## **Private Study Version**

## Arbroath Swift Conference Helping Swifts – Helping Us!

## 16 May 2025 30 Minute Talk

**Private Study Version** 

#### Helping Swifts – Helping Us! Swifts are Vanishing Why and What We Must Do About It

**Edward Mayer** 

**SWIFTCONSERVATION** KEEPING THE SKIES ALIVE www.swift-conservation.org

## **Our Swifts!**



# Private Study Version

## **Spectacular Birds!**



Superbly skilful flyers, Swifts drink, feed and mate in flight

# Worldwide there are about 120 Swift species, most of them in the tropics

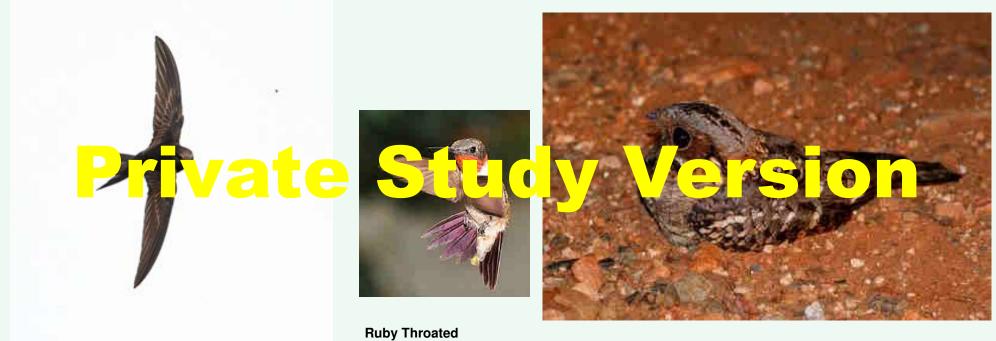


Short-tailed Swift – Brazil - Photo courtesy of Hector Bottai and Wikipedia

Pacific Swift - Japan - Photo courtesy of Stuart Price and Wikipedia

## Most Swifts are dark & have a very similar "design" ideal for catching agile insects in high speed flight

# But we have only one Swift species here in the UK – the unique "Common Swift"



Common Swift – UK – Photo Abby Eaton

Ruby Throated Hummingbird - USA Photo jeffeyw /Wikipedia

Fiery Necked Nightjar – South Africa Photo Dave Maguire/Wikipedia

#### A very surprising bird – it's closest relatives are the Hummingbirds of the Americas, and the Nightjars

## **Our Swifts live incredible lives**

Always flying, except when nesting

Travel 14,000 + miles each year Spend winter in Africa Spend summer in Europe & Asia

Faithful to mates and nests Slow Serie S - new line

Suffer little predation but in brutal decline

Famous for their "screaming parties"

**Respond to other Swifts' calls** 



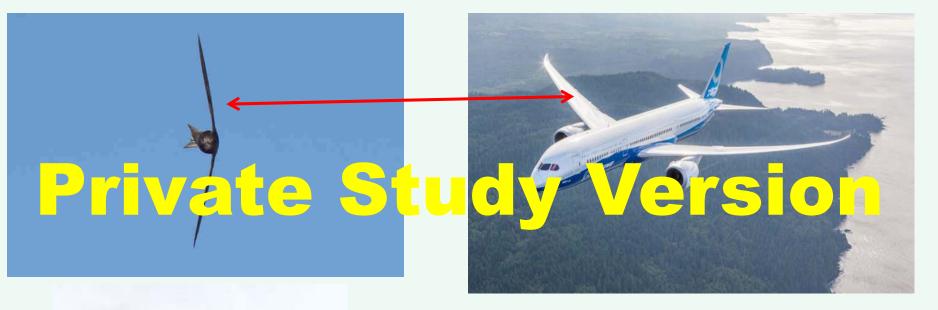
## Thanks to a very successful "design"



Swifts were flying over Europe, 49 Million years ago Humans have been around for maybe 150,000 years

