Scottish Natural Heritage

Swift Best Practice Advice Note

Guidance for Planners, Builders, Architects and Community Groups



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1 Introduction and legislation

1.1 An introduction to the Common Swift (Apus apus).

The Common swift (*Apus apus*) is a summer visitor to Scotland, arriving in early May and leaving in early August for its wintering areas in southern and central Africa. They are superbly adapted aerial birds which live their entire life on the wing and land only to breed. Originally using cliffs, crags and trees for breeding, they have adapted well to using man-made buildings.

Surveys carried out by the British Trust for Ornithology (BTO) show that there has been a decline of 60% in the population of swifts in Scotland between 1995 and 2013 (Breeding Bird Survey Report for 2014). In 2009 this led to swifts receiving an Amber listing, showing that they are now a UK Species of Conservation Concern. They are also included in the Scotlish Government's Biodiversity List of Priority Species.

BBS index for Scotland 1994-2015
Swift

120

100

80

60

20

1995
2000
2005
2010
2015

Figure 1 - graph showing the Breeding Bird Survey index for the swift in Scotland

A major contribution to the decline in population is the ever-increasing loss of nesting sites. Swifts are predominately associated with older buildings where they use the gaps under eaves, gaps in pointing and cracks in stonework to nest. As these buildings are renovated, these gaps and cracks are filled in, resulting in the loss of nest sites. As swifts return to the same site year after year, it is increasingly difficult for them to find a new nest site in which to breed. It is likely that one of the limiting factors in the size of swift populations is the availability of nest sites.

There is also a lack of understanding as to when the birds nest. Scaffolding and nets are often erected during the breeding season, thereby either excluding the birds from nesting or, if the birds are incubating eggs, trapping them inside the nest site.

Swifts will also nest in newer buildings where there are suitable gaps and spaces. However, modern building practices tend to exclude swifts from their traditional sites by using materials which seal all gaps and cover ventilation spaces. Wire mesh plates or grids are now used to cover ventilation gaps, and new building materials and techniques

do not offer alternative possibilities. There is, however, an increasing use of integral nestboxes, incorporated into the architectural design from the outset. These can make use of soffits, wall heads or the building itself. More information on these swift boxes can be found in sections three and five.

Figure 2 - Young common swift (Apus apus) © Geoff Moy



1.2 Swifts and the law.

All wild birds in the UK are protected under the Wildlife and Countryside Act 1981 (Amended) and the Nature Conservation (Scotland) Act 2004. All birds, their nests and eggs are protected by law and it is an offence 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 or prevent any wild bird from using its nest;
- intentionally or recklessly kill, take or destroy the egg of any wild bird.

Anyone found guilty of an offence is liable to a fine of up to £5,000 or to imprisonment for a term not exceeding six months, or both. Other birds which use buildings for nesting include Starlings, House Sparrows, Blue tits and House martins.

With a little forward planning, repairs and renovations to buildings can be completed outwith the nesting season and nest sites can be maintained at little or no cost.

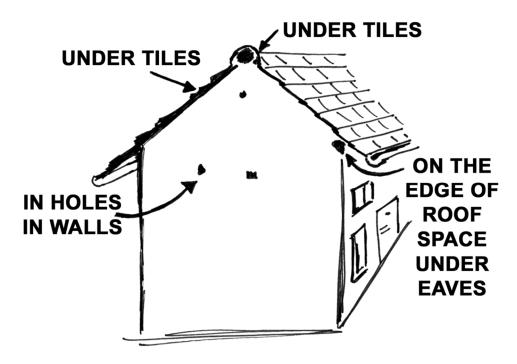
2. Existing nest sites and building renovations

2.1 Identifying swift nest sites

Swifts can nest in very restricted spaces and due to their streamlined shape can squeeze into gaps only a few centimetres in height and width. The nest will not be visible from outside the building but a white splash below a small gap can sometimes help to give the location away. The birds may crawl a short distance from the access point to the location of the nest. Swift nest sites are found in the following locations, usually (but not always) over four metres high:

- Inside eaves in 'open' eaves, under the bottom row of tiles, above the gutter, just inside the roof-space;
- In holes frequently in holes in walls where downpipes have been removed;
- Behind flashings on brick ends or in holes under loose / missing flashings on chimneys and skylights;
- Inside gables behind barge boards and gables, on the brick ends;
- Under tiles under loose or displaced tiles, on the roof timbers or felt;
- Missing pointing in voids behind gaps between stones or bricks where the pointing has washed out.

