in November flying largely south east suggest we tapped into the flight-path of a local feeder.
- Dunlin, Oystercatcher, Greenshank, Redshank, and Grey Plover were all welcome additions from Bob's magical nocmig set-up.

by James Heal





happy national robin day!

National Robin Day is on the 21st December, created by the charity Songbird Survival in 2016 as a way to raise awareness of not only robins but also all small garden birds who may struggle to survive the cold winter months.

From as early as mid-December onwards, Robins step up a gear and start singing much more powerfully. This is to defend territory and attract a mate ready for the breeding season, which can be as early as January.

If you're on the look out for Robins, the good thing is they can be spotted just about anywhere: from hedgerows and woodland to gardens and public parks.

Find out what else to look out for the rest of december:
www.cpre.org.uk/.../a-countryside-walk/in december





Anyone who has read my reports of spider surveys on Wanstead Flats before will know that the Wren Group is lucky with at least two things: 1) We have a diverse array of interesting spiders locally, including several species that are nationally scarce or rare; 2) we have a very good friend in David Carr; a genuine spider expert and now county recorder for several counties (although not ours).

The combination of the species and expert is critical as several spiders require expert knowledge and sometimes microscopic examination to identify.



Clubiona corticalis - pic by James Heal

David joined a couple of us (sadly very low turnout which has prompted me to remind people on

WhatsApp of some of our surveys and other activities as well as our more usual channels) on Wanstead Flats on 27 October. A quick summary of the day: we found some interesting spiders although perhaps not the level of quality we might have hoped and perhaps expected. However, the day was bolstered by some interesting insects.



Wood House Spider - Tegeneria sylvestris - pic by James Heal

David only added one new spider to our local spider list: Clubiona corticalis. This is one of the Sac Spiders that catch their prey by stealth; wandering around until they find something they can pounce on. It is a relatively common species nationally and found - as David did - under loose bark on mature and rotting trees.

David also found Tegenaria sylvestris in woodland on Wanstead Flats. Sometimes called Wood House Spider, T. sylvestris is closely related to the house spiders many of us will have encountered in our houses as we grew up. Why do I say "as we grew up"? Because Tegenaria domestica has now been largely displaced in our homes by the larger Giant House Spider (Eratigena agg.) T. sylvestris is the wilder and scarcer cousin of the house spiders but looks very similar.

While David was sieving for spiders in the woodland leaf litter he came across probably the best find of the day. And it wasn't a spider. It was an absolutely miniscule ladybird called Nephus quadrimaculatus. Less than a couple of millimetres in length, this tiny beetle favours ivy (and David found it on an ivy covered tree). It was a lifer for me and only the second record from our recording area; after Tony Madgwick found one in his garden.



Nephus quadrimaculatus - pic by James Heal





Public ownership and community involvement chart a new path for land use in this country.

ie of the Land by Guy Shrubsole provides vital reading for government ministers, activists and anyone who cares about the future of the planet.

Shrubsole reveals how the limited numbers of people who own land in the UK have overseen the trashing of this asset under the guise of being good stewards. There are telling statistics, such as that just 5% of the land is taken for private homes and gardens. This figure rises to 8.8% if the definition is extended to all land built on. A further 73% is farmland and 10% forestry.

Shrubsole asserts that the "biggest drivers of biodiversity loss are agriculture, forestry and shooting." Agriculture contributes 11%. of UK carbon emissions.

There is then a comprehensive demolition of the private landowners claims to be good stewards of the land.

Shrubsole chronicles the damage done to peat on the uplands by grouse shoots. Huge amounts of CO2 have been released through mismanagement, involving the draining and burning of the peat heavy areas. All, to

satisfy the needs of game birds that are ultimately shot.

There are amazing statistics, such as that 50 million pheasants are released to be shot each year by the landowners - more than the total breeding biomass of the entire UK wild bird population.

"The public needs to be able to assert that some parts of our land - our most important carbon stores, our most precious ecosystems-have to be managed for the common good, rather than trashed for private gain."

Guy Shrubsole

The author charts the draining of the Fens in Cambridgeshire, initially by 13 landowning venture capitalists, converting it from wetlands to farming land. There has been a subsequent huge release of CO2.

Then there was the destructive role of individuals like Lord Bedford, who in the 19th century, brought in invasive damaging species like the grey squirrel.

