Ballymun Wildlife Group Report on Biodiversity present at the abandoned lands adjacent to the north and west of Northpoint, Ballymun

Date: 22/3/2019

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Site Names in use: Ballymun NCT ponds and meadow, Northpoint wetlands, Route B, Site 2-Ballymun

Site Location: 53°24'40.3"N, 6°16'11.0"W – Townland: Ballymun; Barony: Coolock; County: Dublin

Site size: Total area ~8 acres including ~0.8 acres of wetlands

Executive Summary:

The ecological assessment for the proposed works on the named site omitted and or failed to include significant records of protected species and habitats in their analysis. The ecological assessment also failed to consult the Biodiversity Action Plan for Ballymun by Dublin City Council, the landowner who has responsibility for three of the four site boundaries. Therefore, I wish to advise that the ecological assessment proposed for routing of the waste water pipeline through the Ballymun site by Irish Water has significant deficiencies as a document in that it failed to: incorporate relevant information (including their own data on protected species), overlooked the objectives, policies and failed to consult with Dublin City Council on the Biodiversity Action Plan for Ballymun, failed to conduct an appropriate ecological evaluation of the adjacent green space and amenity area (Silloge Golf Course), fails to comply with the Fingal Development Plan, contravenes Article 10 of the Habitats Directive, and breaches the Planning Act (section 34.2.b). It is for the reasons stated above that I recommend that a new ecological impact assessment of the current routing and alignment of the waste water pipeline "Route B" that incorporates all the relevant data from the site itself and adjoining sites be conducted.

Contents

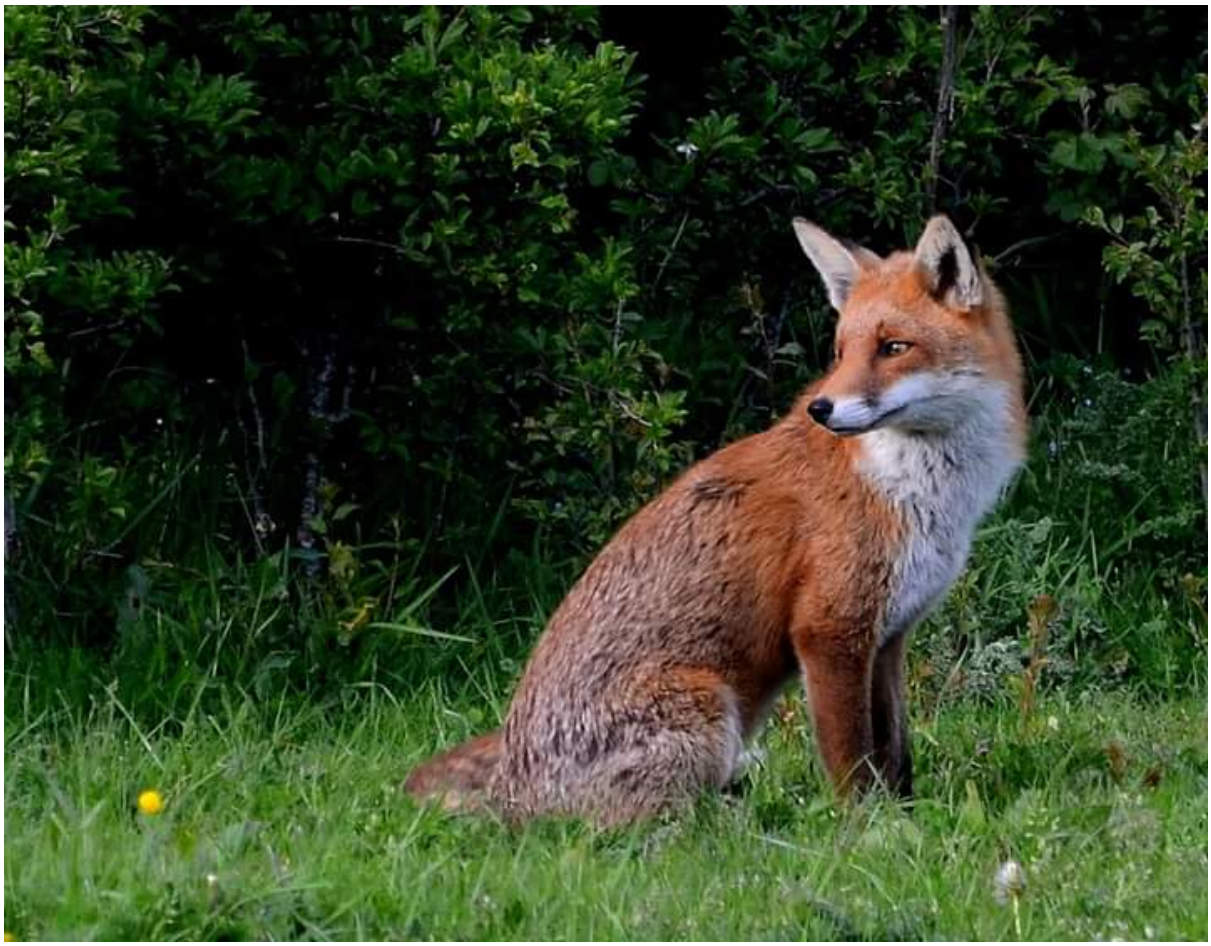
Personal Statement by the author:

I have been visiting the Ballymun NCT ponds and meadows for the last 15yrs. Born and raised in Ballymun, I have had the pleasure of seeing the site rewild over the years and develop from what was once an abandoned builders quarry and offices into one of the most diverse and biodiversity rich "brownfield" sites in Dublin. This site is bordered by the Santry River to the South and Silloge golf course to the North and West with mature hedgerows and trees which provide foraging, commuting, and nesting habitat for a wild variety of animals from birds to badgers. The hedgerows are regularly visited by song birds known to be declining almost everywhere else due to habitat lost, a good example being the Yellow -hammer (*Emberiza citronella*). All members of Finch species, Reed bunting, many members of the Tit family are commonplace with notable summer visitors like Spotted flycatcher (*Musciapa striata*) and Grasshopper warbler *(Locustella naevia)* and the charismatic Swallow, Sand-martin and Swift all feeding on the insects over the ponds. It is these ponds, wetlands, and reed beds are what really make the site special. Fed with fresh run off from the golf course and with a hard-compacted ground substructure stopping the deeper parts of the wetlands from drying out, the pristine water holds large numbers of common frogs and invertebrates in early Spring. During the Summer, the site hosts a huge array of dragonfly/damselfly species, including the rare Emperor dragonfly (*Anax imperator*) and Emerald damselfly (*Lestes sponsa*). I have also recorded 16 species of butterfly including the rare small blue butterfly (*Cupido minimus*). A variety of mammals are also regularly encountered on-site. Native birds of prey such as Kestrel and Sparrowhawk are frequently seen hunting over the meadow and wetlands. Buzzards (*Buteo buteo*) nest in the mature trees within the hedgerow along the Santry river with their "sky dance" ritual seen every Spring in the open sky above the site and southwards towards Ballymun centre. The grasslands and meadows hold also huge numbers of cricket, grasshopper, day flying moth, and many other invertebrate species.

A great variety of flora like wild viola, trefoil, kidney vetch, common vetch, clovers, pyramidal orchids can also be found around the site. In short, this site is a fantastic biodiversity rich site which is connected to the Santry river (and hydrologically to the Baldoyle SAC) and Silloge golf course and acts as a wildlife corridor and reservoir in an increasingly urban area. I reiterate, I don't object to the Irish Water waste water pipe plan. I do however wish to advise that the ecological surveys to date have vastly underrepresented, and in some cases have failed to include, the diversity of protected species and hedgerows on-site. By moving the waste pipeline and leaveaway to the north or south of its planned route, it would mean that this special, rewilded site would not lose its incredible diversity of wildlife and be saved from destruction. I also wish to make it clear that I do not object to the Greater

Dublin Drainage Plan per se, rather I would like to advise that realigning the route of the waste water pipeline through this site would create a situation whereby the footprint of the works is less likely to contravene the directives on wildlife protection stated above. I envisage that a 'Community Gains Proposal' to acquire the lands and be managed by Dublin City Council (as the adjoining high nature amenity landowners with appropriate visitor facilities) would be the best course of action for this site going forward. Given its proximity to the M50 and that it spans two council jurisdictions, I can see that this site could easily become a nature area of regional importance to both local communities and nature lovers from further afield.

A photographer's guide to some common species at Northpoint

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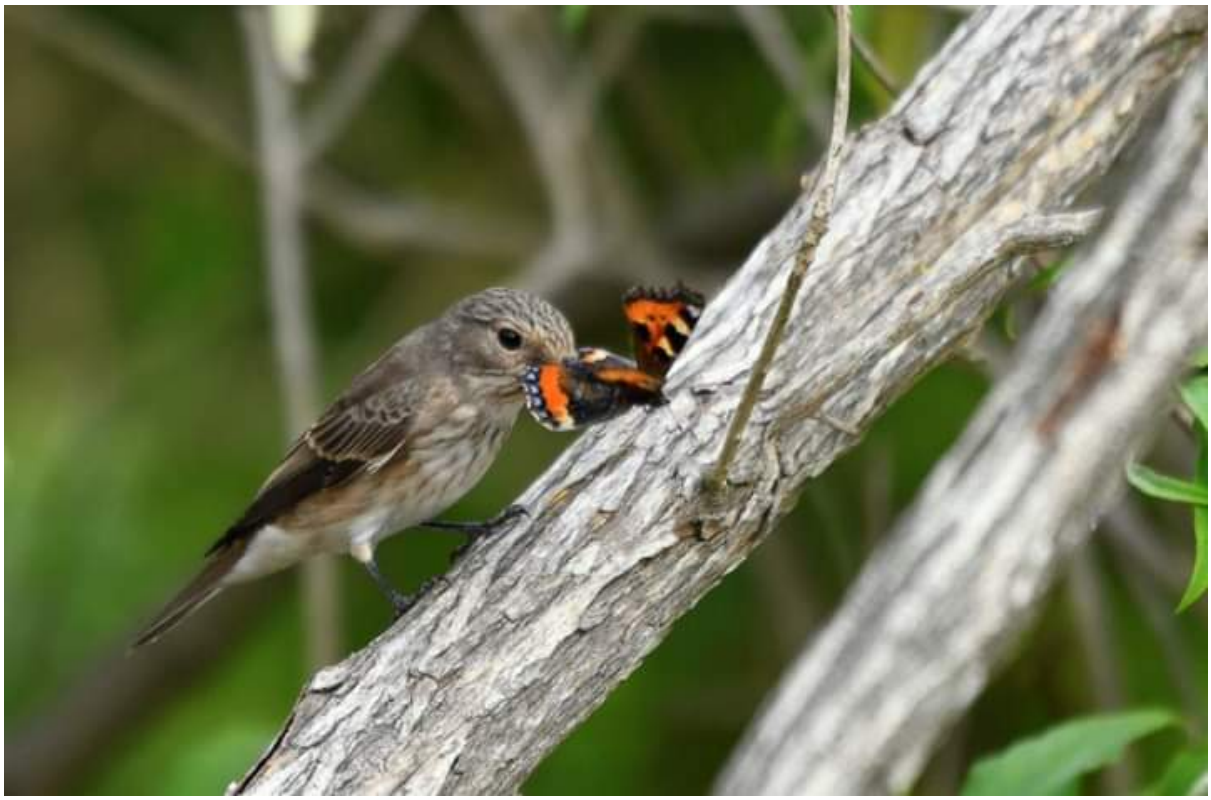