## With amazingly sophisticated aerodynamics

#### Leading Edge Vortexes and High Aspect Ratio Wings – Swifts had them first!



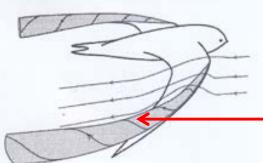


Fig. 4. Artist's impression of the conical LEVs on the wings of a swift in gliding flight. The oncoming flow is deflected downward by the attached LEV system, showing the liftgenerating downwash. LEV separation starts at the wrists. From there the LEVs are attached over most of the wing length but start to go upward and inward approaching the wing tip and behind it.

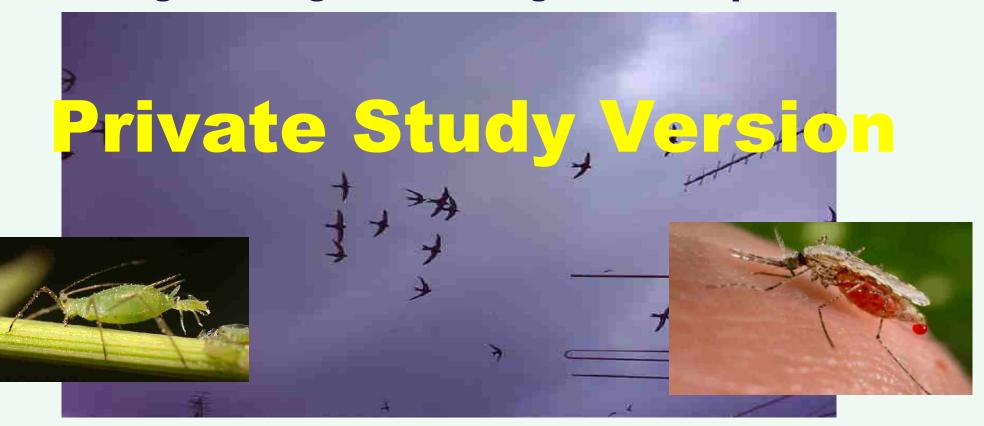


## **Animating our Skies**



#### Swifts fly over Barcelona

## They bring us massive benefits Swifts bring the Sound of Summer brightening even the grimmest places



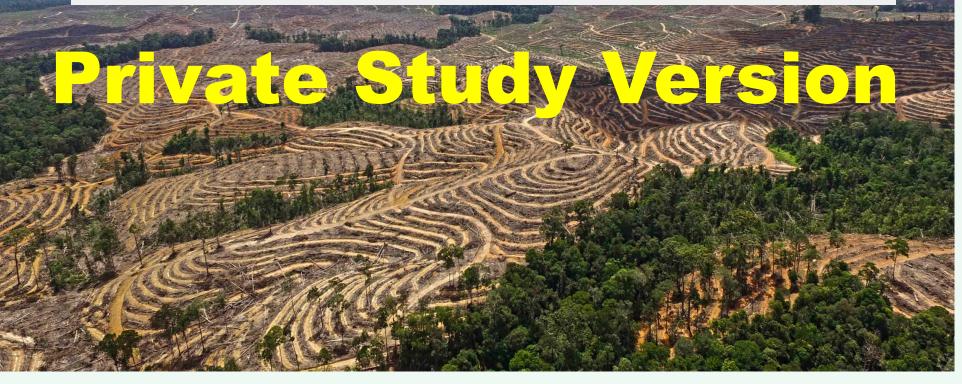
Every Swift eats thousands of mosquitoes & aphids every day - natural disease & pest control!