Shrubsole claims that the funds given to private landowners (£9.2 billion in the last 30 years), in the name of stewardship, to look after and improve the land, has been largely wasted. It would be better

spent on buying the land outright and bringing it into the public estate. Even the national parks are dominated by privately owned farmland. And matters have got worse over the past 14 years, with cuts to public sector operators and regulators.

This book though is not all doom and gloom but a vision of what can be, as well as a call to action.

Basically, Shrubsole wants to take the land back from the private sphere to the public. He draws inspiration from Scotland, where the Land Reform Act enshrines the community right to buy. So, when land becomes available, community bodies can register an interest. They then have eight months to raise the funds but can also draw on a Community Fund.

A similar but more diluted form of the community right to buy exists in England under the Localism Act. But here, there is just six months to raise the funds and community groups can be gazumped. A Community Ownership Fund was established in 2021.

In Scotland, the community ownership process has seen 500,000 acres (2.6%) of the land come under public ownership. Shrubsole looks in detail at the transformation in nature as a result of the public buy out at Langholm Moor in Scotland.

Among the activists featured in the book are the River Roding Trusts own Paul Powesland, whose efforts to improve the river and surrounds are featured. Among his intriguing suggestions are that the Redbridge Council owned 80 acres of Ilford Golf course be allowed to flood and become a marshland. The river was embanked at this point in the 1930s to stop it coming over onto the golf course. If left, as water levels rise with climate change, it would flood over the area. This, Powesland argues, would reduce the pressure and stop the river coming over further downstream in densely populated Ilford. The area is already a wildlife oasis, with kingfishers, herons and most recently otters in residence. Powesland's idea is certainly worthy of consideration. The golfers will of course probably have other ideas.

Shrubsole concludes with a 10 point plan of action. The plan includes taking back control of the peat soils of the uplands, presently emitting 3.4 million tonnes of CO2 annually. This includes banning moorland burning and outlawing driven grouse shooting. Shrubsole believes rewilding the uplands would substantially cut CO2 emissions and make the government target of protecting 30% if the land for nature by 2030 attainable.



Golf courses disproportionately consume resources; to put it bluntly, they suck up water, poison the soil and nearby rivers and enclose the land to the detriment of the social and environmental health of the community. Moreover, the landscaping of golf courses in flood plains removes natural soakaways and causes flooding in adjacent areas.

There are also calls for a strong community right to buy in England, using public money to buy land for nature, make polluting landowners pay, via a carbon land tax, stopping the mass pheasant releases and making large landowners (1000 acres plus) accountable for what they are doing with the land for nature.

Guy Shrubsole has come up with a most important book at a crucial time in the present biodiversity and climate crisis. His ideas for community involvement and public ownership are certainly worthy of consideration in our local area. He highlights how the domination of the land by a small number of private interests has helped further that crisis. His recommendations offer a way forward and hope for the future. But only if the public interest finally triumphs over private greed.

by Cllr Paul Donovan



Lie of the Land by Guy Shrubsole - published by William Collins, £22.

then 8 now

In each edition of the Wren newsletter we will be showing you a picture of an area in the Wren catchment taken around 100 years ago and how it looks today. Just for fun have a guess where this picture was taken (answer to follow). If you would like to see a particular area in this slot why not get in touch and we will see what we can do.





Planning and paths for the future

As many of you will already know there are 68,000 new homes planned to be built with a 6.2 kilometre "zone of influence" of the Forest over the next 15 years.

This has the potential to introduce many more people to the joys of Epping Forest, which is an overwhelmingly good thing, but it also has the potential to damage the Forest if it is not managed properly.

And at Epping Forest Heritage Trust we have two main concerns about this future development.

The first is that when this new housing is planned and built it should minimise its impact on the Forest. In the north of the Forest, our concerns are mainly about the impact of the increase in the number of vehicles this will mean travelling near or through the Forest. This is due to the amount of pollution this will create. The Forest, and especially its trees and lichen, are already suffering form excessive levels of pollution, and Epping Forest District Council is under a duty to reduce these levels, although we see little proactive action to address this. At the same time, we are seeing huge

planning proposals come forward, for example at Epping South and Latton Priory, where the private car is still seen as a major method of transport for the new residents. This, we believe, is a mistake, and we have been responding firmly that these developments should minimise car parking spaces, and prioritise public transport, walking and cycling. At Epping South, which has plans for 450-550 new homes, and which is only a 10-minute walk from Epping Tube station, we think car parking spaces should be absolutely minimised, as they are for example further south in Waltham Forest, which has a general policy of new developments being car free. We will wait and see how these developments are taken forward.