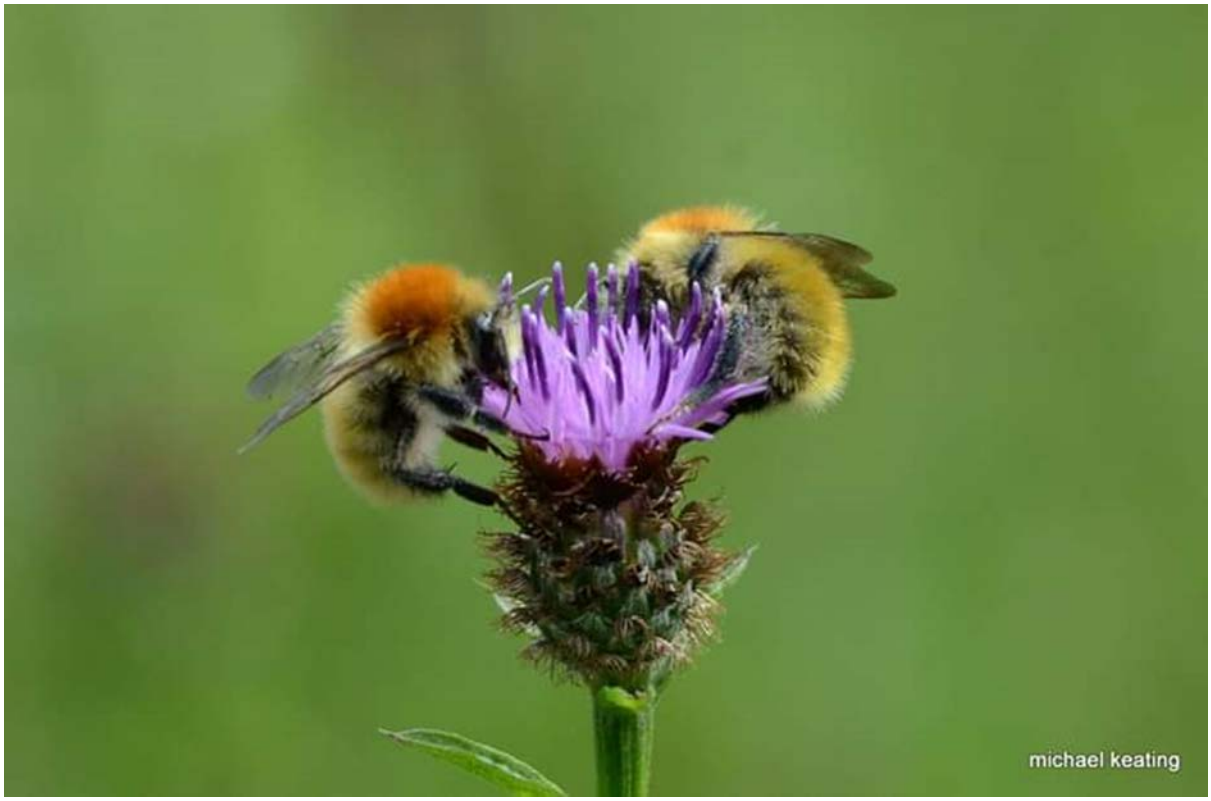
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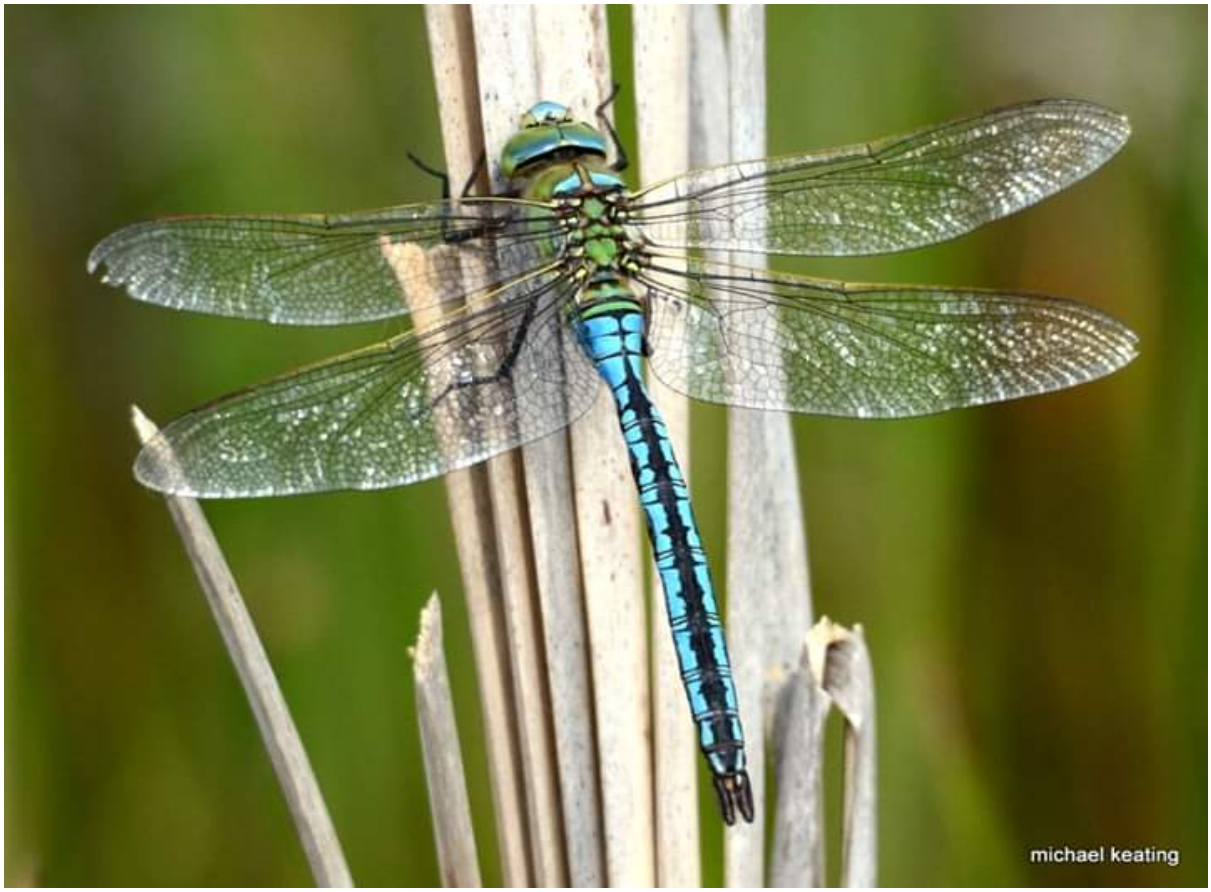
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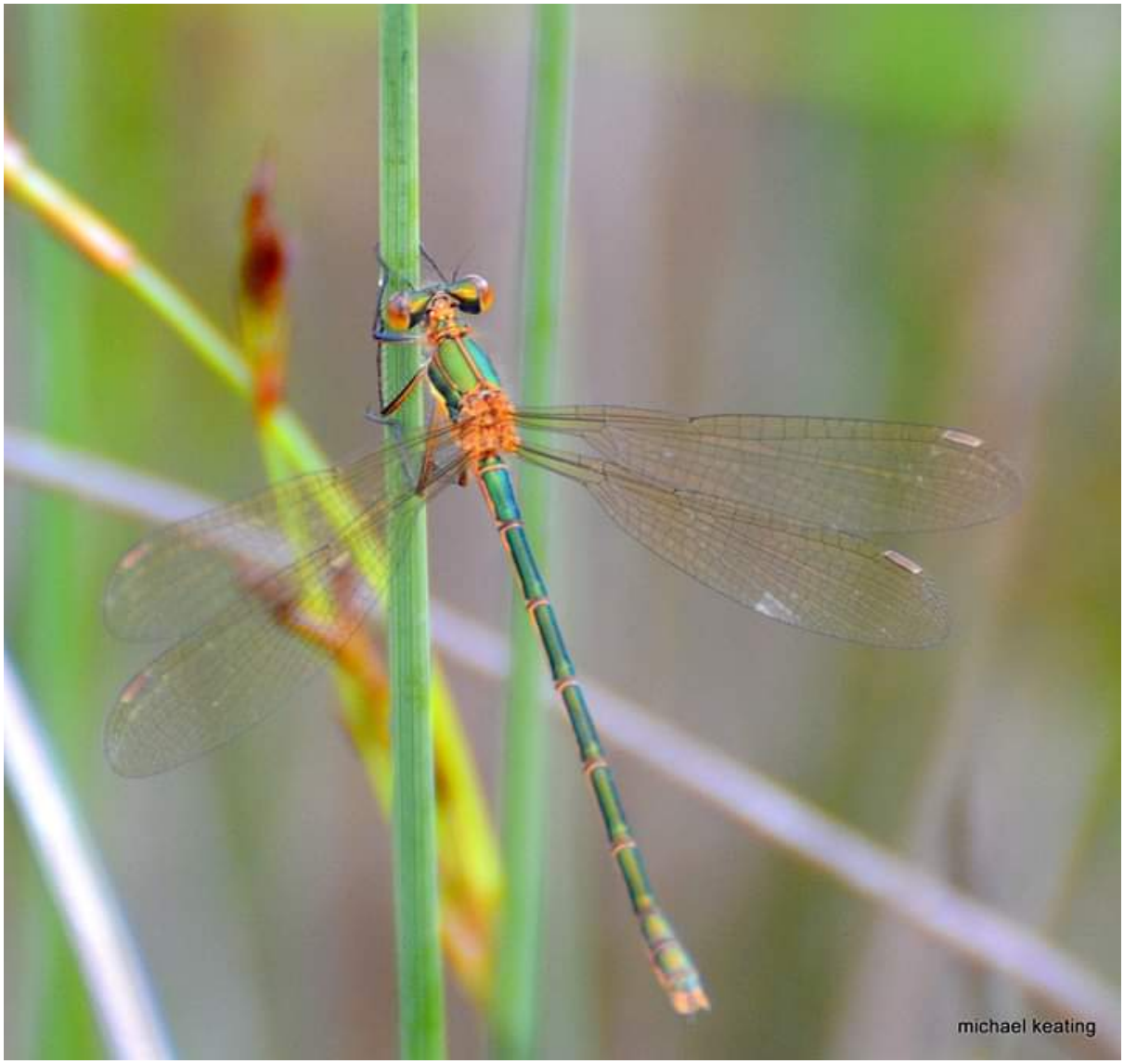
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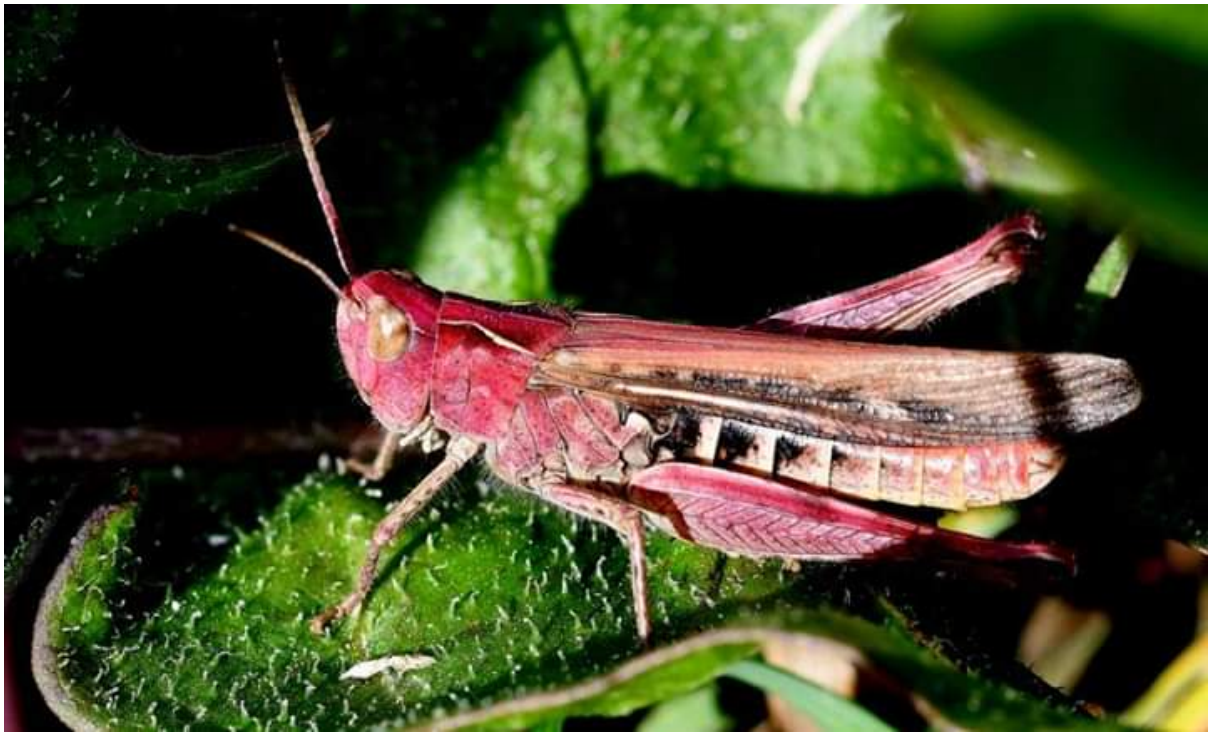