## They used to nest in old woodpecker holes in ancient trees - a very few still do

Poland, Scotland, Sweden – where a few Swifts still nest in holes in very old trees in specially preserved ancient forests

# But when we deforested they had to move into our buildings

In prehistoric times the UK was mountain, marshland and dunes, but mostly covered by vast forests Since then we have deforested almost the entire planet of ancient primeval forests

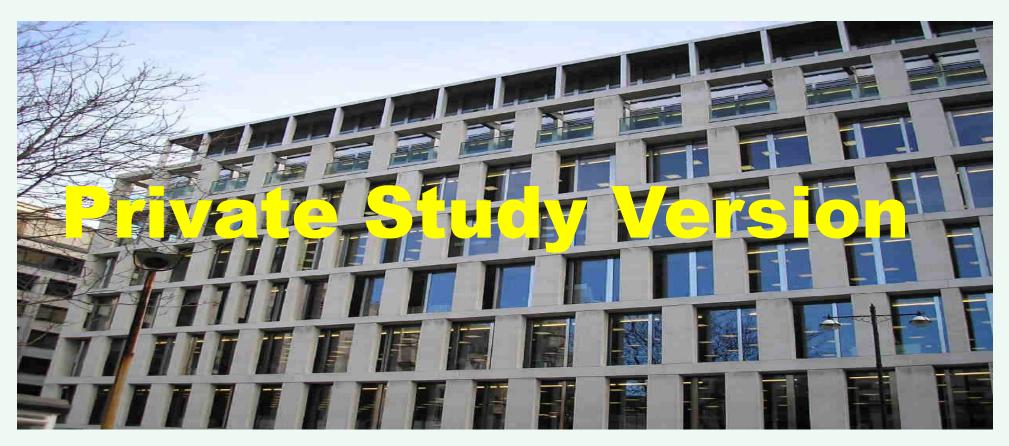


#### **Becoming Secret Nesters** Breeding in holes and gaps in buildings



Secret nests are safe from predators, but highly vulnerable to maintenance work or demolition which often destroy them

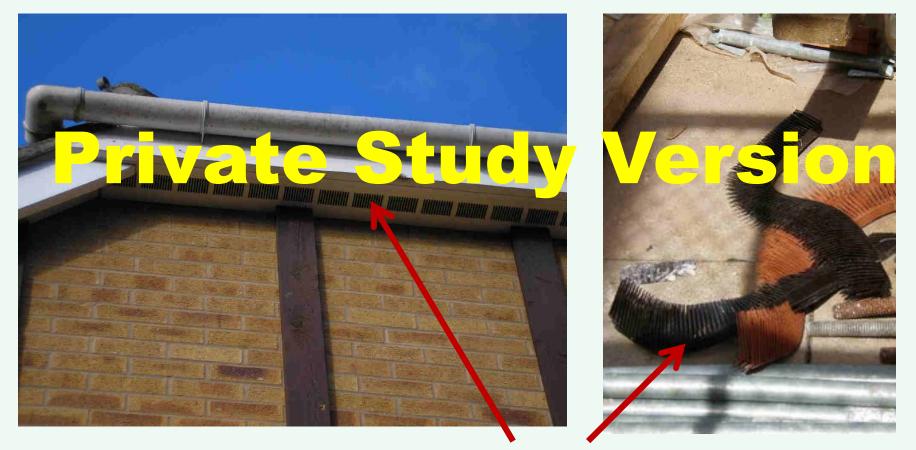
## But now Swifts are being excluded



Post-War Housing Standards = no roof or gable apertures to nest in Re-roofing & Demolition = destruction of nests Insulation = obstruction of access to nests Modern Architecture, Buildings & Materials = no holes All eliminate the ability to nest and breed

