

# Swift (Flagship) Species Action Plan



*“But when eve shines lowly,  
And the light is thinned,  
And the moon slides slowly  
Down the far-off wind,  
Oh, then to be of all the birds the Swift!”*

Wilfred Owen

## 1 Aims

- To protect swift populations across the borough, and strive towards supporting self-sustaining, viable and thriving populations, utilising evidence based conservation actions with the integration of population monitoring.
- Promote swifts as a ‘Flagship Species’, to encourage a wealth of beneficial conservation practices that support an array of other less known and less *charismatic* species.
- To raise the awareness amongst Council Officers and the public of the importance of swifts to encourage greater levels of council & community driven conservation and appreciation across the borough.

## Acknowledgements

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## 2 Introduction

The common swift (*Apus apus*) is the fastest bird in level flight in the UK, with a top recorded speed of 111.6 km/h. Swifts spend almost their entire lives on the wing, and can feed, sleep and even mate in flight. Due to their size and shape they are often misidentified as swallows, sand martins or house martins, but can be distinguished by their all-round sooty brown colour and if heard, by their diagnosis call (see Appendix A for an identification guide).

For their size, swifts have a considerably long lifespan, with the oldest swift on record reaching an impressive 21 years of age. One 18-year-old swift ringed in Oxford in 1964 was estimated to have flown around 4 million miles in its lifetime, which is the equivalent of flying to the moon and back 8 times. The main reason that these birds can survive for so long is that few predators are able to hunt healthy swifts, owing to their incredible speed and agility.

British swifts spend only a quarter of their lives in the UK during spring and summer months to breed, and spend the rest in Africa. Edward Jenner, a British physician and scientist who pioneered the concept of vaccines, was the first Englishman to evidence this migration by cutting the toes of swifts, who were recorded in the same locations in spring; fat and in excellent condition. By remaining faithful to their nests and mate's year after year, swifts save valuable energy searching for new nest sites.

Swifts are the only group of birds to mate in flight and do so in an intricate, downwards twisting glide. They are communal during the summer months and can be heard making loud, screeching vocalisations to each other. When flying in groups around rooftops these are known as "screaming parties". When in the nest, swifts use their calls as a means to defend their nesting spaces, but this has the opposite effect and actually attracts other swifts. Due to this behaviour, pre-recorded swift calls can be used, especially around dusk or dawn, to attract individuals to artificial nest sites such as swift bricks and swift boxes. Swift bricks are considered to be universal bird nesting features since other birds, such as the red-listed house sparrow and members of the tit family, take readily to them.

The oldest known fossil record of a swift dates back 49 million years, during the eocene epoch when the UK had a tropical climate. Historically, swifts would have nested in cliffs, crevices and holes in large trees, particularly old woodpecker holes in ancient trees in ancient forests. However, many such forests in Britain and elsewhere have been destroyed and swifts now find themselves nesting in our homes and buildings. Unfortunately, this contributes to their downfall as many modern nesting sites are lost to demolition and repairs.

Despite its name, the common swift is declining and is considered at risk of extinction in the UK. As one of the world's most interesting and aerodynamic birds, swifts are a species worthy of protection, whose conservation will help to protect other species outside of its own, as many compete for the same nest sites.

### 3 Current status

a. **Legal / policy status** - Swifts, and all wild birds, are protected under the Wildlife and Countryside Act 1981 (Amended). However, there is no legal protection for swift nests outside of the breeding season, despite the species being highly faithful to their nests each year. It is illegal to:

- Intentionally or recklessly kill, injure or take any wild bird
- Intentionally or recklessly take, damage or destroy or otherwise interfere with the nest of any wild bird while it is in use or being built
- Intentionally or recklessly obstruct/prevent any wild bird from using its nest
- Intentionally or recklessly kill, take or destroy the egg of any wild bird