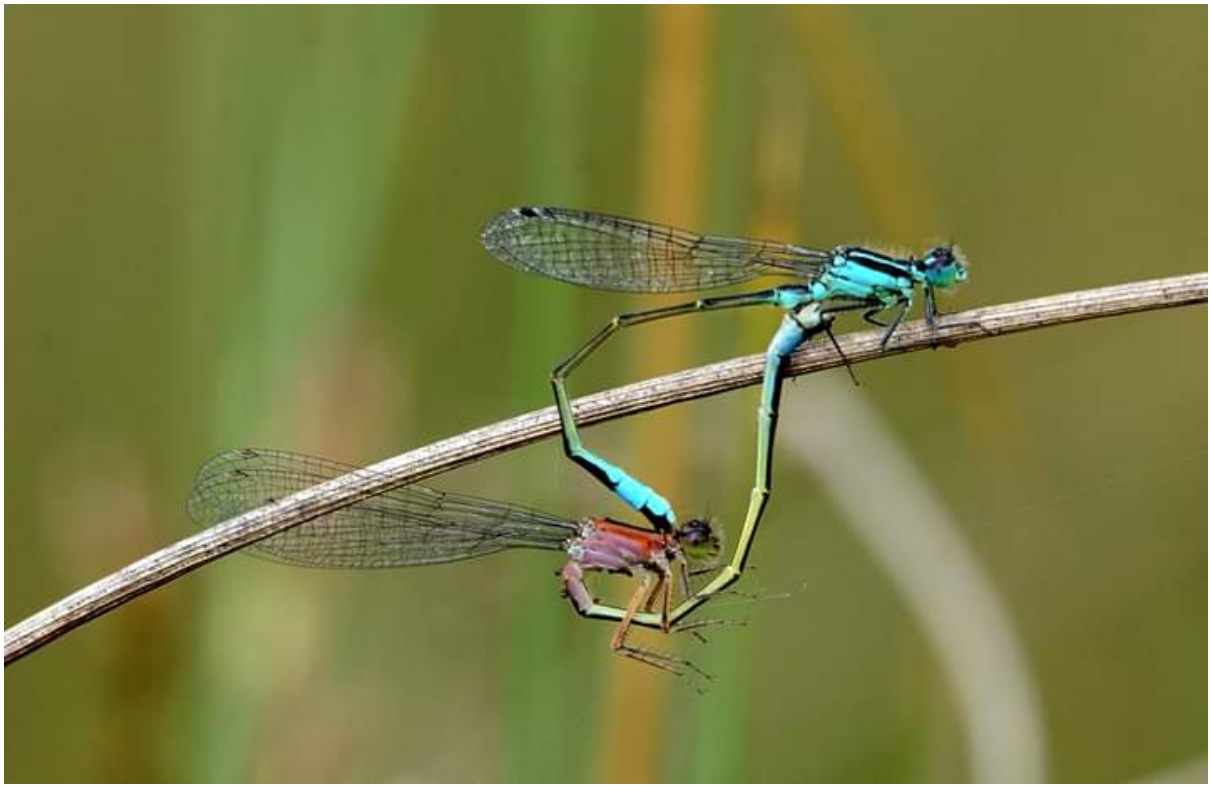

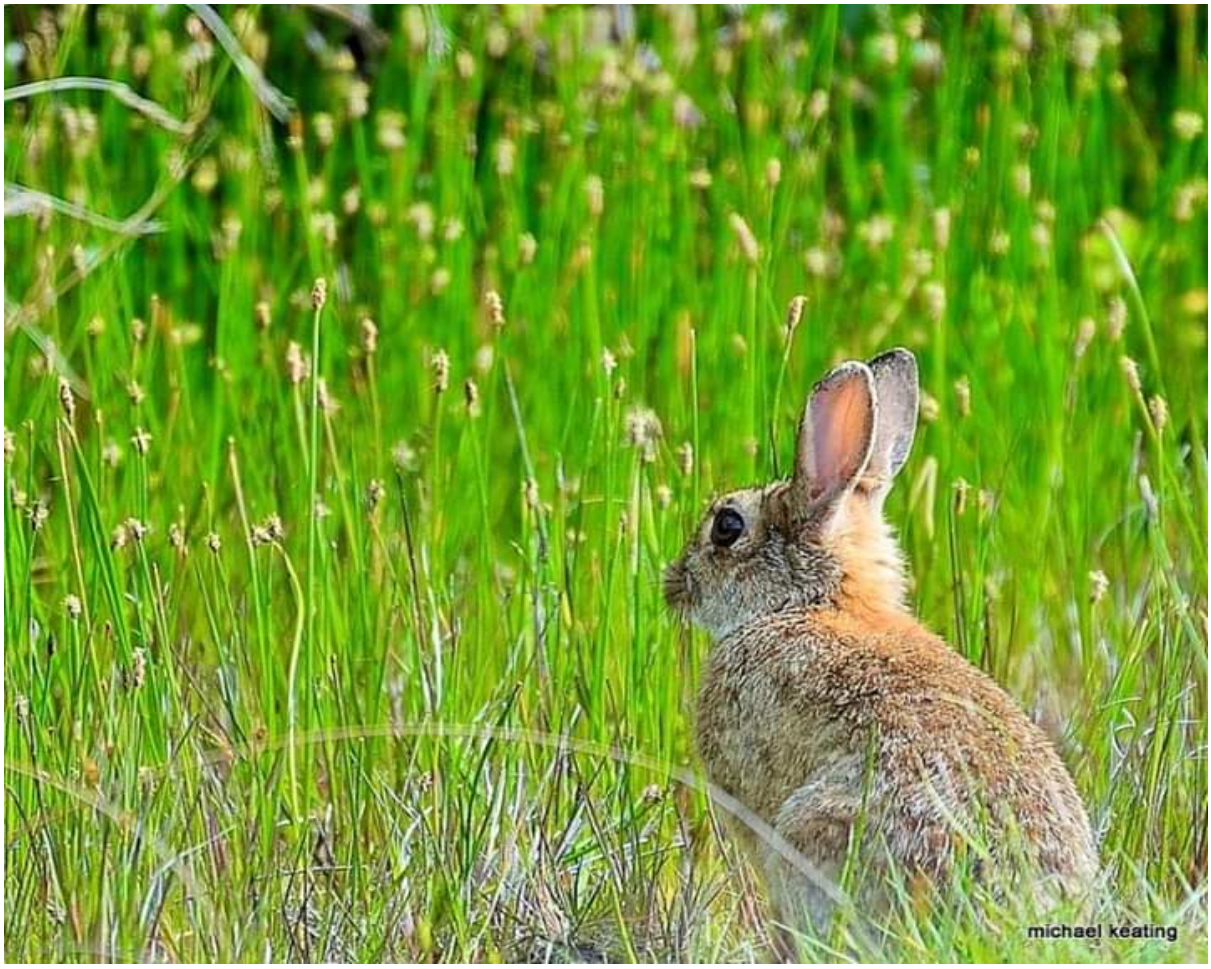
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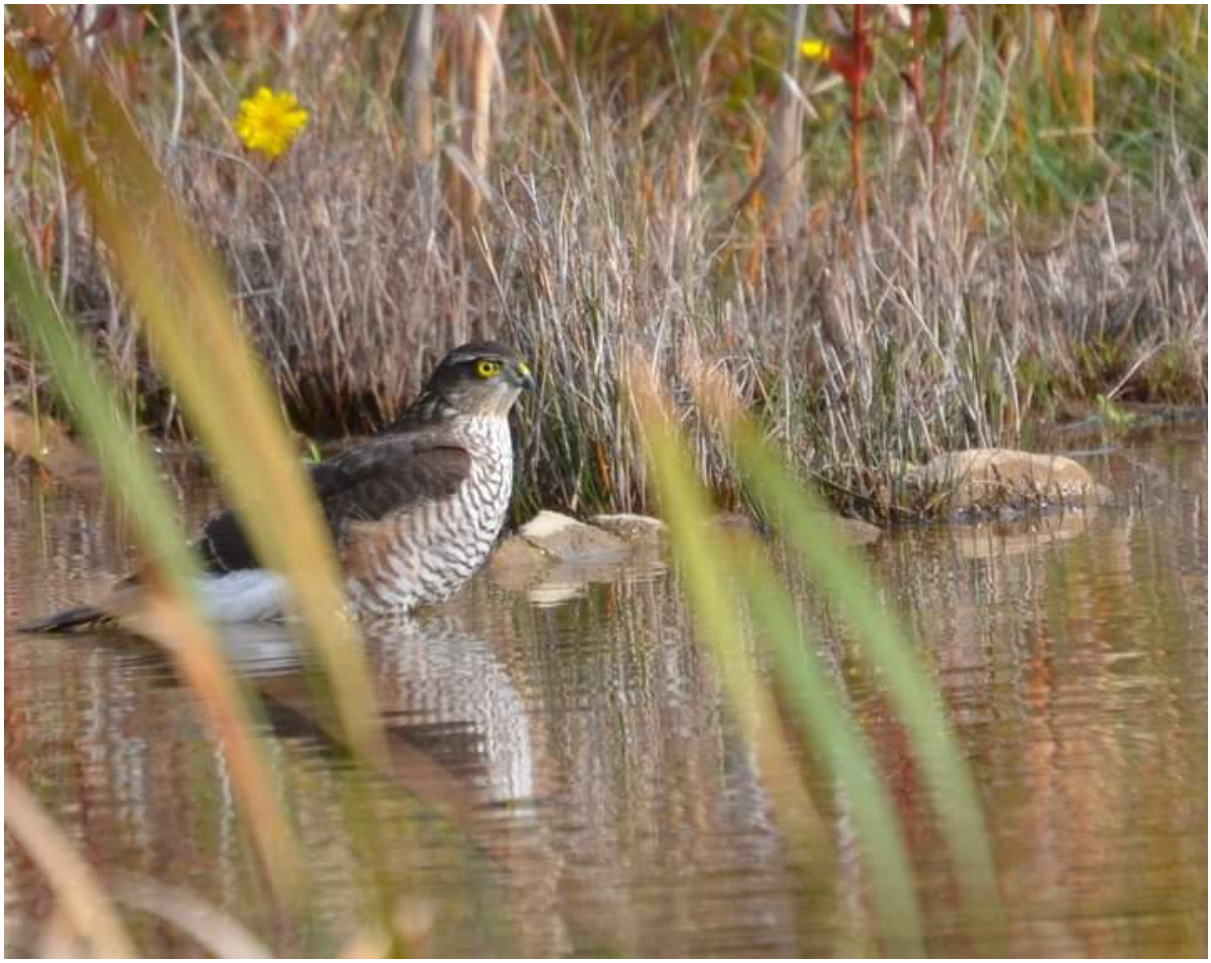

