



SOS Swifts Information Sheet

SOS Swifts is a partnership project between Suffolk Wildlife Trust & Suffolk Ornithologists' Group

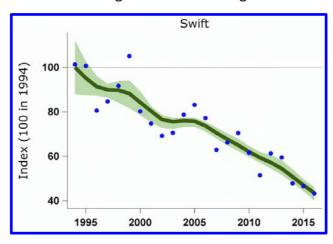
Revision #8: March 2018

This Information Sheet covers:

- 1. What's happening to our Swifts?
- 2. Recording Swift sightings
- 3. Attracting Swifts to new locations: nest boxes and call systems
- 4. What to do if you find a grounded Swift
- 5. Additional online information

1. What's happening to our Swifts?

In the past 20 years we have lost over half the Swifts breeding in Great Britain – and this is true in Suffolk too. Recent published research now makes Swift - one of the iconic birds of summer - 'Endangered' as a breeding bird.



The graph shows the results of the BTO/RSPB/JNCC *Breeding Bird Survey* 1994 - 2016. The left hand scale is an index (set at 100 in 1994), representing the overall number of Swifts. The dark green line is the best fit through the data points and the paler green band shows us with 95% confidence that the decline really is a significant one.

The reasons for these losses may be complex. However, Swifts are very dependent on holes and crevices in our buildings for their nest sites, so it seems safe to assume that a major part of the problem lies here.

If older buildings are demolished to make way for new developments, this can remove long-standing Swift colonies at a stroke. Equally, maintenance and repair work on existing buildings, particularly to stonework, brickwork, roofs and eaves can all mean that nest holes may be partially or completely blocked up. This is often carried out unwittingly, as breeding Swifts may be difficult to detect – they are so fast in and out of the nest and are remarkably clean birds too, so they don't betray their presence easily.

This can be particularly disastrous if demolition or repair work takes place during the breeding season - between May and August - as more than one generation will then be wiped out. However, even if work is scheduled between September and April, when the birds are on migration or in Africa, it is important to enlist the help of someone with a trained eye, who will be able to identify nest sites and provide appropriate advice.

2. Recording Swift sightings

Swifts are summer visitors to the UK and spend the remainder of the year migrating to and from central and southern Africa. Apart from the few weeks they spend with us at the nest sites, the rest of their lives are spent on the wing!

One of the first things to do to help Swifts is to record where they are present now. SOS Swifts has the ambitious target to find out by 2020 whether or not there are Swifts present in every rural parish and urban ward in Suffolk! Please use the **Suffolk Swift Survey** website to record any sightings of 'screaming parties', known nest sites in buildings or swift nest boxes that have been erected - both in your home area and also when you are out and about in the county.

Please note that there is no need to record Swifts that you see just flying overhead, or high in the sky, as they could be breeding some distance away. Screaming parties and actual nest sites tell us that there is definitely a breeding colony nearby. Click on this link to add your records:

http://www.suffolkbis.org.uk/swift

As well as 'semi-natural' nest sites i.e. those found in buildings, the Survey also now includes options to record the presence of external and internal nest boxes and whether they are being successful in attracting new Swifts. This will help us work out whether these conservation measures are having a measureable effect.

3. Attracting Swifts to new locations

Purchasing and siting Swift nest boxes

Swifts take quite readily to artificial nest boxes and nest sites where they are provided and there's a wide range of boxes available to suit different circumstances. Here are two links to show some of the options available, including ones you can make up yourself if you are DIY minded:

http://www.swift-conservation.org/Shopping!.htm

http://actionforswifts.blogspot.co.uk/p/diy-swift-box-designs.html

Placing a new box in the correct position is important. This link to a *Swift Conservation* leaflet gives details:

http://www.swift-conservation.org/Leaflet 1 - Swift Nest-boxes at Your Home-small.pdf

The important factors are to site boxes:

- at least 4.5m above ground level
- ideally on north to south-east facing walls (though see below if you only have south and west aspects)
- as high up the wall as possible (in the apex or under the eaves)
- with a flyway clear of obvious obstructions like trees and wires

For external 'retro-fit' situations, SOS Swifts recommends boxes made by John Stimpson, who has been supplying the Project for several years. These are shown on the *Action for Swifts* blog as noted again here:

http://actionforswifts.blogspot.co.uk/p/diy-swift-box-designs.html

The 'Zeist-type' box is suitable where the eaves overhang the wall. The 'Model 30' box with a white PVC roof is suitable where there are no eaves and also for south and west facing elevations, as summer light and heat will be reflected.