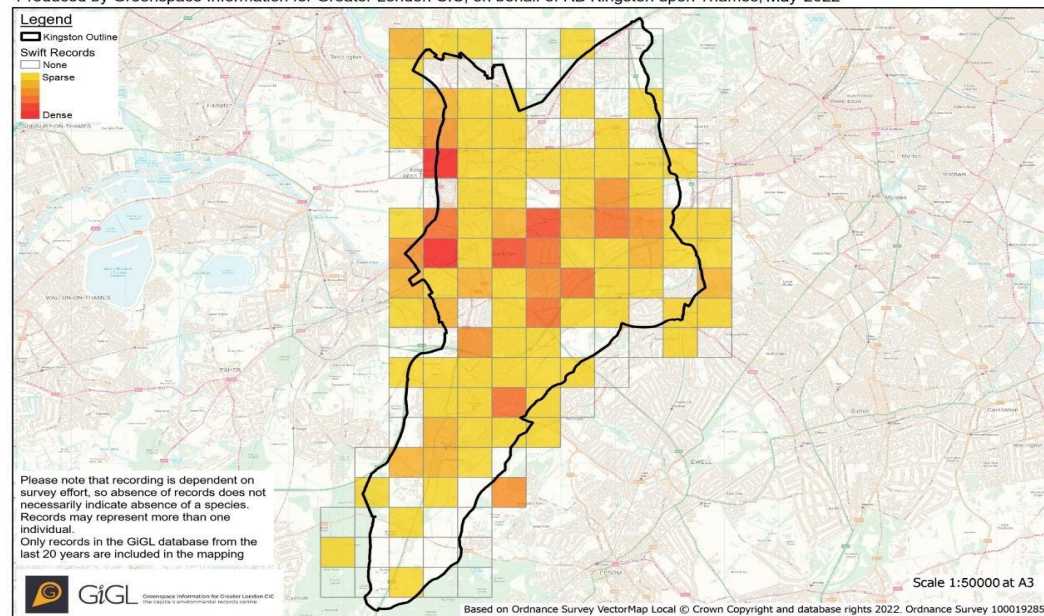
b. **Conservation status**

The common swift (*Apus apus*) is not currently a UK priority species, as global populations are considered to be stable. However, European populations are classed as near threatened in the IUCN Red List. UK swift populations have declined by a staggering 58% between 1995 and 2021, causing them to be Red Listed in Birds of Conservation Concern (5). This is in part, due to loss of nesting sites. It is estimated that 20,000 swift bricks are needed to offset this loss each year in the UK.

c. **Distribution**

#### Heatmap of Swift Records in Kingston upon Thames

Produced by Greenspace Information for Greater London CIC, on behalf of RB Kingston upon Thames, May 2022



**Figure 1** Distribution of swifts across RBK. Note that this map is subject to data deficiencies - this plan will encourage greater recording of swift data.





## 4 Key Habitats

In their British range, swifts require areas for hunting and suitable trees or buildings for nesting (a tiny proportion of British swifts do nest in ancient trees, but these are entirely found within the Scottish Highlands). They are insectivorous and feed in large flocks of as many as 2,000 individuals. They hunt while in flight, so require small flying insects such as aphids, wasps, bees, ants, beetles and flies. David Lack, a British evolutionary biologist, recorded swifts to have eaten over 312 insect species (Lack & Owen, 1955). However, they can also be very selective as one swift was recorded catching only stingless male drones around a beehive while avoiding the stinging females.

Common foraging grounds include wetlands, marshes and flood plains where insect life is abundant, though swifts can be found over any habitat, including urban environments. Healthy lakes and gravel pits also attract large flocks of swifts because they provide ideal conditions for their insect prey. Swifts gather nesting materials while in flight and stick these together with their saliva. This material may include anything from leaves to moss, grass, petals and the feathers of other birds.