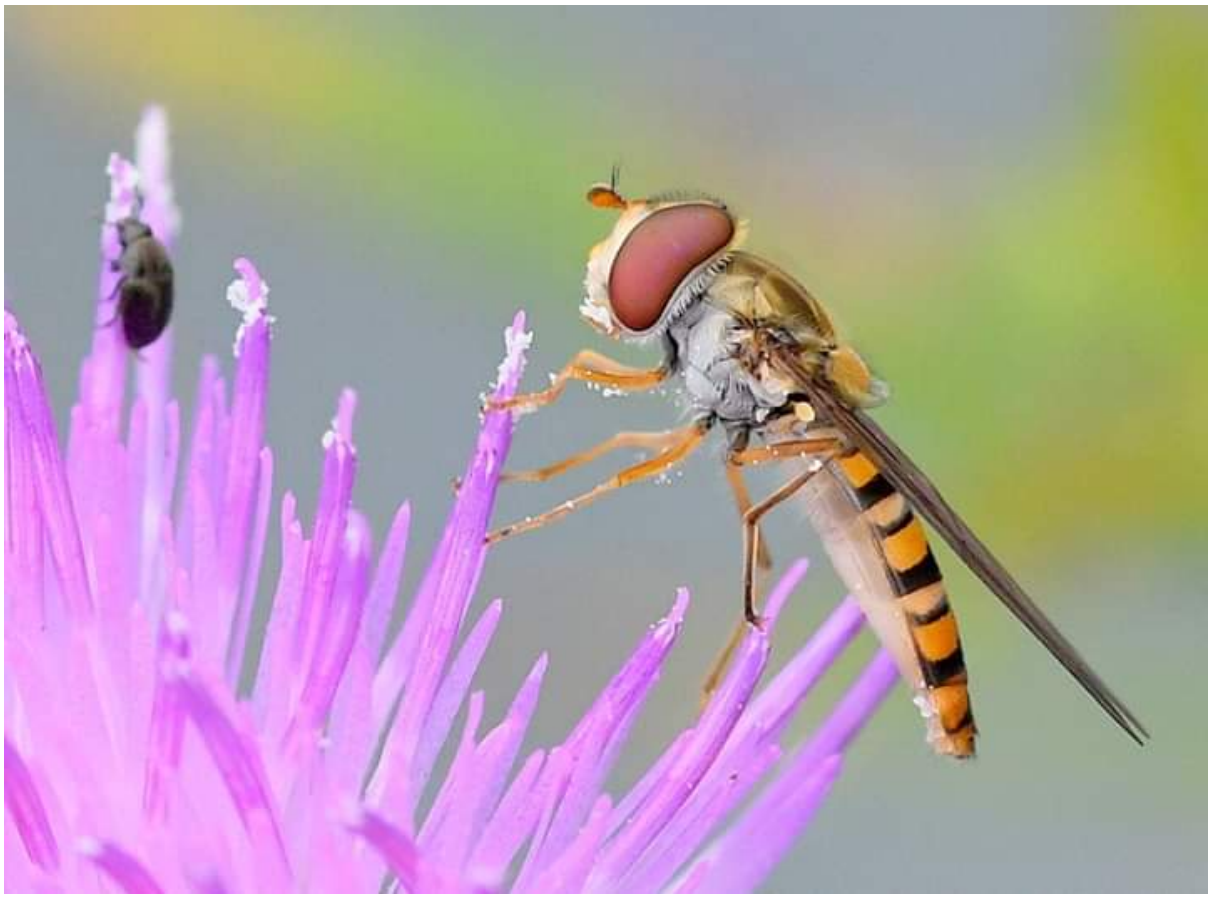

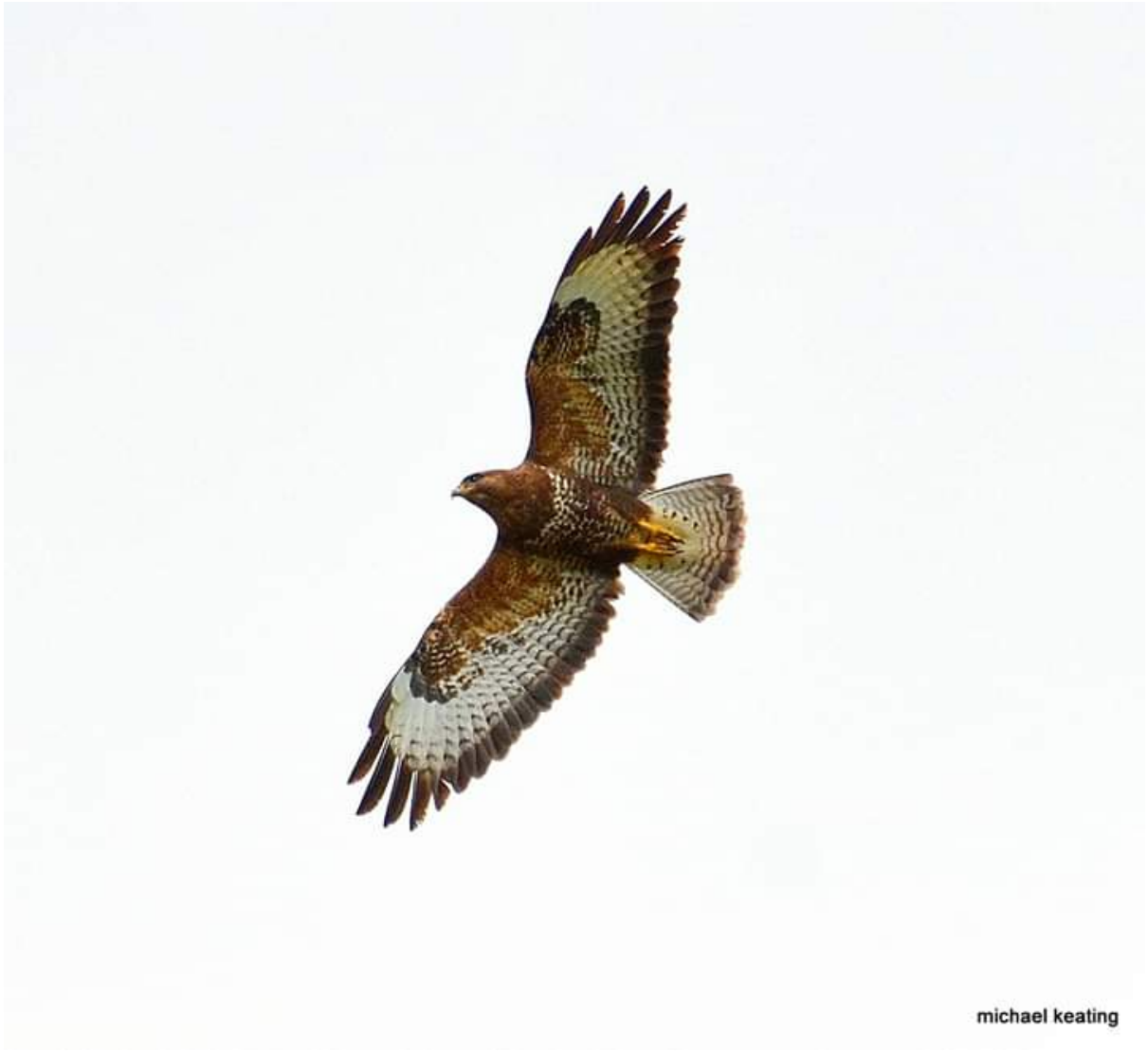

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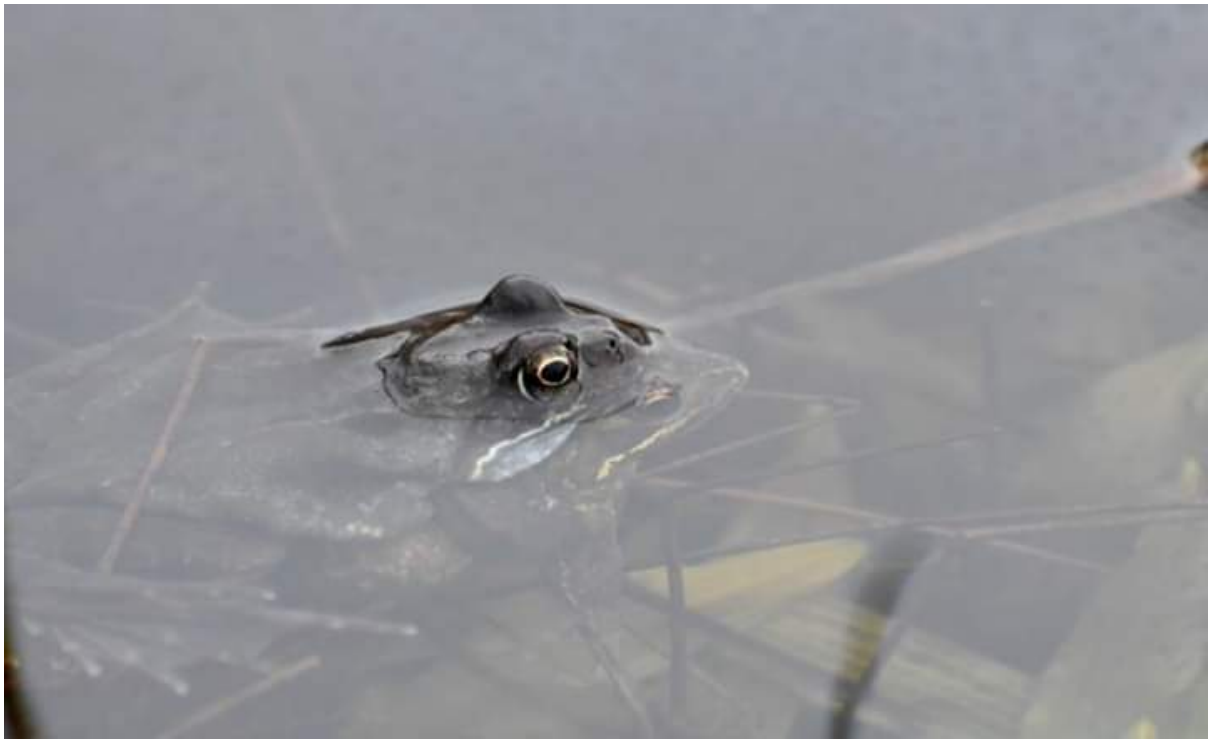