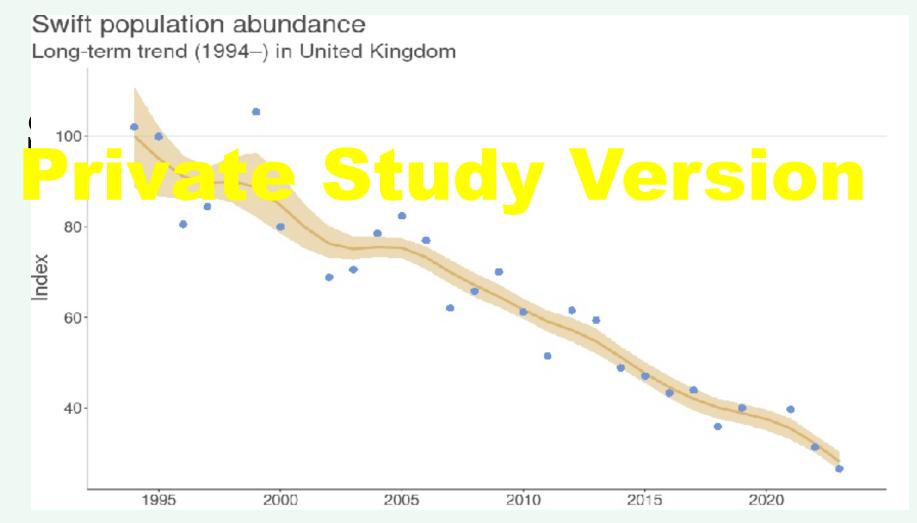
## We know how it's happening

10% of pre-1919 houses can provide nesting space1.4% of post-1944 houses can provide nesting space0.0% of post-2000 houses can provide nesting space?



Grilles cover the eaves of this modern house, and anti-bird spikes await fitting to a Grade 1 Listed Building – This is the end for Swifts and Bats

## Swift Decline as a Chart – 1994 -2023 Extinction by 2050? What can we do about it?



Source: British Trust for Ornithology

#### In the USA very similar Purple Martins were saved from extinction by setting up nest boxes & gourds





If our Swifts are to be saved, it can only be by us making homes for them too everywhere that we can

#### Swifts will use nest boxes & "nest bricks"







## Where to put nest boxes

Assess every site individually - there is NO standard answer!

Perfect successful placing under deep sheltering eaves with no perches for pigeons or hawks



## Swifts like it cosy! Not too hot - Not too cold - Not too windy - Not wet

Not in constant full sun unless insulated or shaded Not in prevailing winds and rain Not in windy locations



Under deep eaves is perfect! Any direction can be OK!

Do not place flat topped boxes on open walls where they may cause a damp patch from snow and rain accumulation or offer perches to predators and feral pigeons

## Where to put nest bricks

Assess every site & look for more sheltered locations



#### Why help wildlife? Very briefly - Our survival depends on it



"Our civilisation depends utterly on the plants, animals, and microorganisms of Earth that supply it vin essential ecosystem services ranging from crop pollination and protection to supplying food from the sea and maintaining a liveable climate"

**Prof Paul Ehrlich Stanford University** 



#### **"The War on Nature"** *Our Governments most successful policy ever?*

The latest State of Nature report, finds no let-up in the decline of our wildlife, with one in six species at risk of being lost from Great Britain State of Nature, the most comprehensive report on UK wildlife, also shows that the species studied have, on average, declined by 19% in the UK since monitoring began in 1970

Most of the important habitats for the UK's nature are in poor condition, but restoration projects can and do have clear benefits for nature and people, as well as climate change mitigation and adaptation