The boxes are well made from marine plywood and coated with weatherproof stain. The oldest ones have now been on houses for over 15 years and still going strong! Current prices are around £17 per box, including a 'nest former' - a small platform with an 85mm hole drilled in it - which you secure inside the box at the end furthest from the entrance hole with a few lines of wood glue. Carriage is extra, which for one box brings it up to a price of around £20.

Contact John on 01353 740451 or email on <u>j.stimpson1@btopenworld.com</u> - and please mention SOS Swifts.

Attracting Swifts by playing calls

Birds occupying a new nest box or nest site in <u>May</u> could be experienced breeders that have returned to find that their old nest site has been blocked up or otherwise removed. Birds that show interest in nest boxes in <u>June</u> and <u>July</u> will more likely be potential first-time breeders in their 3rd or 4th calendar year. Birds of this age returning from southern Africa tend to arrive in the UK towards the second half of May, slightly later than the experienced breeders.

A new nest box *may* attract a new pair to breed if they discover it, but the chances are greatly increased if Swift calls are played at or near the nest box. Birds show interest by repeatedly flying up to the box - sometimes perching on or close to it - and then dropping away again. When they do this they are known as 'bangers'. Some bangers breed immediately, but some just take note of the site and return the following year to breed.

Calls can be played from the time Swifts return in early May (for displaced breeders) and then continue through May and June to the end of July (for the first-time breeders). Once a nest box appears to be regularly occupied, you can stop broadcasting the calls. It's recommended that calls are played each day between 0600 and 0900 and again between 1800 and 2100. Maximum volume isn't necessary — set the volume control to just over half way around the dial. Treble should be full on; bass should be full off. If the weather is particularly wet or cold, there is little point in playing the calls, but however you decide to time the broadcasts, some calls are better than none!

There are a number of ways of broadcasting the calls. We liken these to the different medals awarded to athletes – they are all winners, but some do a bit better than others!

Bronze Medal system

Calls can be played from an open window nearest to the nest box through a CD or MP3 player

with integral speakers. CDs or MP3s of Swift calls can be obtained from the *Swift Conservation* website: http://www.swift-conservation.org/Shopping!.htm

Silver Medal system

Basically the same as above, but with the speaker(s) positioned and secured as close to the nest box as possible. The speakers can either be wired in or operated wirelessly via a Bluetooth system.

Gold Medal system

This is based on purchasing individual items to make up your own customised Swift call kit. Here are details of the equipment that you need, with links to take you through to the relevant websites. These were last tested in March 2018 so we hope they work for you, but if not please let us know.

This information was originally sourced from the *Action for Swifts* blog, but as some of the items mentioned there are now no longer available and some prices have changed, the list below is modified to bring it more up to date. If a link fails to work by clicking on it directly, you can try copying and pasting it into your own browser.

1. 'Cheng Sheng' or 'Heny Sheuy' 12V Stereo Power Audio Amplifier

These compact amplifier units are not directly available in the UK and you need to order through the US website called dx.com, who will then arrange for it to be shipped to you from China. The brand name of the units seems to vary for some reason, but they seem exactly the same. The current price for UK customers is around £10.00, with free delivery. Our experience is that they take about two to three weeks to arrive.

 $\frac{\text{http://www.dx.com/p/100w-hi-fi-stereo-amplifier-mp3-player-for-car-motorcycle-black-silver-sd-usb-90266-.WSQHu4VhJb1}{}$

There is a set-up instruction sheet at the end of this document, as the amplifier doesn't come with one! If you decide to source an amplifier from elsewhere, it's best to have one with an SD card slot.

2. **2 no. PCS 500 Watt Dome Car Tweeters** (high frequency Stereo Audio Speakers)

Several types of these mini-speakers are available through Amazon, though each one tends to go in and out of stock. The current best buy at £3.64 per pair is:

https://www.amazon.co.uk/sourcingmap-Pre-wired-System-Tweeter-Speakers-Black/dp/B00HR733Y4/ref=sr 1 3?ie=UTF8&qid=1519059057&sr=8-3&keywords=PCS+500+Watt+Dome+Car+Tweeters

If these are not in stock, there may be others listed on the page or you can try searching for '500 Watt Dome Car Tweeters' to see what else may be available. Make sure you get the type that has a bracket that is integral to the assembly, so that they can be secured to the nest box.

Provided there is some cover from the weather e.g. a nest box is under the eaves, ideally fix these twin tweeters with one <u>inside</u> the nest box on the back wall, facing down towards the entrance hole and the other <u>outside</u> the nest box on the underside facing downwards or outwards. However, this can be a bit fiddly to achieve, so putting both tweeters on the

underside of the box is the next best thing - and is much easier to do. Just angle them in different directions. You can decide to use one tweeter only, in which case putting it <u>inside</u> the box is preferable, but ensure there is no possibility of birds becoming entangled.