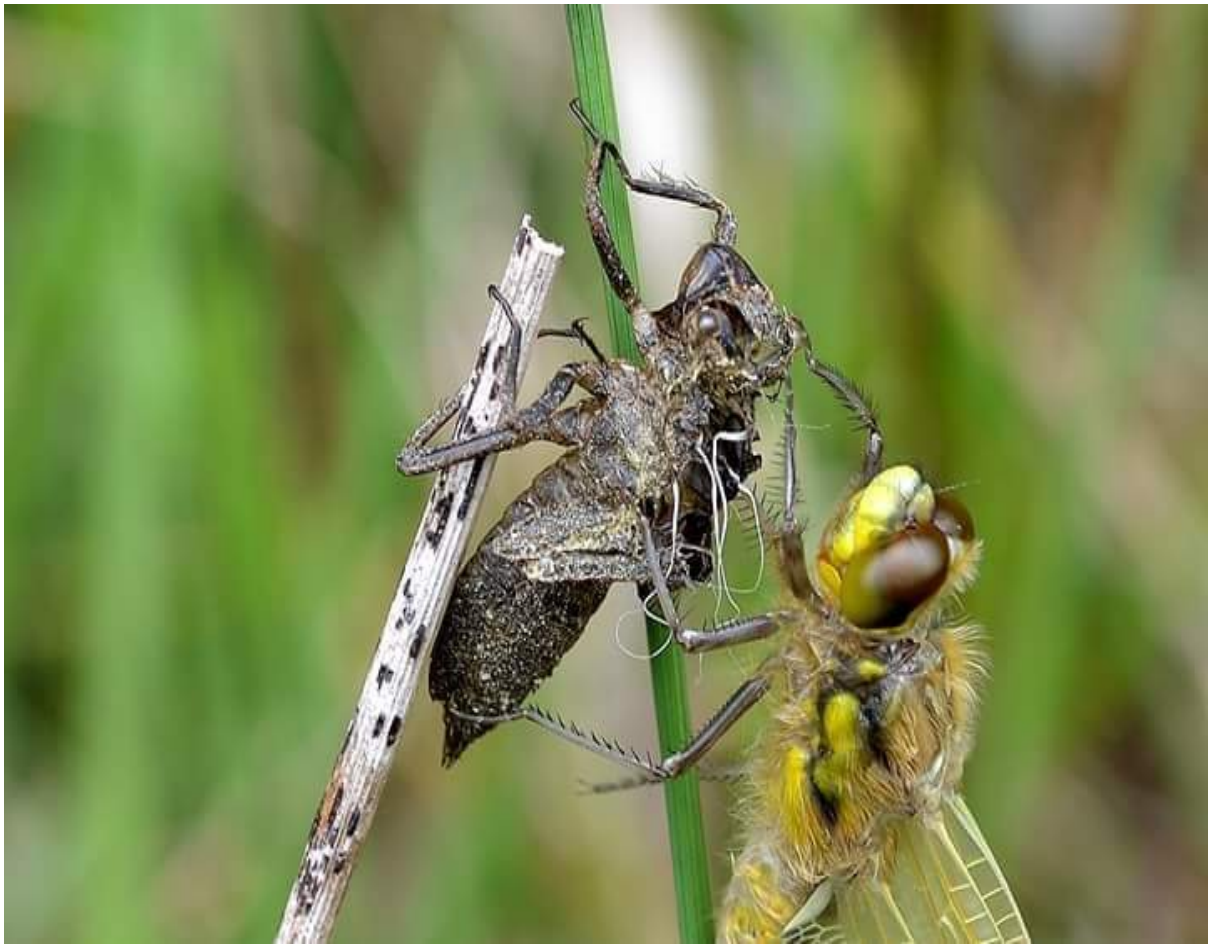

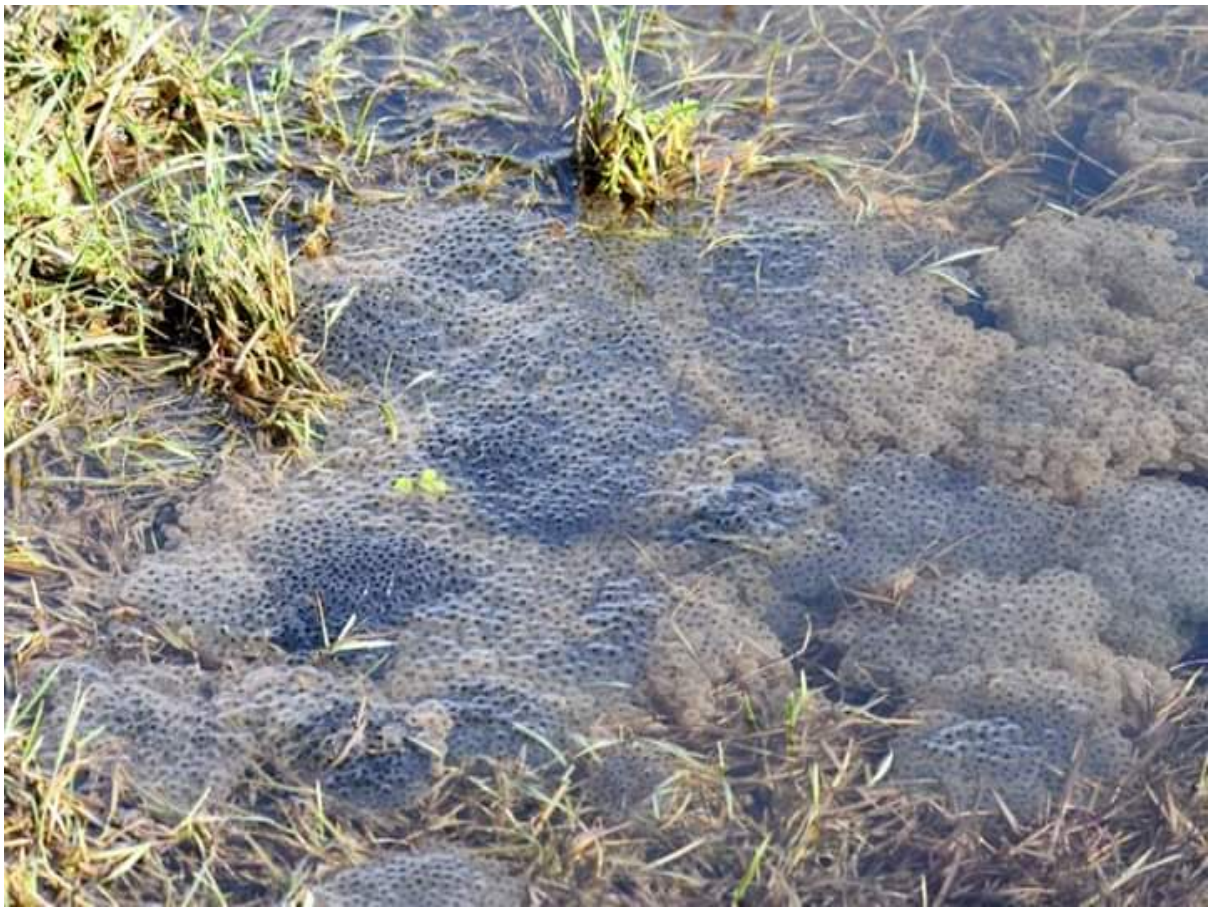

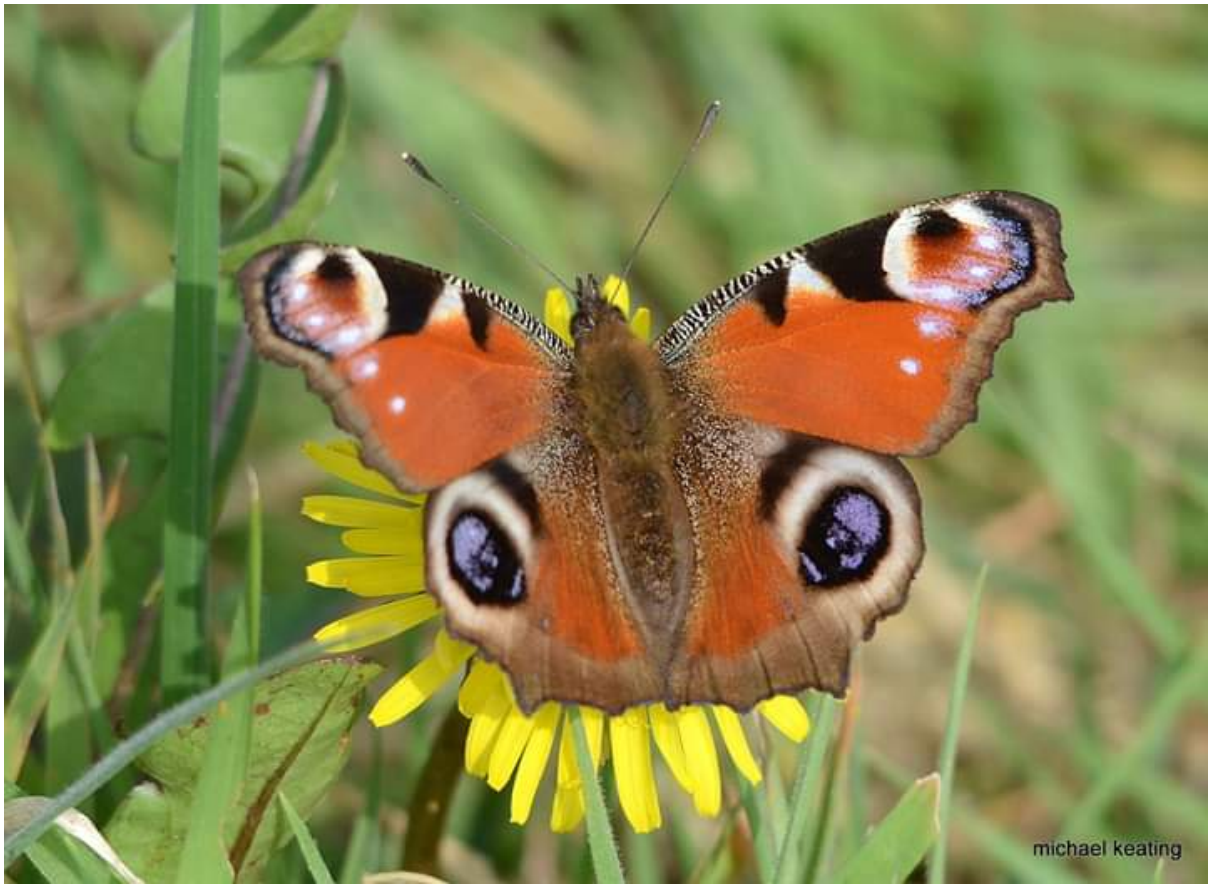
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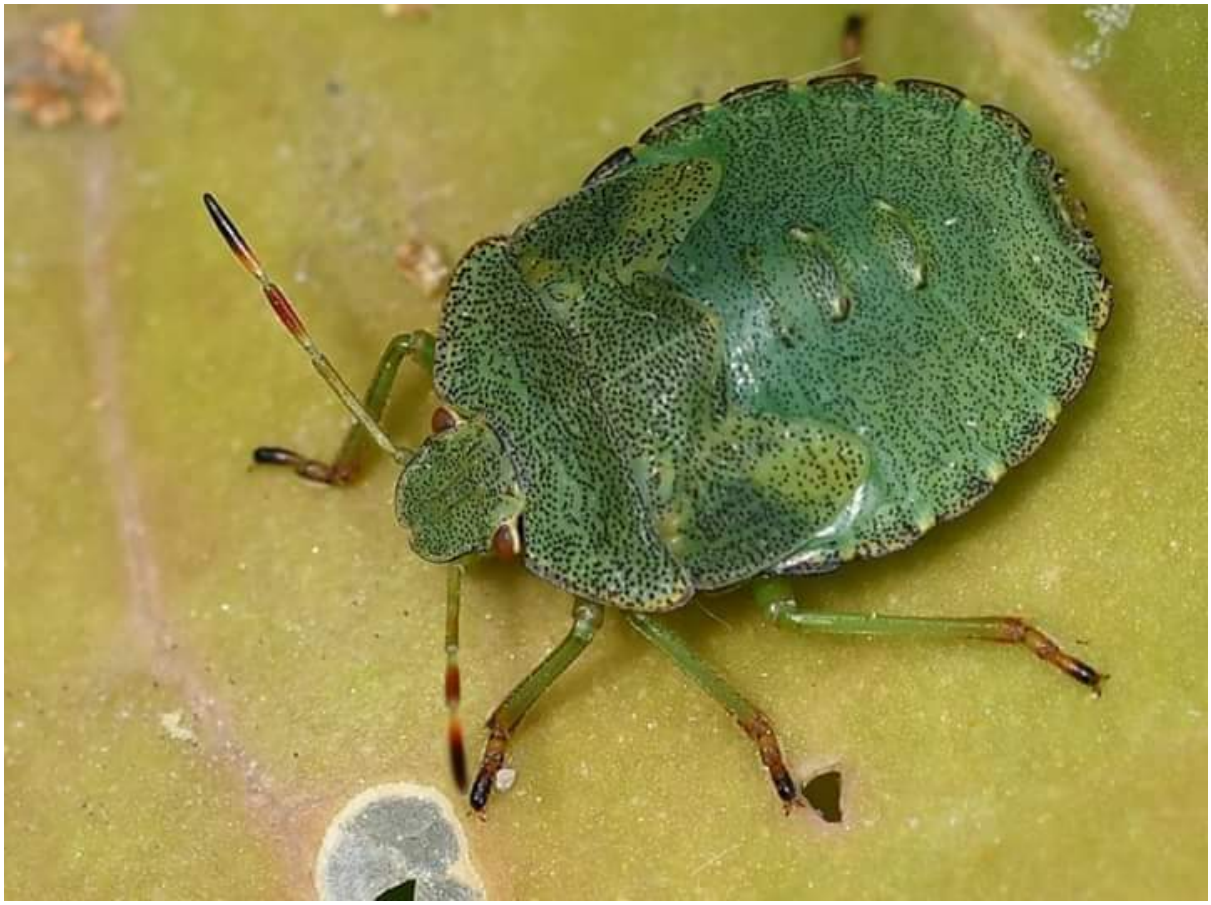