#### As a result, the UK is now one of the most naturedepleted countries on Earth

#### How "Nature" can help us even more

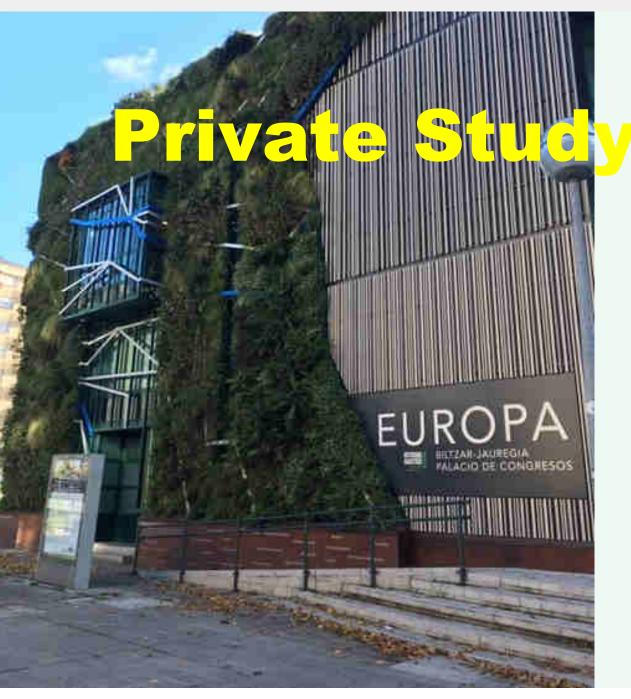


UK Government figures show that between 2017 and 2018 26% of the adult population were prescribed psycho-active drugs used for treating sleeplessness, depression and anxiety

"Spending time in the natural environment – whether as a resident or a visitor – improves our mental health and feelings of wellbeing. It can reduce stress, fatigue, anxiety and depression. It can help boost immune systems, encourage physical activity, and may reduce the risk of chronic diseases such as asthma. It can combat loneliness and bind communities together."

UK Government: "A Green Future: Our 25 Year Plan to Improve the Environment (2018)"

#### Why urban areas really matter for Wildlife





Research by the University of Sheffield shows that urban areas in the UK *now hold more species than the countryside* 

Our urban areas have become nature reserves – the last safe places for many species

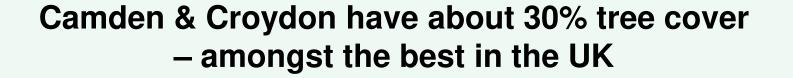
## Why is this? One example – Trees



Our towns and cities *have far more trees per acre than our rural areas* 

Left – Camden, London Below – Lincolnshire a.k.a. "The Chemical Desert"

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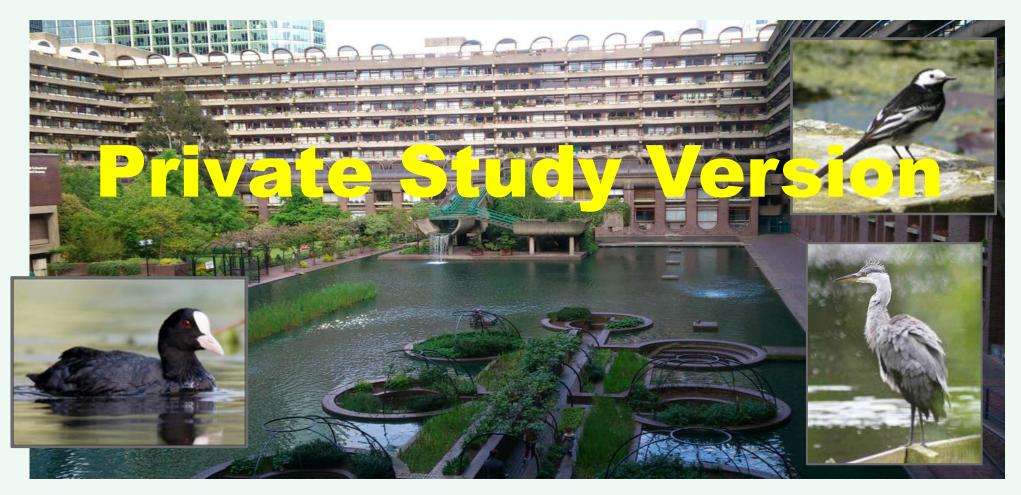
#### **Essential Swift support = Food = Flying Insects**

## Private Study Version

To support Swifts you need fertile soil, clean water, plants, flowers and flying insects