I think about how much I care for the Forest, and how much I worry about the pressures it is facing now from encroaching development, air pollution and climate change.

Peter Lewis



Epping south master plan area. Epping Forest District Council Local Plan has allocated land south of Epping for new homes and associated infrastructure, to meet acute housing and education needs and deliver publicly accessible open space for all.

If you want to see details of all the work we are doing responding to planning applications please check out our website https://efht.org.uk/standing-up-for-epping-forest/monitoring-planning-applications/

The second major concern is that the Forest is in a good enough physical state to welcome visitors, especially in the context that the number of visitors is likely to grow. And the City has done a great job in negotiating the Strategic Access Management and Monitoring Strategy (SAMMs) agreement with the neighbouring boroughs, whereby developers now contribute to mitigating the impact of more visitors. However, we all know that already in the wetter months lots of the paths



We need to make sure that the Forest is in a good enough state to welcome it's visitors. Pic shows a muddy path in Walthamstow Forest - winter 2024

in the Forest, especially in the south of the Forest, become practically impassable due to mud and puddles. And when people do try to get through or past the mud they often cause more damage to the precious understory of the Forest. As mentioned by one of our members at our AGM in October, this is particularly the case if people in Redbridge or Waltham Forest want to walk up through Gilberts Slade and Walthamstow Forest to Chingford and the north of the Forest. We are encouraging the City to prioritise work to deal with the conditions of the paths in the south of the Forest, especially these key routes that enable people to access different parts of the Forest.

We believe this is particularly important as visitor numbers grow, and our winters continue to become wetter.

We are heavily reliant on a small number of dedicated volunteers to take forward our policy and planning work, and would really appreciate more help as it does have an impact. If would like to help us, please do get in contact directly <code>Peter.Lewis@efht.org.uk</code>

Peter Lewis

Chief Executive Epping Forest Heritage Trust



Nature is like air, water, health and well-being it belongs to everyone and is not anyone's to sell or exploit.

To be custodians of nature is a previlege not a business.

litchen

On a recent lichen walk around Wanstead Flats, Wren committee member and lichen buff, Bob Vaughan together with a bunch of local nature enthusiasts explored the incredible diversity of lichens in the area. From crusty greys to vibrant greens, these incredible organisms thrive in unexpected places and quietly dominate - 8% of the world's land!

Once you start noticing these unassuming but fascinating natural air quality indicators, you'll soon find they're everywhere in the Forest!



We were lucky, the morning of Sunday 17th turned out to be mild and sunlit, which enhanced the shades of brown and gold on the many splendid trees in the CoL Cemetery.

Just inside the main gates there are two large memorial graves covered in many different types of crustose lichen. Crustose lichens are very closely attached to the stone with the black *Verrucaria nigrescens* common on both sites.



Figure 1 Verrucaria nigrescens - Pic by Bob Vaughan

However as one memorial is made of calcareous or chalky stone and the other is made of harder siliceous stone containing quartz there were differences between the lichen populations. *Protoblastenia rupestris* was only found on the calcareous memorial, it is rather attractive and when dilute caustic potash is added to the orange fruiting body it goes bright red.



Figure 2 Protoblastenia rupestris - Pic by Bob Vaughan

This shape of the fruiting body on Protoblastenia rupestris is known as lecideine. When a lichen enthusiast talks about jam tarts they are often referring to the other common shape of a fruiting body, lecanorine. A good example was found on the harder stone memorial, this is a *Lecanora campestris* whose tiny round fruiting bodies resemble, perhaps, chocolate tarts?



Lecanora campestris - Pic by Bob Vaughan

We then moved on passing the crematorium but noticed a few lichens growing on the white concrete wall just outside. This wall is exposed to the sun and turned out to have a similar lichen population to the Hawthorns on the flats, the very common sunburst lichen *Xanthoria parietina* and small greenish *Physcia adscendens* with its hooded lobe ends. The Xanthoria was out first example of a foliose or leafy lichen. Lichens are found in many challenging habitats and this concrete wall is probably as close to a desert as we get in London.