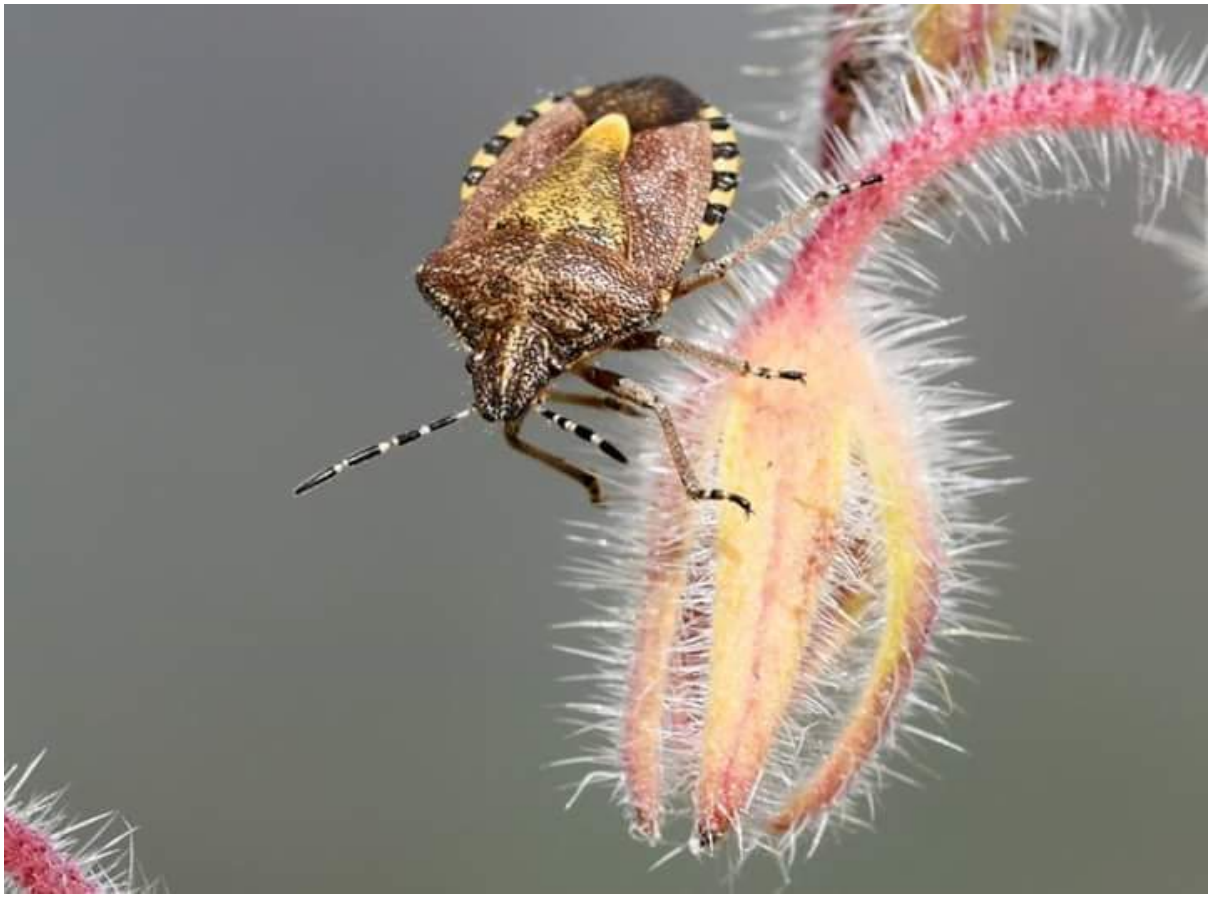

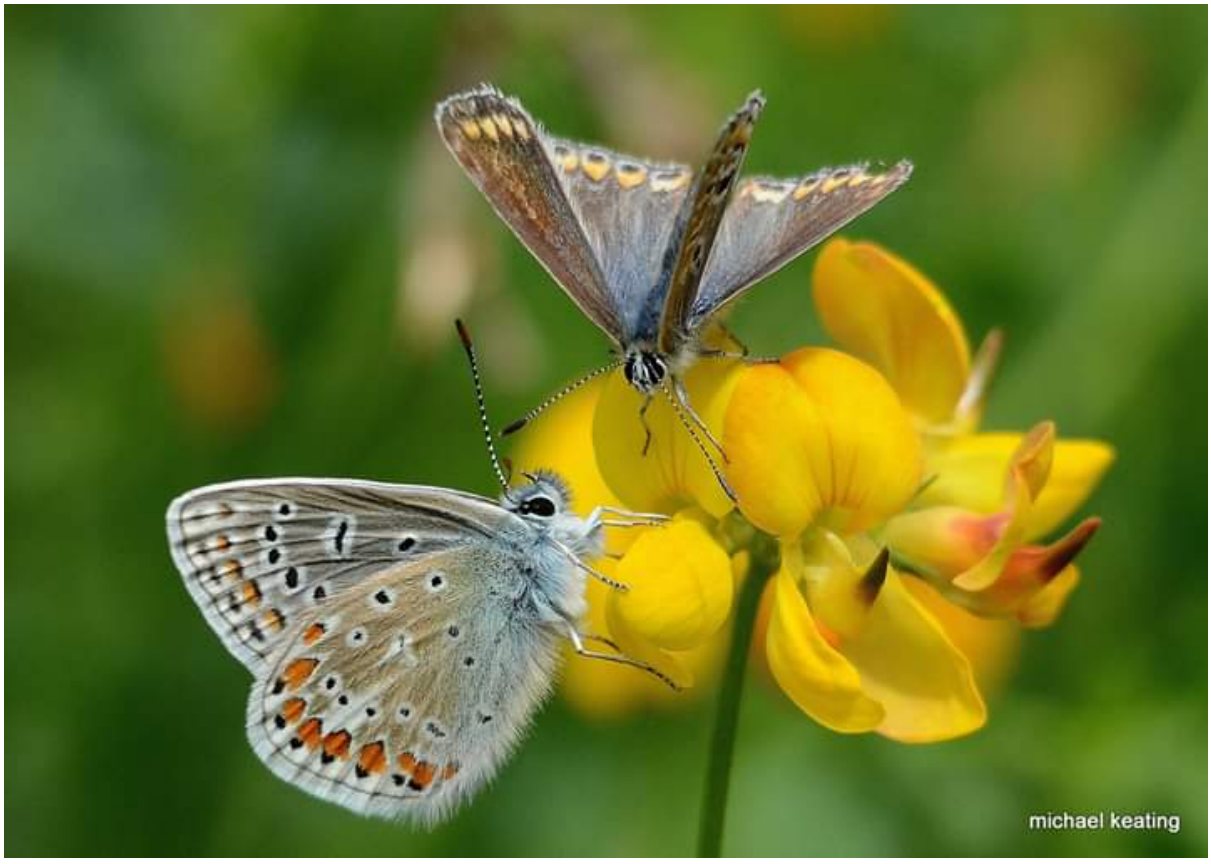
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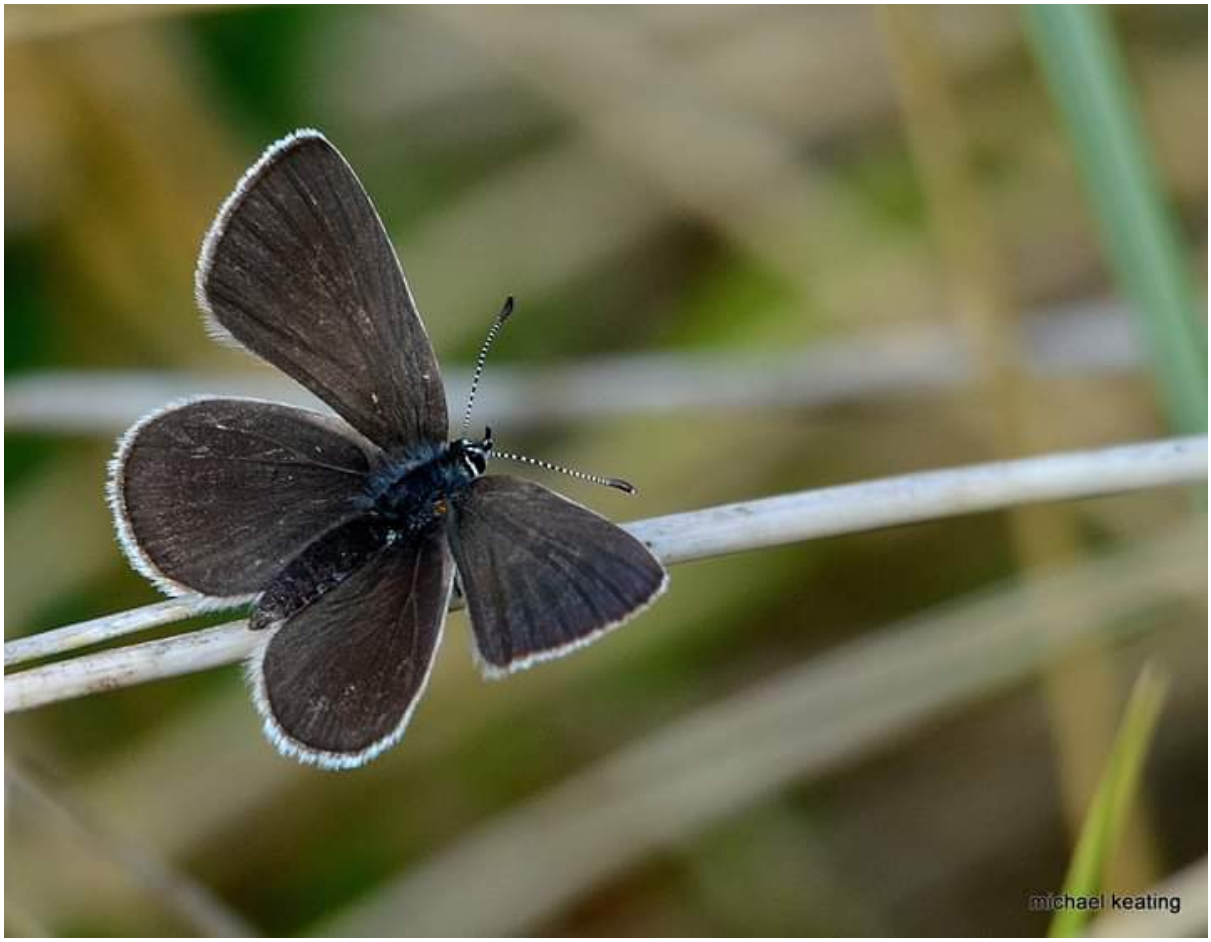
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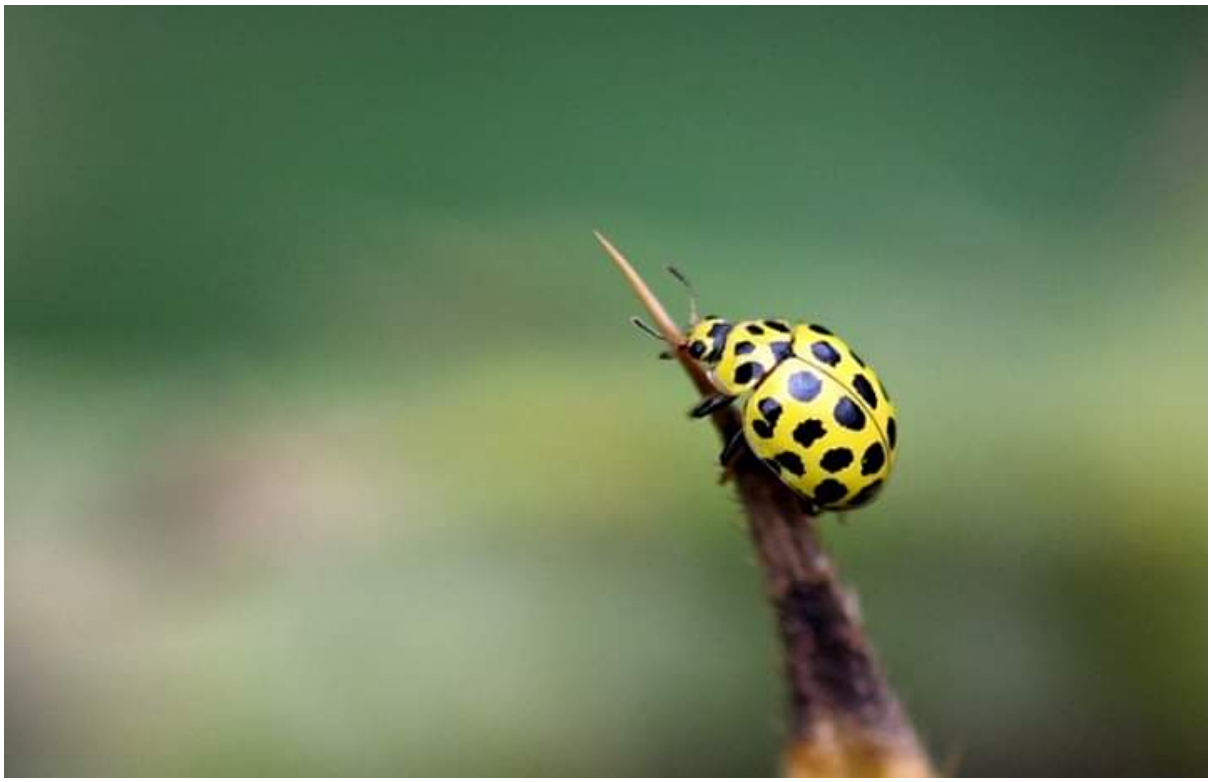