Some buildings offer ideal nesting sites for swifts, particularly older buildings such as church towers and old fortifications, or homes with open eaves, gaps in roof tiles, gaps around downpipes or small holes such as where overflow pipes have been removed for example. New buildings tend to exclude swifts as modern building methods have tightly fitting soffit and fascia boards and measures such as bird combs designed to deliberately exclude nesting birds and other wildlife from the roof space. This is why incorporating features such as swift bricks into new buildings through the planning system is extremely important.

It is important that developers follow specialist recommendations on ratios of swift bricks to the scale of the buildings to prevent ineffective or token gestures. Best practice guidance on densities and arrangement of swift bricks (1:1 swift bricks to residential units, and one swift brick per six square metres on commercial buildings) can be found [here](#).

By welcoming swifts into our homes and buildings and by incorporating green and blue infrastructure that supports insect life, our towns and cities can become thriving hubs for swift conservation. Swift bricks are also universal and provide homes for a number of other species.



## 5 Ecosystem Functionality and Services (Role in the Climate Emergency)

### 6.1 Trophic position

Few predators are fast and agile enough to catch a swift. The hobby is a rare example of a species evolved to hunt fast-moving bird species, and kestrels and sparrowhawks also take small numbers although these are likely to be individuals that are weakened by starvation, disease or old age. Very few mammals ever catch a swift, except perhaps the occasional rat, squirrel, domestic cat or other nest raiding animal. However, when their condition does deteriorate and they are no longer able to fly, swifts become a food source for the many carnivores and carrion scavengers in the UK and as an insectivorous species, swifts hold a special place in the food web.

### 6.2 Pest Control

Swifts provide a natural pest control service as they consume hundreds of insects each day. When there is young to feed, adult swifts gather insects in their throat in what is known as a bolus. The average bolus contains an estimated 300-500 insects (Chantler, 2010). To keep the

brood fed this can equate to thousands of insects each day depending on the abundance of prey available. This service is particularly useful for organic and biodynamic farmers and gardeners, who rely on biological pest control rather than heavy use of insecticides (Orłowski, Karg & Karg, 2014). As climate change is expected to increase the risk of pests spreading in agricultural and forestry ecosystems, resilience through natural pest control is becoming increasingly important.

### 6.3 Cultural

Over the centuries swifts have had many depictions. Due to their dark colour and loud screeches they were once known in the countryside as 'Devils Screammers' and have been associated with bad luck. In fact, farmers in southern counties were historically encouraged to shoot at them as they were believed to be 'regular limbs of Satan'. In more recent years, as we discover more about their awe inspiring nature, swifts have become an iconic symbol of the British summer and many look forward to their return each year.

## 6 Threats to Species

Common swifts spend only 3-4 months of their year in the UK to reproduce and the rest in central and southern Africa. The threats outlined in this document pertain only to swift populations in Britain.

### 7.1 Loss of Nest Sites

Due to habitat loss and degradation, today's UK swift populations depend almost entirely on buildings for nesting sites, leaving them highly vulnerable to demolition, repairs and renovations. New building regulations governing energy efficiency can be an issue where, for example, loft insulation reduces space available within the eaves. However, there is no direct conflict between swifts (and other wildlife) and energy-efficiency as the

birds nest outside the thermal envelope of the building, e.g. in a ventilated roof space. Even the most energy-efficient new buildings can still host wildlife where this is designed in, e.g. through swift bricks and other integrated or external nest spaces. Wotton et al. (2002) found that in 1919, 10% of new British homes would have provided opportunities for nesting swifts, compared to 0% of homes built after the

year 2000 (unless the nest spaces are factored into the design).

In the Old Malden area of Kingston there are some houses where existing sites have been recorded. However, many of these are at very high risk from home renovations and many have likely been lost already. The Kingston Planning Department is aware of the remaining nest sites which have been recorded through the [RSPB Swift Mapper](#).