Going up some steps we entered an area with many trees. There were some powdery lichens on the north facing trunks of some of the oaks and these included Lepraria incana. This is a bluish grey-green lichen which just consists of tiny fluffy granules with little apparent organisation between the algal and the fungal partners. There was also some free-growing orange Trentepohlia, one of the algae that form the photosynthetic partner in some lichens. Further on there is a garden planted with ornamental trees, the Magnolias having long horizontal branches low enough to examine the lichens closely. A diverse array of splendid foliose lichens was there for all to see. These leafy lichens all have a definite structure, an upper cortex, a middle layer called the medulla with the algal partner arranged inside and a lower cortex often having rhizines which look like minute roots. Some of the lichens on the upper surface of the branches looked as though they had been chewed by molluscs and it was interesting that some species of lichen were relatively unscathed. Lichen fungi are chemical factories and produce many different unique substances, some of these are to make the lichen unpalatable, some may diffuse or protect from UV light and others may act as antibiotics. These fungal chemicals vary from species to species and have been useful in separating similar looking lichens. *Punctelia jerkeri* was shredded but *Flavoparmelia caperata* was notable for being uneaten with its quite large yellow-green lobes that are known to contain usnic acid which has antibiotic properties. Some of the nearby trees had crustose lichens growing on their vertical trunks and these also showed grooves from the scraping of the radula of molluscs across their surface.



Flavoparmelia caperata - Pic by Bob Vaughan

As we made our way back to the entrance to the cemetery I offered to continue around Alexandra lake to show participants some of the different forms of terricolous lichens that grow on the Flats. Nearly half the walkers agreed so we went to the area where a ditch was dug many years ago to drain the football fields into the lake after excessive rain. On one of the mounds there was quite an extensive area of *Peltigera hymenina* with its shiny green leaf-like thallus with upturned pale edges. Note the prominent white rhizines with tufted tips below the thallus.



Peltigera hymenina - Pic by Bob Vaughan

This lichen is rare in London and no doubt benefits from being on the Flats where there has been no farming or gardening for many years. It seems to prefer facing away from the sun, in well drained sites. In the ditch itself there are many types of Cladonia and we saw *Cladonia furcata*, one of the so-called reindeer lichens with its white branching tubular structure. We also found a classic pixie cup lichen which on brief examination was probably *Cladonia fimbriata*.

Here is a list of the lichens commented on during the walk, in order of discovery:

Verrucaria nigrescens
Lecanora campestris
Caloplaca (big group probably dalmatica)
Protoblastenia rupestris
Xanthoria parietina
Physcia adscendens
Lepraria incana
Chrysothrix candelaris

Flavoparmelia caperata
Punctelia jerkeri
Evernia prunastri
Hypogymnia physodes
Protoparmeliopsis muralis (formerly Lecanora muralis)
Peltigera hymenina
Cladonia furcata
Cladonia fimbriata



Some of the party - picture taken by Moira.

Thanks to all those who turned out, we covered some ground and saw some of the diverse array of lichen lifeforms. It seems that working together is beneficial for these small organisms, might this be a lesson for human society today?

Bob Vaughan Wren Committee Member



How the unemployed transformed the Wanstead Flats area

Wanstead Flats, Wanstead Park and Leyton Flats, forming the southern area of Epping Forest, have been woven into local history for many centuries. But today's landscape of woods, lakes and playing fields is a fairly recent phenomenon – and is largely the result of the work of local unemployed labourers over 100 years ago.

by Mark Gorman and Peter Williams

Ornamental Waters, Wanstead Park. It is thanks to unemployed labourers that we are able to enjoy the natural beauty of the south of Epping Forest pping Forest is far from being a natural landscape. For centuries people have been making use of the forest, and in doing so have continually altered "the natural aspect".

The southern forest is no exception - from the 1880s to the first decades of the 20th century the terrain we know today was created, largely through the use of unemployed workers.



Looking south-west across Wanstead Flats at Centre Road in the early 1900s. The landscape still showing scars of local industry some 40 or so years earlier. Picture courtesy of Vestry House Museum, London Borough of Waltham Forest

When the City of London corporation took over Epping Forest in 1878 Wanstead Flats, Wanstead Park and Leyton Flats were in quite a mess, and the landscape was much altered and tidied up by the new management. There was an economic depression in the late 1880s and 1890s and local

worthies formed committees to support unemployed labouring men and women. There were public appeals for money and later government grants kicked in.