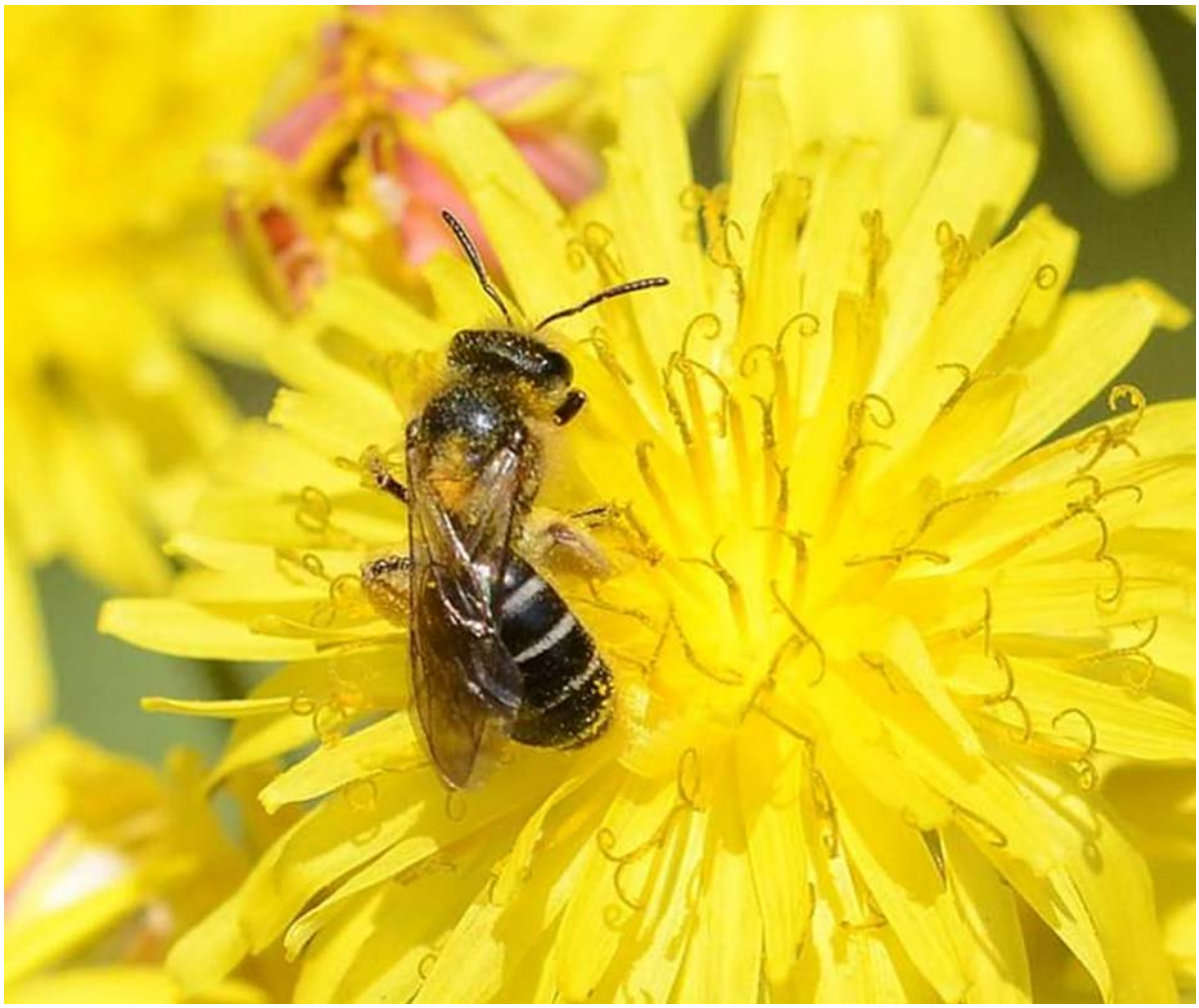

List of all common species recorded at Northpoint

Species	Common Name	Protected status	Annex H/D	Annex B/D	Other
Mammals					
Pipistrellus pygmaeus	Soprano pippistrelle	Wildlife Act (1976,2000)	IV		
Pipistrellus pipistrellus	Common pippistrelle	Wildlife Act (1976,2000)	IV		RedBook -II
Nyctalus leisleri	Leisler's bat, Lesser noctule	Wildlife Act (1976,2000)	IV		RedBook -II
Vulpes vulpes	Red Fox				
Meles meles	Badger	Wildlife Act (1976,2000)			Annex III Berne convention
Erinaceus europaeus	Hedgehog	Wildlife Act (1976,2000)			Annex III Berne convention
Mustela erminea hibernica	Stoat	Wildlife Act (1976,2000)			Annex III Berne convention
Sorex minutus	Pygmy shrew				Annex III Berne convention
Oryctolagus cuniculus	Rabbit				
Birds					
Emberiza citronella	Yellow-hammer				Red-list
Gallinago gallinago	Snipe			II	
Buteo buteo	Buzzard				Green-list
Accipiter nisus	Sparrowhawk				Green-list
Falco tinnunculus	Kestrel				Amber-list
Tyto alba	Barn owl				Red-list
Asio otus	Long eared owl				Green-list

Musciapa striata	Spotted flycatcher				Amber-list
Locustella naevia	Grasshopper warbler				Amber-list
Phylloscopus trochilus	Willow warbler				
Emberiza schoeniclus	Reed bunting				
Pyrrhula pyrrhula	Bullfinch				
Carduelis chloris	Greenfinch				
Carduelis carduelis	Goldcrest				
Fringilla coelebs	Chaffinch				
Linaria cannabina	Linnet				
Anthus pratensis	Meadow pippit				
Carduelis flammea cabaret	Redpoll				
Spinus spinus	Siskin				
Phylloscopus collybita	Chiffchaff				
Parus major	Great tit				
Cyanistes caeruleus	Blue tit				
Periparus ater	Coal tit				
Troglodytes troglodytes	Wren				
Hirundo rustica	Swallow				Amber-list
Riparia riparia	Sand martin				Amber-list
Delichon urbicum	House martin				Amber-list
Apus apus	Swift				Amber-list
Turdus philomelos	Song thrush			II	Green-list
Turdus viscivorus	Mistle thrush			II	Green-list
Turdus pilaris	Fieldfare			II	Green-list

Turdus iliacus	Redwing			II	Green-list
Corvus frugilegus	Rook			II	Green-list
Pica pica	Magpie			II	Green-list
Amphibians					
Rana temporaria	Common frog	Wildlife Act (1976,2000)	V		Annex III Berne convention
Butterflies					
Small white	Pieris rapae				
Large white	Pieris brassicae				
Green veined white	Pieris napi				
Wood white	Leptidea sinapis				
Orange tip	Anthocharis cardamines				
Small tortoiseshell	Aglais urticae				
Painted lady	Vanessa cardui				
Red admiral	Vanessa atalanta				
Peacock	Aglais io				
Speckled wood	Pararge aegeria				
Ringlet	Aphantopus hyperantus				
Large heath	Coenonympha tullia				
Meadow brown	Maniola jurtina				
Common blue	Polyommatus icarus				
Holy blue	Celastrina argiolus				
Small blue	Cupido minimus				Nationally rare
Dragonfly/ Damselfly					

Emperor Dragon fly	Anax imperator				
Brown hawker	Aeshna grandis				
Migrant hawker	Aeshna mixta				
Common hawker	Aeshna juncea				
Hairy hawker	Brachytron pratense				
Four-spotted chaser	Libellula quadrimaculata				
Emerald damsely	Lestes sponsa				
Large red damselfly	Pyrrhosoma nymphula				
Common/ruddy darter	Sympetrum sanguineum				Locally rare
Common blue damselfly	Enallagma cyathigerum				
Variable damselfly	Coenagrion pulchellum				
Misc. Invertebrates					
Bombus muscorum	Large Carder bee				IUCN- Near Threatened
Andrena sp.	Mining bee/Solitory bee				IUCN- Vulnerable
Chorthippus brunneus	Common field grasshopper				
Stethophyma grossum	Large marsh grasshopper				
Myrmeleotettix maculatus	Mottled grasshopper				
Chorthippus brunneus	Common grasshopper				

Leptophyes punctatissima	Speckled bush cricket				

Information omitted or not referred to in the Ecological Assessment

In reference to: **Jacobs Tobin Report Greater Dublin Drainage Project**

Irish Water Environmental Impact Assessment Report: Volume 3 Part A of 6

Chapter 11 Biodiversity (Terrestrial and Freshwater Aquatic)

June 2018

Section 11.2.2

The assessors failed to include the site as par to the ecological corridor that is the high value greenspace area that is Silloge golf course. The golf course bounds the Northpoint site on three sides with ancient hedgerows as well as being connected hydrologically to the Baldolye Estuary SAC via the Santry River, which itself forms the southern boundary of the Northpoint site. Therefore, the destruction of the wetlands and ancient hedgerow habitats at Northpoint both contravenes the concept of an interconnected habitat, ecological corridor, or stepping stone and also Article 10 of the Habitats Directive as it will remove vital foraging and commuting habitat for European protected species, namely Common Pipistrelle bats, Leisler's Bat, and Common frog.

Table 11.2 in Relation to the Fingal development Plan 2017-2023

N18 objective is contravened by the ecological assessors as they have failed to include their own data (limited to an Appendix) on protected species they found during their own surveys (bats, and common frog). No plans have been put in place to reduce the impact on the routing of the waste water pipline through the wetland and hedgerow habitats at Northpoint (referred to as Route B) in their report.

N23 objective: Is the Nanikin River, a tributary of the Santry River, been included in this assessment?

N24 objective: This objective is contravened by the assessors as wetland habitats will be permanently destroyed, there will be impacts on flora and fauna which also use Santry, and Naniken Rivers, including rare species of macroinvertebrates and Groundwater Dependent Terrestrial Ecosystems. This is also contrary to Water Framework Directive and Habitats Directive. The Kingfisher, *Alcedo atthis,* is Annex 1 Birds Directive species. This species uses the Santry River corridor at Silloge golf course.

N25 objective: This objective is contravened as the public amenity that constitutes Silloge golf course and access to wetlands on the course perimeter will be reduced through removal of hedgerow, Common frog, and Smooth newt habitats. A bryophyte and Phase 3 habitat survey is also required at Northpoint to check for Flora Protection Order species as a number of orchid, and moss species occur on site

N27 objective: This objective is contravened as the permanent removal of ancient hedgerow which has amenity and biodiversity value, as proposed by Applicant, is contrary to protecting the existing hedgerows. There is no indication that an assessment was made of landscape character. Was one conducted?

11.2.3 Field Survey

A phase I habitat survey is inadequate for a survey of some portions of the proposed pipeline route and has not followed Heritage Council's guidance.

The bats surveys completed by the ecological assessors identified two species of bats using the hedgerows along the proposed pipeline route. Tubridy and associates, in their review of the Ballymun Biodiversity Action Plan, determined bat roost sites to be present within the ancient hedgerows the form the boundary of Silloge Golf course and Northpoint The Biodiversity Datacentre records show that the Northpoint site is a site of medium importance with eight species found within a 1x1km area.

A badger sett is located on-site at Northpoint abutting the northern boundary hedgerow with Silloge golf course. Did the assessors provide this information to An Bord Pleanala? The planned route of

the pipeline runs directly across the existing badger set and therefore would be considerably impacted by the construction of the pipeline at Northpoint.

Barn owl and Long-earred owl have been seen along the eastern boundary hedgerow at Northpoint. It is likely that they use these hedgerows for commuting and hunting (Owl information is provided as an attached appendix).

No specific surveying was conducted for the Common frog (*Rana temporaria*) a nationally and European protected species. The Smooth newt, *Lissotriton vulgaris*, is the least protected of the three native species so why was this species given preference over the Common frog, an Article 17 species?

Why did species specific surveying excluded highly suitable habitat that exists in the ditch habitats that run parallel to the hedgerows that form the eastern boundary of the Silloge Golf course? A population of smooth newt is known to be present in this ditch, approximately 300m from the wetlands at Northpoint.

Why were the smooth newt surveys carried out in May and June? The optimal time to survey for smooth newts in shallow water bodies is April to May as many of their preferred habitats dry out by June.

Table 11.6

The Northpoint site meets the criteria for a site of County and Local importance (higher value), namely:

- species of animal and plants listed in Annex II and/or IV of the Habitats Directive; species protected under the Wildlife Acts; and/or species listed on the relevant Red Data list.
- County important populations of species or viable areas of semi-natural habitats or natural heritage features identified in the National or Local Biodiversity Action Plan (BAP), if this has been prepared.
- Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county.
- Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.
- Key features of local value, being sites or features containing common or lower value habitats that maintain links and function as ecological corridors between key features of local value.

Local

Northpoint has rare invertebrates, bats, and a large population of common frog (see species list provided & HSI report for frogs) and the site itself functions as part of a wider ecological corridor in conjunction with Silloge Golf course and the Santry River corridor.