Figure 3 - Where swifts nest © Concern for Swifts Scotland



Throughout the summer groups of swifts can be seen flying around buildings at great speed, making a screaming noise; these screaming parties usually indicate that swifts are nesting close by.

Figure 4 – entrance to swift nest site © Danièle Muir



Swift nests are made up of material caught by the birds while flying including feathers, thistle down, willow seed and hay. These materials are glued together with the swift's saliva to form a basic 'nesting cup'. Any extra material such as baling twine will have been brought in by either Starlings or House sparrows, which can use the same nest sites as swifts.

2.2 Work affecting swifts & what to do prior to starting work

Demolition, structural alterations, refurbishment and maintenance work can affect nests in various ways. Re-tiling, roof repairs, internal and external building insulation, guttering repair and replacement, work on soffits and eaves, repointing and repairs to walls, the erection of scaffolding and nets, loft or sarking repair and pest control in the loft may all affect swifts by destroying the nest site, blocking the nest entrance, obstructing the flight path or disturbing the birds while nesting.

What to do prior to starting work:-

- Consider whether work will affect nest sites (see above);
- Check records local authority planning departments should have records of the areas where swifts nest. Your local RSPB office or Ranger Service may also be able to help;
- Survey from the ground for birds flying around;
- Inspection at eaves level may indicate existing nest sites;
- · Mark existing or potential nest sites with chalk for conservation;
- To be completely sure of nesting status it may be worthwhile employing an ecologist to undertake a professional survey.

These works should not be initiated or undertaken between early May and late August if swifts are suspected to be in residence. For more information on where swifts nest in your area, please contact your local swift representative – see section five.

2.3 Conserving existing swift nest sites

The following case studies show that conserving existing swift nest sites can be easily done and at very little cost. The key factor is to include the work at the planning stage.

2.3i Glengate Hall, Kirriemuir

Prior to purchase by Redford Construction for renovation, the hall had been empty for a number of years. With an existing swift nest site on the north side of the property, the developers were keen to maintain this and help expand the colony by installing a triple nestbox on the back of the property.

Figure 5 – swift nest site maintained by Redford Construction © Danièle Muir



Pointing was carried out throughout the building but the small gap which the birds used to access the nest site was left open. There was no chance of water ingress due to the rhone protecting the entrance hole. The nest itself was built on the headwall just underneath the rhone and this was boxed off with plywood so the birds had no access to the inside of the building itself. The original nest was left in situ. This was a nil-cost option that was easily factored into the timescale of the project.

2.3ii – Inchture Church

As a member of Eco-Congregation Scotland, the Church was keen to conserve their swift nest site while the Grade B listed building underwent complete renovation. Working with George Martin Builders and J F Stephen Architects, pointing started at the far end of the building from the nest and scaffolding was erected only once the young birds had fledged and the adults left the nest.

Figure 6 - inbuilt swift nest box at Inchture church © Danièle Muir



A ventilated plywood nestbox sized 450mm x 210mm x 222mm was made and placed in the same spot as the original nest after removing the roofing slates. The material from the old nest was kept and placed in the box to encourage the swifts to nest again the following year. Access to the rest of the building was blocked off and the slates were replaced. The necessary pointing was then carried out and the box fronted with stone so the external wall looked as it did originally (see figures 13 and 14). In addition, another

two nesting boxes were installed on the north face of the Church. The solutions were simple, inexpensive and in keeping with being a registered Eco-Church.

2.3iii - Kirkmichael Hotel

Kirkmichael is one of the 'swift hotspots' of East Perthshire. Re-pointing work was carried out to the Kirkmichael Hotel where there were a number of swift nest sites. These were conserved by leaving the top course of stonework un-pointed, as it was in any case protected from water ingress by the guttering. This option conserved the swift nest sites at no cost and with no risk to the fabric of the building.

Figure 7 – maintaining openings to swift nest sites when re-pointing © Danièle Muir



3 New builds and nestboxes

3.1 Concern for Swifts Scotland

There is now a wide variety of integral swift nestboxes (hollow blocks sized to hold a nest) on the market which have been designed to fit in with building standards. Integral nestboxes are preferable to external boxes as they need no maintenance and will last longer. They should be fitted either on a side of the building that gets some shade during the day, under an overhang or under the eaves, to give protection from heat, but not over windows or near to vents. They should be sited at least 5 metres above ground, with clear adjacent airspace so the birds can access them in high-speed direct flight. Ensure predators do not have easy access (e.g. by climbing up creepers or flying in from close perches).

Concern for Swifts Scotland works closely with Housing Associations, local authorities and private builders to conserve existing nest sites and advise on placing in-built nestboxes in new builds. These swift bricks were easily incorporated into the design of this new housing development at next to no cost.