These so-called Relief Committees (and after 1905 legislation Distress Committees) organised public works projects, what we call job creation schemes. These had a big impact on the Wren area, as all the lakes on the Flats, and several in the Park were created or much altered. For example Heronry Lake was enlarged, the island created and the bottom concreted by the West Ham council's Distress Committee using hundreds of unemployed labourers working only with hand tools, subsidised by government grant. The Ornamental Waters were de-silted and restored.



Wanstead Flats, Alexandra Lake (also known locally as Sandhills Lake) was dug out by the unemployed in 1906/7. Employment was erratic and insecure for the unskilled; the docks hired men by the day and periodic slumps threw many into destitution.

Meanwhile on Wanstead Flats Alexandra Lake was created from scratch by East Ham's Distress Committee, and West Ham took a miserable small pond on Dames Road and built the huge Model Yacht Pond (now Jubilee Pond). Sports fields were also laid out on the Flats, and drained.



Unemployed relief work on the Lake, Wanstead Park, 1909, with ruins of Grotto in background

The labourers were paid but the conditions the men faced were back-breaking, involving levelling very uneven heathland, then planting and tilling, as well as digging and draining the areas that were to become the necklace of lakes in the southern forest. And all without the aid of machinery. A Forest Gate resident, observing the work on Wanstead Flats in the late 1890s, commented that "it was positively distressing to see the poor 'unemployed', mostly men of miserable physique, engaged in the useless labour of turning over the heavy frozen clay".

Not all the men worked willingly, but quite minor offences could lead to dismissal. Half a dozen men were removed in March for offences ranging from refusing to stop smoking and abusive language to "being absolutely lazy". The works foreman declared that "We are drifting into the Casual labour class", comparing them unfavourably with previous batches of men. He was also very rude about what he called "the old soldier class" who "do their shirking under

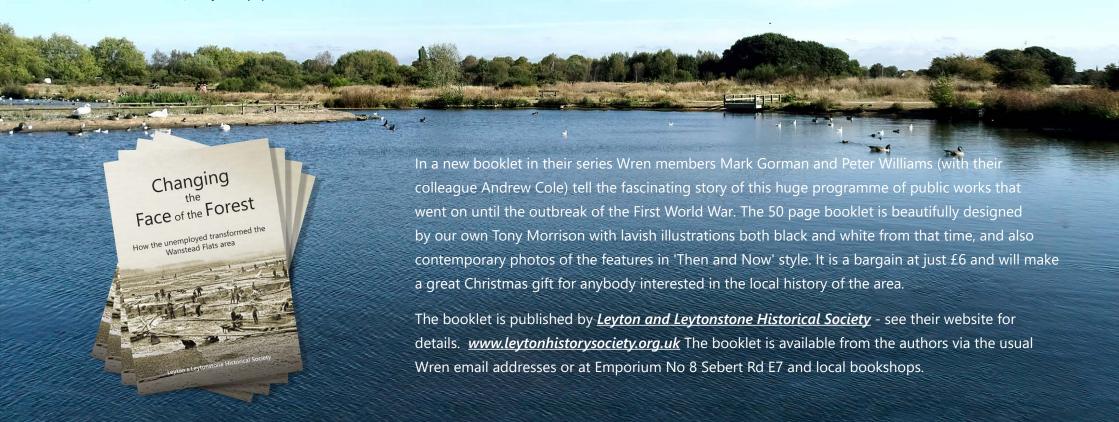
cover". Although those dismissed could appeal against the decision most appeals were rejected.

By its own criteria the relief work was a failure. The whole point of the exercise had been to give employment to the "deserving poor" who were temporarily unemployed because of a dislocation in trade. In fact most who took advantage of the schemes were the chronically underemployed -

principally casual labourers with no skills.

But for Wanstead Flats and the rest of the southern forest the relief work scheme was a spectacular success. We owe the modern-day environment, with its playing fields, lakes and copses, to the unemployed labourers of east London who in the space of 25 years transformed the face of this landscape.

The model yacht pond at the western end of the Flats built by unemployed workers in 1914. The pond became a victim of changing leisure interests, and by the 1980s was empty and derelict. In 2002 the City of London corporation renovated the pond and create a wildlife area and the Jubilee Pond, as we now know it, was formally opened in June 2003.