3. **12 Volt Power Supply**

There is no power adaptor supplied with the amplifier, so you need to purchase this separately. A 12V Power Supply Code HK100157 can be found on the HandyKam website. Current price £7.00.

https://www.handykam.com/product/12v-power-supply/

4. **24** hour timer

This goes between the 240V mains source and the 12V power supply and can be one that has just a 24 hour dial or one that gives you 24 hour and 7 day options for setting times for the calls to be played. Once set and switched on you can more or less forget about it. However, please double check that the calls are <u>not</u> being broadcast 24 hours a day – people have got into trouble for doing this! This link is for a standard 24 hour timer, priced at £5.99, but other options are available:

https://www.currys.co.uk/gbuk/home-appliances/home-accessories/home-cables-and-adaptors/masterplug-tms24-24-hour-timer-plug-adapter-10145108-pdt.html

This electronic timer also gives 7-day options, priced at **£10.00**. However, the set-up instructions can be a bit of a challenge to follow!

http://www.johnlewis.com/time-guard-ltd-24-hour-7-day-electronic-timeswitch/p153383

5. **2GB SD card**

The set up requires an SD Card for storing downloaded Swift calls ready for playback. The minimum size now seems to be 2GB of storage space. This one is priced at under £5.00

https://www.uk.insight.com/en-gb/productinfo/memory-cards/0001689283-00000001?gclid=EAlalQobChMInJHv39XV2QIVg7vtCh2ciQkdEAQYASABEgLX5fD BwE

6. Swift Calls

You will need to obtain sound file(s) of Swift calls and download them onto the SD card. These need to be in .MP3 format (rather than .wav or .aiff etc). When played, the calls just circulate in a continuous loop. Download the files onto the SD card and then simply slot the card into the front of the amplifier and follow the set up instructions as below. Files are available on the *Swift Conservation* website:

http://www.swift-conservation.org/Shopping!.htm

If you have any problems obtaining Swift calls and you do not have my contact details, please call or email Suffolk Wildlife Trust (01473 890089 or info@suffolkwildlifetrust.org) and ask for a message to be passed on to Edward Jackson with your email address. We can arrange for a folder of files to be emailed to you free of charge.

7. Additional speaker cable

Depending on where your nest box is located you will probably need to buy an additional length of standard speaker cable to link the amp to the tweeters, plus a 3 amp terminal

connector block.

The B&Q website offers cable in a 100 metre roll for £20.

https://www.diy.com/departments/time-13-strand-figure-8-twin-speaker-cable-0-2mm-grey-black-100000mm/536971 BQ.prd

This is probably far more than you will need, but it's possible that your local retail store may allow you to purchase the correct length off a roll.

Most people have their amp easily accessible in a ground or first floor room and then run the speaker cable outside accordingly, linking it via a terminal block to the wires leading into the back of the tweeters. You can obtain a pack of four terminal blocks priced at £2.25 via this link:

https://uk.rs-online.com/web/p/products/7822876/

You will only need <u>one pair</u> of terminals, so carefully cut off the block in half. However instead of buying a pack, you could take a look at what they look like and try to source one from a friendly electrician! It's also worth protecting the connector block from the elements with some electrical insulation tape.

If placing the two tweeters under the outside of the box, link their wires together (maintaining correct polarity via the separate 'black' and 'striped' cables) and screw the two joined strands into one side of a terminal connector. Then attach the additional cable to the other side of the terminal connector (again with the correct polarity) and run that wire into one pair of the clip sockets at the back of the amplifier.

If placing one tweeter inside the nest box and the other outside, join them through the terminal connector <u>inside</u> the box, drilling a hole to bring the external tweeter wire inside. Then drill a second hole to bring in the additional speaker cable and attach it to the other side of the connector. Finally, to ensure that birds cannot become tangled in any loose wires, knock in cable clips to secure the wires onto the side of the box. Don't use gaffer, duct or other types of sticky tape inside the nest box, as this could come unstuck with time.

Nest box cameras

You may also wish to install a small camera in a nest box to prove successful occupancy and follow the excitement of breeding activity. This type of camera is recommended at a current price of £24.92 with free shipping:

http://www.securitycamera2000.com/products/SONY-700TVL-940nm-Invisible-IR-8m-Indoor-Mini-Camera-MIC-Audio.html

You'll also need 10 or more metres of AV cable with integrated power lead. This link is for a 10m lead costing £4.49, but if you need a 15m or 20m cable just search for it accordingly:

http://www.ebay.co.uk/itm/331513154127

The red sockets are for power, the white for audio and the yellow for visual. NB You will also need another 12V power supply as noted in item 3 above to power up the camera.