### **7.2 Insect Loss**

Global warming, fires, storms, droughts, deforestation, insecticides, agricultural intensification, the degradation of wetlands, introduced species, urbanisation, pollution and fertilisers are all drivers of insect decline across the globe. Swifts eat nothing but flying insects and some drifting spiders. Among other factors, it is likely that there is a link between swift decline (58% since 1995) and insect decline (60% between 2004-2021) (Wagner et al., 2021), although as swift's are largely urban birds they may be less affected by the largest insect declines in agricultural areas. Reducing intensive insecticide use and enhancing management for wildlife will help to make habitats more suitable for beneficial organisms like swifts and is a key strategy in sustainable development.

### **7.3 Aircrafts**

Swifts fly at high altitudes putting them at risk of collision with jet engines. The most effective way of minimising bird strikes (aside from constraining aviation growth) is to avoid building airports near to important bird habitats and migratory flight paths (Richard & Horton, 1980; (EGAST, 2013). This is a key reason for opposing new airport expansions in such areas.

### **7.4 Public Attitudes**

Despite swifts causing little to no harm to the buildings that they nest in, they are not always welcome. However, swifts are very discrete nesters and are often not noticed by the occupants of the building. People may still decide to take steps to deter or remove them which threatens swifts as they are highly faithful to their nests and now rely more on buildings in urban centres than rural areas.

### **7.5 Climate Change & Weather**

As healthy swifts are rarely predated, poor weather is considered to be a primary cause of mortality. In years with colder summers, there may not be enough insects to support populations. In this scenario, emaciated swifts may huddle together on buildings (house martins more often behave in this way) and many are found dead soon after from starvation.

Climate change which is associated with hotter and drier summers may impact swifts directly, or through their insect prey. Recently, there have been cases of extreme heat causing young fledglings to fatally overheat in the nest, or fall from their nest as they seek cooler air at the entrance as they have not yet developed the plumage needed to fly. The UK is also starting to experience drier summers which parch the landscape, meaning less resources for insect survival.

Seasonal weather patterns are also beginning to change so that spring and summer are arriving, on average, earlier in the year. It is not yet known the extent to which this will impact swifts, however it is known that swifts have not yet adapted their migration patterns to match these seasonal changes.

## 7 Conservation actions (Tabulated)

Action	Timeframe	Lead	Partners	Evidence base
<b>SW01</b> - Encourage the inclusion of swift bricks into planning specifications and the installation of swift bricks into all suitable new-builds, including extensions.	2023 – ongoing	RBK		<a href="#">Swift Brick Installation &amp; Suppliers – Swift Conservation</a>  <a href="#">Universal Swift Bricks – Swift Conservation</a>
<b>SW02</b> - Install swift bricks into all new council-owned buildings of two storeys or more.	2023 – ongoing	RBK		See <b>SW01</b>
<b>SW03</b> - Create advisory note for LA planning officers with advice on when to consider swifts in a development and how to mitigate loss.	By 2028	RBK		See <b>SW01</b>  <a href="#">Swift Advice Sheet for Planners – naturespot.org</a>  <a href="#">Guidance - CIEEM</a>
<b>SW04</b> - Explore where green and blue infrastructure can be implemented or improved to favour swifts and insect life (habitat creation / enhancement).	2023 – ongoing	RBK		<a href="#">Urban Greening for Biodiversity Net Gain – London Wildlife Trust / GOV.UK</a>  <a href="#">Planning For a Healthy Environment – The Wildlife Trusts</a>
<b>SW05</b> - Encourage the recording and protection of swift nesting sites.	2023 – 2028	RBK		<a href="#">Swift Mapper - RSPB</a>  <a href="#">Submit Records - GIGL</a>
<b>SW06</b> - Ensure that developers comply with the British Standard for integral nest boxes (BS 42021) and set out measures to ensure compliance with planning conditions (e.g. photographic evidence).	2023 - ongoing	RBK		<a href="#">Integral Nest Boxes - British Standards Institution</a>  See <b>SW01</b> , <b>SW03</b> & <b>SW04</b>