Lestes barbarus is a species of damselfly of the family Lestidae, the damselfly, shy emerald damselfly, and migrant spreadwing.

southern emerald damselfly

As we moved deeper into autumn, fewer damselflies and dragonflies showed themselves around our local ponds and lakes. So, it was exciting to get a WhatsApp message and an image posted by Andy Gibbons (Wanstead Birders) saying he had found what he thought was a Migrant Spreadwing or Southern Emerald Damselfly, which has not been recorded on Wanstead Flats or in Wanstead Park since 1897, and in East London since the early 2000s.

The message had myself and fellow Wren member Bob Vaughan rushing out to confirm the sighting. And this damselfly turned out to be even more exciting than we first thought, as we confirmed our suspicion that it was a Migrant Spreadwing (or Southern Emerald Damselfly). A further search of the pond area revealed the presence of another female and a male.



Damselflies in the Wren area

Damselflies are the dainty relatives of the more familiar and robust aeronauts that are dragonflies. Small but long-bodied, mostly brightly coloured red, blue, green or even almost totally black, they can be seen fluttering among the emergent plants around our water bodies, hunting for prey or mates. Some may be seen flying low and purposefully across water while others can be found hunting in the grasslands of Wanstead Park, Wanstead Flats and Leyton Flats.

Adult damselflies are predators of a variety of small invertebrates, catching them in the air using their bristly legs as basket-nets, or plucking trapped flies from spider's webs. When damselflies mate, they form a heart-shaped 'wheel' and will usually stay together on nearby vegetation. The males remain locked to their mates, guarding the females as they lay their eggs on the surface of submerged living or rotting vegetation. The larvae then hatch and begin to forage, lurking in the underwater ready to ambush any invertebrate prey large enough to be swallowed. Depending on species and temperature, larvae can take between one and two years developing underwater before emerging as adults. Across our local area, the most frequently encountered

damselflies are the Large Red Damselfly in early Spring followed by Azure, Common Blue, Small Red-eyed, Red-eyed and the Willow Emerald Damselflies. Banded Demoiselles can often be seen on the River Roding.

Table 1. Classification of the UK's Emerald Damselflies

Family: Lestidae

Genus: Chalcolestes

Species: Chalcolestes viridis (Willow Emerald

Damselfly)

Genus: Lestes

Species: Lestes sponsa (Emerald Damselfly)

Species: Lestes dryas (Scarce Emerald Damselfly

Species: Lestes barbarus (Southern Emerald

Damselfly/Migrant Spreadwing)

A Damselfly New to NE London!

On Monday 30 September, Andy Gibbons (a member of the Wren WhatsApp group) posted a message with a photo of a lovely dull green damselfly with its wings held open at 45 degrees to the body, a pose typical of emerald damselflies (or spreadwings). The Willow Emerald Damselfly (Chalcolestes viridis) is now a common late summer damselfly in our area, but this one was clearly a little different. Within 10

minutes of Andy posting his message, Bob Vaughan and the author independently recognised that his find was a first sighting of a newly colonising Southern Emerald Damselfly or Migrant Spreadwing (Lestes barbarus). We both rushed over to meet Andy on Wanstead Flats having instructed him to relocate and guard his find! Within a short space of time, we had found two females and a male within a few meters of each other (Figure 1&2). This was quite a moment for the three of us! As it turned out, this was the second of only two London records for this species, the other being a single female found in Richmond Park in August of this year.

Resident and Colonising Damselflies

The emerald damselflies belong to the family Lestidae. To date, there are four species found in the UK, belonging to two distinct groups (See Table 1).

Up until the early 2000s, the Emerald Damselfly (Lestes sponsa) was the most found member of the Lestidae across the UK. However here have only been a few records of this damselfly being found in NE London, with mostly old records for Wanstead Park (1830s and 1897) and anecdotal reports from Leyton Flats area in the early 2000s. There has been a reported national decline in this species in recent years.

The Scarce Emerald Damselfly (Lestes dryas) is mostly confined to sites along the Essex and Kent Thames Estuary and an isolated population in Fairlop Waters. It has been seen occasionally in Wanstead Park, the last sighting being a single male in 2021.



Figure 1 - Female Lestes barbarus - Southern Emerald Damselfly or Migrant Spreadwing found on Wanstead Flats on 30 September 2024

In contrast, the Willow Emerald Damselfly (Chalocolestes viridis) is a recent colonist from the continent. It was first seen in significant numbers in East Anglia in 2009 and first recorded in Essex in 2010. The first record for our area was in 2015 since when it has rapidly expanded its range both locally and and nationally. It is now an abundant damselfly across many of our ponds and lakes. Uniquely, this damselfly lays its eggs under the bark of branches, usually of Willows, overhanging water. This activity leaves characteristic ladder-like scars. The eggs

overwinter, hatching in late Spring allowing the larvae to drop into the water. As with all the Emerald Damselflies, development is fast and the adults will emerge within three months of hatching.