Figure 8 - bricks inset in new housing, Wellhouse, Glasgow © Clare Darlaston

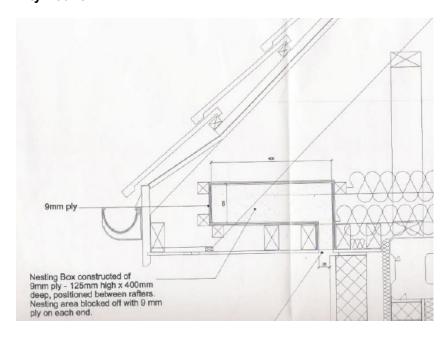


3.2 Case study – Edinburgh City Council with John Wilson

Targeted work to conserve swifts has been carried out since the first Edinburgh Biodiversity Action Plan was published in 2000. There has been a lot of volunteer effort to survey and identify colonies of swifts with various partnership initiatives promoting the installation of swift boxes on existing properties.

The City of Edinburgh's Design Guidance is the supplementary planning guidance used by the council and the planning consent process has encouraged developers to include swift bricks in new developments. Where appropriate, when Planning consent is issued for a suitable development the inclusion of swift bricks are requested and an information sheet provided to highlight to developers and architects how and where to install swift bricks. There are now several new developments with purpose-built homes for swifts.

Figure 9 – extracts of Bryant plan and swift box detail, August 2005 \odot Edinburgh City Council



3.3 Case study - Premier Inn, Perth

Premier Inn, part of the Whitbread Company, carries out biodiversity improvements to its properties on a site by site basis, and has included new homes for swifts in fifteen of its hotels to date. When carrying out building renovations prior to opening a new hotel on Mill Street in Perth, four nestboxes were installed adjacent to the location of a natural swift nest site.

Figure 10 - swift nest boxes on the Premier Inn in Perth © Catherine Lloyd



3.4 Case study – Hillcrest Housing Association

Hillcrest Housing Association has been very supportive of swift projects taking place across Scotland. When building a new property on Jeanfield Road in Perth, they worked with J M Architects, Edinburgh to include three lightweight Schwegler in-built swift nestboxes. Their headquarters in Dundee also contains two nestboxes built into the fabric of the building.

Figure 11 - swift nestboxes in new-build in Perth © David Williamson



4 Working in Partnership

Community groups can make a significant contribution to swift conservation. Volunteers can map their local area for swift nest sites over one or two survey seasons; biodiversity partnerships can then amalgamate this knowledge into regional "dots on maps" so that Swift Priority Zones can be designated and included in council planning GIS layers to indicate specific areas to target in planning work. This has been done across Tayside with community-run projects in the Carse of Gowrie, Kirriemuir, Strathearn and Stanley.

4.1 Carse of Gowrie Swift Conservation Project

Running over 2013 and 2014, this project involved all schools in the area, church groups, a number of businesses, set up Swift Area Co-ordinators to oversee local surveys, mapped swifts in screaming parties and mapped the location of nest sites. This information was then used by the local authority to conserve existing nest sites, as well as to find the best locations for over fifty nestboxes, which were put up with a cherrypicker.

4.2 Stanley Swift Project

Following a Swift Walk by Tayside Swifts, members of the local community surveyed their village throughout the summer, finding over forty swift nest sites and a number of subcolonies. Nest boxes were erected on the village hall close to existing nest sites, some of which were used in their first summer by swifts. The survey is continuing each season to build up better knowledge of where swifts are nesting throughout the area.





5 Where to find advice

There are many places to find further information with useful technical advice and further case studies including:

- Swift Conservation www.swift-conservation.org
- Concern for Swifts Scotland www.concernforswifts.com
- Action for Swifts http://actionforswifts.blogspot.co.uk
- Swift bricks and dimensions <u>www.rspb.org.uk/Images/swift-bricks_tcm9-397697.pdf</u>
- Scottish Biodiversity Partnerships
 http://www.biodiversityscotland.gov.uk/area/lbaps/partnerships/

Figure 13 - swift nest site at Inchture church prior to renovation © Danièle Muir



Figure 14 - swift nest site at Inchture church after renovation © Liz Kay



Thanks to Swift Conservation and Concern for Swifts Scotland who have kindly permitted use of their instructional materials in the content of this leaflet. Also Caroline Peacock, John Wilson, Catherine Lloyd, David Williamson, Liz Kay, Neil Ballantyne, Paul Stephen, Richard Prescott, Sandra Penman, Clare Darlaston, Edward Mayer and Martin Ridley.

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