If installing a camera as well as a tweeter inside a nest box, take care to position the tweeter so that it doesn't block the view from the camera. When connecting the camera to the extension lead, you will need to disassemble one side of the box and create a slot through which the camera lead can run so that the three sockets can be connected up outside the box. Insert the other ends of the camera extension lead into the AV sockets of a TV or monitor to provide a fantastic view of the inside of the nest box.

Summary of Costs

Prices were correct at the time this information was updated. To save you having to get the calculator out, an estimated cost for a nest box is £20. Add a Gold Medal call system with 10m of additional speaker cable and the combined cost rises to around £70. Including a camera as well will be around an additional £36. These costs take no account of installation. If you're going to the effort of putting up one box, it's worth considering installing two or three at the same time – though you only need one set of tweeters.

Important Notice

Through this Information Sheet SOS Swifts volunteers are helping you source nest boxes and call systems and are providing advice to ensure that, when you install them, you have the best possible chance of attracting Swifts.

If you decide to proceed with an installation, it is your responsibility to ensure that you do so safely without any risk to yourself or others during the installation or afterwards. We cannot provide any advice in relation to use of ladders, working at height or other safety issues arising in connection with the installation.

We strongly recommend that you make a detailed risk assessment before proceeding and consider the use of suitably trained and insured contractors.

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4. What to do if you find a grounded Swift

- Place the bird in a box with several small air holes in it a shoe box with a lid is ideal, lined with a couple of layers of kitchen roll
- Place the box in a quiet, warm place away from any noise and interference

• Refer to the First Aid page on the Swift Conservation website for information on what to do next:

http://www.swift-conservation.org/SwiftFirstAid.htm

Don't take any further action before you have read this!

- You will find a chart to help you age your Swift and contact details for Swift Carers
- If you live in Suffolk and adjacent areas your nearest Swift Carer is:
 - o Judith Wakelam

o Telephone: 01638 715971

o Email: woofits@tiscali.co.uk

5. Additional Online Information

Our websites

http://www.sogonline.org.uk/sos-swifts/ http://www.suffolkwildlifetrust.org/swifts

Other useful websites

http://actionforswifts.blogspot.co.uk/ http://www.swift-conservation.org/



Edward Jackson
On behalf of SOS Swifts

Revision #8: 5 March 2018

See below for Cheng Sheng or Heny Sheuy amplifier instructions...

Instructions for using the Cheng Sheng or Heny Sheuy HIFI CD.MP3 Stereo Amplifiers

Connect 1 or 2 speakers by inserting the speaker cable into the red and black speaker terminals (depress to open the sockets). Polarity is irrelevant. [SEP] Insert an SD card or a USB

memory stick, with 1 or more .MP3 files. Connect a 12 Volt power supply.

Switch power on with the POWER button. There are 3 knobs to adjust Treble, Bass and Volume. For high-pitched bird calls such as Swifts, turn Treble to maximum, but set the Bass to minimum as too much of this can damage the tweeters. Then set Volume to half way on the dial.

The device will now commence playing all of the tracks on the SD card/memory stick repeatedly. The green LED should be flashing.

Switching mains power on and off will cause the device to play or not play without pressing any buttons on the device, so it is easy to control with a timer switch.

Knobs

There are 3 knobs to adjust Treble, Bass and Volume. For high-pitched bird calls such as Swifts, turn Treble to maximum, but set the Bass to minimum as too much of this can damage the tweeters. Then set Volume to half way on the dial.

Buttons

There are 4 other buttons on the device:

V-/|<<

Long press turns the volume down.

Short press goes to start of track.

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Short press toggles pause/play.

Long press toggles play one track/play all tracks.

Note that Power on always starts with play all tracks.

Green LED

Not flashing means pause.

Slow flash (once per second) means play all tracks repeatedly.

The 3 red lights give a visual indication of sound level.

>>|/V+

Fast flash (twice per second) means play one track repeatedly.

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Long press increases the volume. This is a separate volume control to the Volume knob. Suggest set to maximum and then set Volume knob to desired level

Short press moves to end of track, so start of next track. If in the last track, then it will move to the start of the first track.

Mode

The device can play from the SD card, the USB port or from the audio terminals on the back. Successive presses of the Mode button cycles through these options. If only one medium is available, it will select that medium automatically.

Remote control

You need to pull the white slip out to activate the battery. The remote replicates the functions described above and can be used to select individual tracks on the SD card

e.g. <3> selects the 3rd track

Amplifier instructions kindly provided by Action for Swifts

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