A Damselfly Family Specialising in using Ephemeral Ponds for Reproduction

As hinted at above, the Emerald Damselfly group have very different reproductive strategies compared with other UK damselflies. They are specialist colonisers of ephemeral water bodies, ponds and pools that dry partially or fully over the summer, so they develop into adults very quickly (weeks) once the larvae enter the water. Our other damselflies are found in deeper, persistent waterbodies such as lakes (e.g. Azure Damselfly, Coenagrion puella) or flowing waters (e.g. Banded Demioselle, Calopteryx splendens) and have a longer larval development period (months or years).

An important adaptation to drying conditions is to grow quickly and exploit the available food as effectively as possible before the water body dries up or becomes too oxygen depleted to support life. The adult emerald damselflies emerge from the water in mid to late summer. After mating, females, guided by their male partner, will select suitable living emergent vegetation (such as reeds) into which they

will insert their eggs. They use the cutting blades of their ovipositors to slice open the plant tissue, a specialised adaptation of this group.



Figure 2 - Southern Emerald Damselfly - Male - found on Wanstead Flats on 30 September 2024

These eggs will be laid within a couple of cms above or below the waterline (L. sponsa), or even mostly above the waterline (L. dryas and L. barbarus). The eggs are drought tolerant, and the embryos begin to develop into prolarvae in the last few weeks of warmth before temperatures begin to fall as Autumn and Winter set in. The cold causes these little larvae to enter diapause, a suspended animation where they stop growing and use very little energy. With the seasons' rains, water levels rise so that the egg sites are now at or below the water level. As the temperature of the water increases in Spring and the

threshold of 5°C is reached, the prolarvae hatch from their eggs and wriggle out into the water. At this point they become incredibly fast and active feeders, devouring any suitably sized invertebrate prey they can find. While the larvae of L. dryas and L. barbarus tend to bottom feed, the larvae of L. sponsa lurk on the stems of marginal vegetation, snatching small crustaceans such as Daphnia (Water Fleas) from the water column using their extensible jaws. This active predatory behaviour, along with the warming water, means that development through several moults into adults is fast. Hopefully fast enough that the larvae are not stranded by falling water levels before they can undergo the final moult into a winged adult to begin the cycle once more.

The newly found Migrant Spreadwing/Southern Emerald Damselfly/Lestes barbarus

The Migrant Spreadwing is, as its names suggests, something of a wanderer. Common in parts of continental Europe, it was first recorded in Norfolk in 2002 and has since established a few isolated breeding colonies in the southeast of England, working its way up along the Thames in South Essex and North Kent. Finding three of these damselflies, especially as there were two females and a male, leads us to hope they may have begun



Figure 3. Female Emerald Damselfies. These images show some of the subtle differences between the four Emerald Damseflies found in the UK. Clockwise from the top left – Lestes barbarus, L. sponsa, L. dryas and Chalcolestes viridis. Note the width of the shoulder stripe (red arrow) and the presence or absence of a spur mark on the side of the thorax (yellow arrow).

to establish a new colony, possibly the first in London. Wanstead Flats, along with Wanstead Park and Leyton Flats, have several shallow ephemeral ponds that show varying drying patterns over the Summer. Some will dry quickly, others more slowly. This provides a mosaic of potentially colonisable habitats for Lestes barbarus which is a particularly fast-growing species and well adapted to shallow pools surrounded by dense vegetation. These are climate dependent habitats historically being more common in Southern Europe.

Managing our Local Habitats for Emerald Damselflies

As one might expect, shallow and ephemeral ponds have a limited life span. Over time they become infilled with vegetation and other substrates until they become completely dry all year. However, management of invasive or rampant vegetation has to be undertaken with care. Unlike Chalcolestes which uses overhanging branches, the Lestes lay their eggs within living vegetation around the ponds. Any Autumn or Winter clearance of the vegetation to slow or prevent infilling risks removing the overwintering eggs containing the prolarvae. Indeed, it has been suggested that the demise of Lestes sponsa is linked to overenthusiastic clearance of the Reeds and Reedmace they usually use. Developing management strategies for ephemeral ponds could help both L. barbarus and L. dryas establish themselves locally.