11.3.2 Terrestrial Habitats

The drainage ditches (FW4) were identified as frog breeding areas. Why was the removal or destruction of this breeding habitat of a protected species mitigated against? This contravenes Article 10 of the Habitats Directive.

Proposed Temporary Construction Compound No. 3

The assessors didn't not find smooth newt at Northpoint, Ballymun but they did find tadpoles of the European protected common frog. This data was only included in an appendix and not included in the overall analysis for the site. Why was the presence of common frog omitted form the analysis? Little is mentioned of the high nature value of the Silloge golf course and its ancient (pre-1800's) hedgerows. Mary Tubridy and Associates describe the Silloge golf course in the Ballymun BAP 2014 as having "Good quality biodiversity is associated with the location of the golf course surrounded by undeveloped land, the presence of dense hedgerows forming its boundary, some old mature pre 1954 trees and part of the course of the Santry River. The presence of the golf course protects the area from development. The absence of development around it ensures the survival of the boundary hedgerows. Thus, the principal objective of management is to retain this use and to ensure that if development occurs the hedgerows will be retained." Why were Dublin City Council not contacted in relation to their Biodiversity Action Plan for Ballymun which contained a review of the diversity within the golf course footprint? Is this not a breach the Planning Act section 34.2.b)?

11.3.3 Bats

Bats (common pipistrelle) were also identified by Mary Tubridy and Associates in their review of the Biodiversity Action Plan for Ballymun. Therefore, bat activity is well known within the Proposed Project Boundary. Leisler's bat and Common pipistrelle were also recorded from these hedgerows in 2017 surveys. Why was Dublin City Council Parks Division not consulted on the Silloge golf course boundary hedgerows? These hedgerows and treelines are identified by the assessors as being of local (higher level) importance.

Evidence of other Mammals

Red fox, Badger and common rabbit are resident at the Northpoint site. Red fox dens under a gorse bush in the south east corner of the site next to a water storage tank.

11.3.5 Farmland birds

Appendix I listed Kingfisher is known to use the Santry river corridor at the entrance point on Silloge golf course.

The Red-listed Barn owl has also been recorded using the hedgerows at Northpoint. This brings the total to eight Red-listed species on-site.

13.3.7 **Summary Valuation of Terrestrial Biodiversity Features**

Silloge Park golf Club NDA is recognised in the ecological assessment as being of “county importance” However, given its location on boundary of Dublin City Council jurisdiction, and that the golf course is a Dublin City Council public park, why didn't the assessors refer to DCC policies in the Biodiversity Action Plan or the Dublin City Council Development Plan? This is inadequate assessment on the behalf of the assessors.

11.4 Impact of the Proposed Project on Terrestrial Biodiversity – Construction Phase

Table 11.14 Potentially Significant Construction Stage Impacts of the Proposed Project on Terrestrial Biodiversity

The assessment fir Silloge golf course NDA has been inappropriately conducted. The NDA is designated in the DCC development plan as it is within their jurisdiction not Fingal. Red-listed Barn owl and Annex IV listed bat species use the hedgerows within and around Silloge golf course and therefore there will be significant impact on these species during construction phase.

We contest that the scrub, hedgerows, and treelines to be of county importance at Northpoint as they are associated with the wetland complex and therefore will there will be significant direct impact during the construction phase.

We contest how the construction phase can proceed as wildlife offences are likely to occur and no mitigation plans have been proposed for Northpoint.

11.4.1 Other Designated Areas

We contest that the loss envisaged for the Silloge golf course NDA is not a temporary loss but an actual significant long-term loss of key features on a site of County level importance, including habitats for EU protected species under Article 10 of the Habitats Directive and of Red-listed species.

11.4.2 Terrestrial habitats

We contest that Northpoint is of county importance to Dublin City Council and that loss of hedgerow at Northpoint and Silloge golf course will be significant, adverse and permanent. Hedgerow loss has been identified a key threat by Dublin City Council since the first Biodiversity Action Plan in 2008.

11.4.3 Bats

Why are the results of the bat surveys at Silloge not reported here?

We deem the construction phase of the orbital sewer route to contravene Article 10 of the Habitats Directive as it will involve significant levels of irreversible removal of foraging, commuting and roosting habitat of Annex IV species.

11.4.6 Other Species

That the Proposed Project Boundary was modified to avoid three ponds that contained smooth newt. Shouldn't further modifications be made to avoid the breeding habitats of the common frog, given their higher levels of protection as both nationally and internationally protected species?

11.7.4 Bats

The replanting of new hedgerows does not mitigate the removal of ancient hedgerow and pre 1954 treelines. As such the impacts will be direct, significant and long term.

11.7.7 Other species

Will a derogation licence from NPWS be applied for to translocate the common frog at Northpoint during their breeding season?

Why are there no mitigation plans for the common frog that has a higher protected status to the Smooth newt?

11.9 Baseline Environment – Freshwater Aquatic Biodiversity

Drainage Ditches near the Proposed Project

We contest that further surveys of the drainage ditches are not deemed to be required as there are records of protected species (Common frog and smooth newt) using the ditches in the area near Silloge and Northpoint as breeding habitats

Conducted by: R Gandola

Date: 13/3/2019

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Spring Survey of Common frogs at Northpoint Wetlands, Ballymun, Dublin

SUMMARY:

The aim of this survey was to determine the importance of these wetlands to the common frog, *Rana temporaria* and estimate the local population size. The common frog is protected under the Wildlife Act (1976, 2000 & amendments) and is also a designated 'Article 17' species of European importance. Based on our findings, we determine that the wetlands known locally as "Northpoint wetlands" or the "NCT wetlands" are of high importance to the local frog population with over 1400 individuals estimated to have spawned here in 2019.

METHODS:

The derelict site at Northpoint wetlands, Ballymun were surveyed on the 3/3/2019 to estimate the population size of the common frog at this site via spawn count assessment (Figure.1)

A Visual Encounter Survey as employed for all areas of standing water and in the immediate terrestrial grassy areas.

Spatial data was collected on a Garmin 60Csx for each individual frog, clump of spawn, and spawn mat encountered. Spawn mats (the amalgamation of multiple individual spawn clumps) were measured to within the nearest 1cm.

To calculate the numbers of frogs breeding in these wetlands, we assumed an effective sex ratio of 1:1 (Savage, 1961). For each individual spawn clump we assumed two frogs. We calculated frog density based on the surface area of spawn mat using the formula $y= 2 (2.27 + 0.007x)$ where y is the frog density, and x is the surface are of the spawn mat measured in cm^2 (Griffiths, Raper, and Brady 1996).

RESULTS:

Large amounts of frog spawn were encountered in shallow margins along the western and north-western side of the wetlands (Figure.1, Table 1). This is the usual location where the frogs spawn every year (M. Keating, pers comm.) The wetlands here have an open, south facing aspect, shallow water and ample submerged vegetation making it ideal habitat for frog spawn and tadpole development.

The Smooth newt, *Lissotriton vulgaris*, was not detected on-site, however a population is known approx. 250m away in a ditch on the Silloge Golf course (N. O'Reilly, pers comm.). This suggests that there is the potential for colonisation of the Northpoint wetlands in the future. There is also the potential that Smooth newts use the ancient hedgerows as terrestrial foraging grounds. It is undoubtable that the common frog uses these hedgerows as a foraging and refuge area.

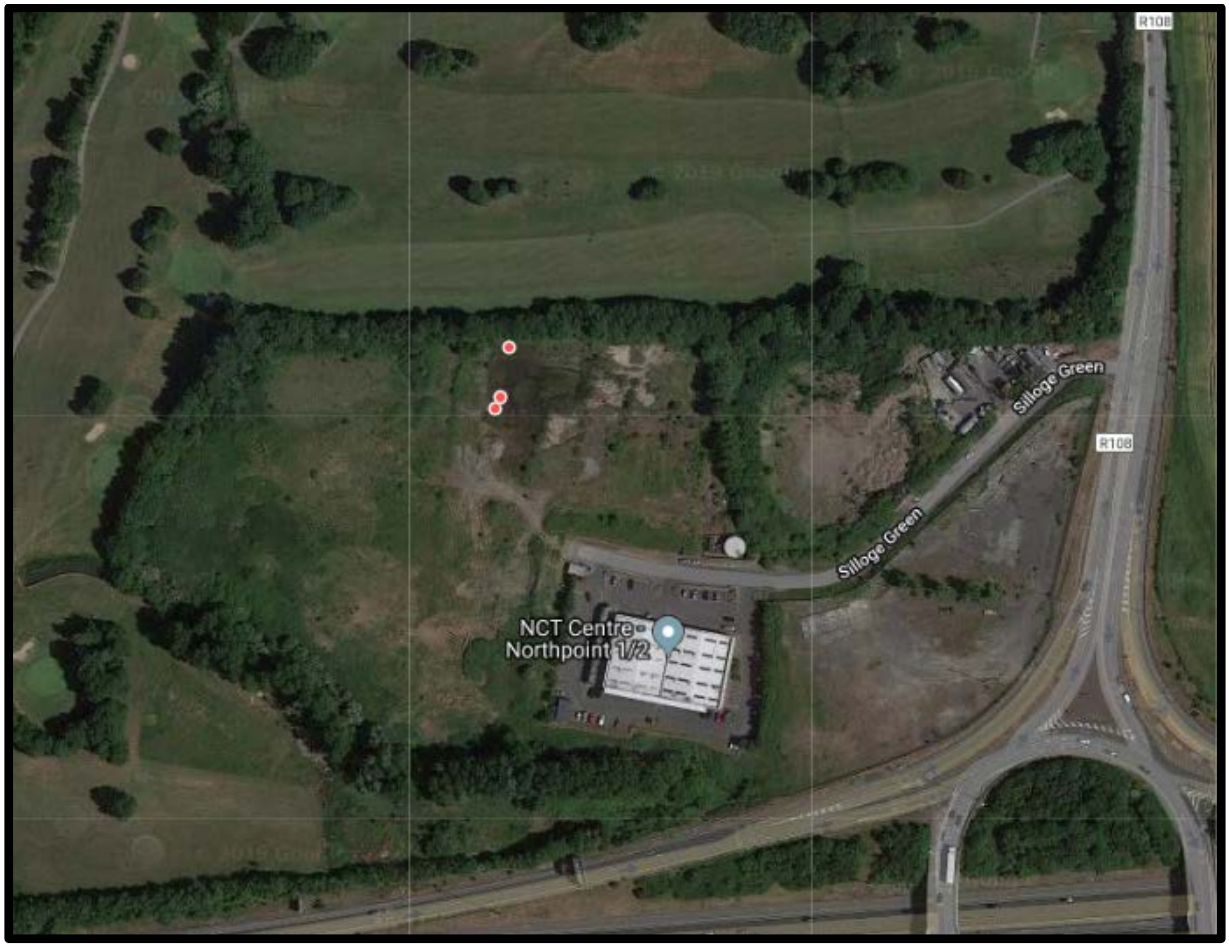

Figure 1. Location of Northpoint wetlands. Red dots indicate location of common frog spawn

Species	GPS	Spawn clumps	Spawn Mat (cm)	No. of individuals
Rana temporaria	53.411197, -6.269877		300x150	697
Rana temporaria	53.411238, -6.269839		300x150	697
Rana temporaria	53.411444, -6.269779	30		60
Total				1454

Table 1. The size and number of detected frog spawn clumps and mats including an estimate of the number of individual frogs responsible for each spawn mat and clump.

We estimate that **1454 individual** adult frogs used this wetland as a breeding site in 2019.

CONCLUSION:

We found that large numbers of common frogs use the wetlands at Northpoint, it is likely that there is at least 2-3 years recruitment of sub-adult and immature individuals also present on-site in the hedgerows and grasslands based on previous years spawning events. We would not expect these individuals do not return to the water to spawn in the Spring as this is only done by adults of breeding size and age. Therefore, we conclude that the population of *Rana temporaria* is even greater than suggested by spawning success in 2019. We provide robust evidence that the wetlands and adjacent terrestrial habitats at Northpoint are of high conservation value to the local population of common frog.

REFERENCES:

Savage, R.M. (1961). The Ecology and Life History of the Common frog. Pitmans, London

Griffiths, R. A., Raper, S. J. & Brady, I. D. (1996). Evaluation of a standard method for surveying common frogs (Rana temporaria) and newts (*Triturus cristatus, T. helveticus and T. vulgaris*). JNCC Report No. 259. Joint Nature Conservation Committee, Peterborough.