Engagement & Awareness	Timeframe	Lead	Partners	Evidence base
<b>SW07</b> – Create and promote a pledge to incorporate swift bricks and boxes into people’s homes and/or business establishments.	2023 – ongoing	RBK		N/A
<b>SW08</b> - Run a campaign to encourage people to report swift sightings and nesting places to local and national recording schemes.	2023 – 2028	RBK		<a href="#">Swift Mapper - RSPB</a> <a href="#">Submit Records - GIGL</a>
<b>SW09</b> - Run “Swift Walk” events across the borough to raise awareness of swift conservation & contribute to citizen science surveys.	2023 – 2028	RBK		<a href="#">Swift Survey Techniques – Swift Conservation</a>
<b>SW10</b> – Generate 2 local swift-related press releases each year.	2023 – 2028	RBK		N/A

## 8 Planning Context - Biodiversity Net Gain

As priority species for the borough, swifts should be protected through the planning system and, where possible, habitat creation and enhancement for swifts is encouraged. Planning conditions should be applied which incorporate the implementation of universal swift bricks and foraging habitat, and prevent or mitigate their deterioration.



## 9 Monitoring

Metric	Process of Monitoring	Timeframe	Lead	Partners
<b>SW01, SW02, SW06, SW07</b> – Number and map of swift bricks / boxes installed and collation of data / photographic evidence	Annual account	2023 - ongoing	RBK	
<b>SW03</b> - Record of advisory note created	Update as needed	By 2028	RBK	
<b>SW04</b> - Number of habitat enhancement projects supported / undertaken	Annual report	2023 - ongoing	RBK	
<b>SW05, SW09</b> – Number and map of swift nesting sites recorded during surveys	Annual report	2023 - 2028	RBK	
<b>SW08, SW10</b> - Collation of materials used	Ad hoc, Annual account	2023 - 2028	RBK	
<b>SW09</b> - Number of events and number of attendees	Annual account	2023 - 2028	RBK	

## 10 Other relevant HAPs/ SAPs

- a. Grassland
- b. Hedgerow
- c. Pollinator Parks
- d. Rivers and Streams
- e. Standing Open Water
- f. Woodland

## 11 References

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## 12 Abbreviations

BNG – Biodiversity Net Gain

RBK - Royal Borough of Kingston upon Thames

## 13 Contact information

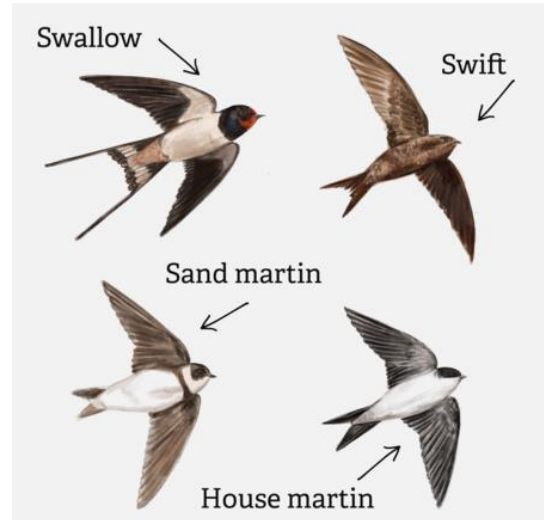
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**Appendix A. Swift Identification**

There are 3 bird species in the UK which have a similar appearance to swifts (swallows, sand martins and house martins). It is therefore important to differentiate between these species, in order to conserve swifts confidently. Key identifying features of swifts include:

- Overall sooty brown colour as an adult - can look black against the sky
- Long, pointed scythe-shaped wings
- Short forked tail
- A piercing, high-pitched “scream”



The easiest way to tell these species apart is the overall dark appearance of the swift compared to the other species, although young swifts have a white throat and face which is lost with age.