Unfortunately, some of our local birdlife are partial to eating both the adult and larval damselflies!
Unlike other damselfly (and dragonfly) larvae, the Lestids are active hunters rather than ambushers and can be more easily seen by predators as they move around. But that's nature!

A significant risk that can be managed is the presence of tick and flea treatments in the water.

Many modern pet treatments contain fipronil and imidacloprid, potent and persistent neurotoxic insecticides. These are being found in water bodies across the UK and are linked to treated dogs entering the water (and also run-off from wastewater where animals and hands have been washed). As the damselfly larvae are top predators in the water, and ephemeral pools concentrate any contaminants as

they dry, the larvae risk accumulating these toxins and being killed.

The reasons for the demise of some species and the success of others are complex, but human activity and climate change are both important factors.

Where we can create and manage diverse mosaics of good quality habitat, we can hope to make existing and future assemblages of animals and plants

resilient for future generations to enjoy.

For more information on Damselflies, go to the website of the British Dragonfly Society <u>british-dragonflies.org.uk</u>

by Dr Tony Madgwick







.... don't forget

It's that time of year again to keep an eye out for our feathered friends. It's pretty parky out there and food may be hard to come by for our birds.

So please keep an eye out for our feathered friends.

- ☐ Provide fresh clean water every day.
- ☐ Give kitchen scraps like cheese, cooked potato and bread.
- □ Clear up uneaten food at the end of the day as it could attract rats.
- □ Avoid giving salted nuts and only give peanuts from a good supplier.
- □ Clean feeding areas regularly to prevent any disease..

then & now Were you right?

Alexandra Lake, Wanstead Flats 1930s - the lake was known locally as the Sandhills Pond. The 'sandy' hills were thought to be more prominent when the lake was created but sand was taken to fill sandbags during the war and the same spot in 2002



and finally...

Wren New Year Social

Come and join us for the Wren New Year Social - promises to be a lively event with a short quiz and a raffle. It's a great opportunity to socialise with fellow Wren Group members.

Please bring your own choice of drink, a dish to share, and some cash for the raffle. Cups, paper plates and cutlery will be provided.

Saturday 18th January 7.00 pm onwards Good Shepherd Studios, 15A Davies Lane, Bushwood, London <u>E11 3DR</u>

Entry is round the back, through the 'Back to Ours' cafe door.

https://maps.app.goo.gl/p5uwBNqpUCy7xMEh9

Free entry via eventbrite: https://www.eventbrite.co.uk/e/wren-group-new-year-social-and-mini-quiz-tickets-1050571265937?aff = ebdssbdestsearch

Wren on Bluesky

Wren now has a presence on Bluesky - why not follow us and find out more about the group at @wrenwildlife.bsky.social





Wren links page www.wrengroup.org.uk/links

Facebook www.facebook.com/WrenOrg

Twitter https://twitter.com/wrenwildlife

Wanstead Wildlife

www.wansteadwildlife.org.uk

Friends of Wanstead Parklands

www.wansteadpark.org.uk

RSPB North East London Members Group

www.rspb.org.uk/groups/northeastlondon

Wanstead Birding Blog

wansteadbirding.blogspot.co.uk

Epping Forest

www.cityoflondon.gov.uk/things-to-do/green-spaces/epping-

forest/Pages/default.aspx

British Naturalists' Association

www.bna-naturalists.org

Bushwood Area Residents' Association

www.bara-leytonstone.org.uk

East London Nature www.eln.yorkshirefog.co.uk

East London Birders www.elbf.co.uk

Friends of Epping Forest

www.friendsofeppingforest.org.uk

East London Nature <u>www.eastlondonnature.co.uk</u>

Plenty of info here about walking in Essex - including the forest

http://trailman.co.uk

Wild Wanstead - greening up the local area

www.wildwanstead.org

BBC Nature www.bbc.co.uk/nature

British Naturalists Association

www.bna-naturalists.org

BBC Weather http://www.bbc.co.uk/weather

Field Studies Council (FSC)

www.field-studies-council.org

London Natural History Society

www.lnhs.org.uk

Natural England <u>www.naturalengland.org.uk</u>

RSPB <u>www.rspb.org.uk/england</u>

UK Safari www.uksafari.com

The British Deer Society www.bds.org.uk

The Wildlife Trust www.wildlifetrusts.org