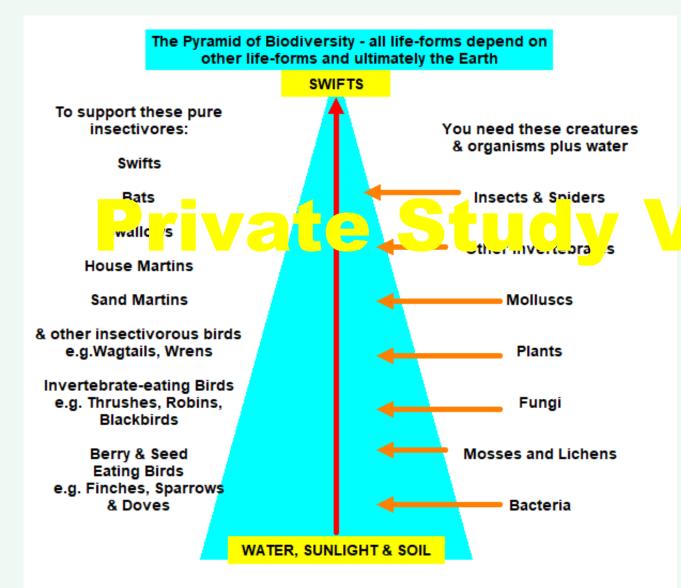
## And we can build in Biodiversity



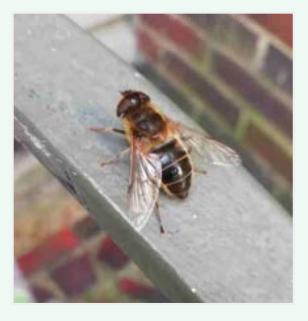
By 2030 over 90% of the UK population will live in towns. We know that living in urban areas devoid of trees, green places and wildlife is bad for our physical and mental health

Application of Urban Biodiversity concepts can reverse this by creating new environments for wildlife like here at the inner-city Barbican

## **The Biodiversity Pyramid**



You start off with soil, you end up with Swifts, and us



## But stop your Council's Biocide use!



France has banned the use of pesticides in all towns, villages, cities and gardens

We must do it too in every village, town and city

And stop them cutting the verges! We need the wildflowers and the pollinating insects Zéro pesticido Vous entrez dans un espace naturel

Pour le respect de l'anutronnament. nous rétabliseons l'équilibre biologique en n'employant aucun traitement chimique. Ainei des larues de coccinelle sont parfoie disséminées pour lutter contre l'inuceton des pucerons.

Noue uoue encourageone à faire de même àane uotre jardin.

Préseruone la nature, acceptone les herbes sauvages.

## **Reviving a town with Swifts!**



#### Harleston Norfolk

Economic Benefits Social Mixing Educational Assets Biodiversity Indicators Unique Selling Points Activity Generators A busy High Street









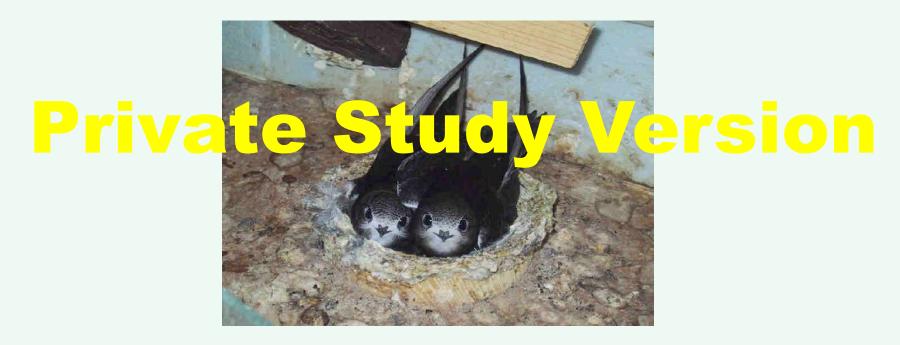






## Please help Swifts to help us too!

# Or else they will vanish, life will be miserable & we'll all die of Malaria



#### For free advice, information, designs & suppliers - see www.swift-conservation.org

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