SWIFTS IN TAYSIDE

Newsletter Issue 3

Evolution of the Swift

The history of the swift, in evolutionary terms, is a short and relatively simple one. The common swift (*Apus apus*) evolved to its current form between 35 and 45 million years ago and since then it has changed very little physically. Swifts are often confused with Swallows and House and Sand Martins, the three of which are in the same Order (*Passiformes*) and family (*Hirundinidae*). However the swift is of a completely different order, being a member of the *Apodiformes* in the family *Apodidae*.

A recent fossil finding (*Eocypselus rowei*, 2013) has shown how swifts are more closely related to hummingbirds, sharing a common ancestor at some point in their evolutionary history. The fossil marks the closest point to divergence that has been found, shown to be around 52 million years ago. The link was shown by the similar wing shape the fossil has to swifts, on which the feathers are close to modern swifts but less specialised.



© Lance Grande of the Field Museum of Natural History

As well as the feathers, several other features are similar to modern swifts as well as others leaning towards the hummingbird side of the line. The short, rounded beak is different to all the descendants of the line and it is thought that this would have been used for eating seeds and fruits, as well as catching insects on the wing as current swifts do. The feet of the fossilised *E. rowei* show similarities to the modern hummingbird, being adapted for perching (three toes pointing forwards and one back) while the legs of modern swifts are vestigial. This means they are now very small in comparison to its ancestors. In fact, the Greek word for the Swift family (*Apodidae*) actually means "without feet".

Because of the swifts' apparent slow evolution, which could be considered as a large amount of specialisation, the evolution of the swift before this point is largely unknown. However, it is thought that the average shape and size of this family of birds has changed very little since the end of the dinosaurs 65 million years ago, or even further back in time.

DID YOU KNOW?

- Swifts live entirely on the wing feeding, mating and sleeping. They only land to breed.
- They return to Scotland from Africa at the beginning of May and leave again in early August.
- The birds are boomerang—shaped and look all black against the sky (their white throat patch is not often visible).
- They feed on large quantities of insects.
- They only feed on the wing, so are very dependant on weather conditions. The adults will fly hundreds of miles, if necessary, to find food.
- On fine summer evenings swifts gather in "screaming colonies", chasing around the buildings where they nest at high speed.
- Over an average lifetime, each swift will fly approximately 4 million miles to and fro Africa from its birthplace in Scotland.

WHERE DO SWIFTS LIVE?

- Almost exclusively in buildings under roof tiles, on the wall head of buildings (gaining access via gaps and cracks in the wall or soffit), or in holes in the walls of buildings.
- Usually in older buildings, including church towers, but they will use new buildings if there are suitable gaps and spaces. They need a clear flight path to and from the nest, usually over 4m above ground.
- They can use holes too small for starlings or pigeons.
- They are loyal to their nest sites. If disturbed or excluded, they rarely relocate to a new nest site for that season.

© David Moreton, courtesy of Swift Conservation



Kirriemuir Swift Conservation Project

Kirriemuir has a good population of swifts, with a nest site survey carried out in July 2013 finding a total of nine definite and forty four probable sites. To help conserve these nest sites and find new locations for swift nestboxes, Tayside Swifts is working with Angus Council, Historic Scotland and the Kirriemuir Conservation Area Regeneration Scheme (CARS). This started in spring 2014, with planned completion in

Project officers Fergus Cook and Daniele Muir have been involved in carrying out guided swift walks, visiting schools, working with local businesses and raising the profile of swifts in the town. Nestboxes are available free of charge to property owners and the Kirriemuir Swifts leaflet advises on what local people can do to help safeguard their swift population. The project officers are pleased to offer advice to anyone wishing to take part in the project – see contact details at the end of the newsletter.





One business that has worked closely with Tayside Swifts over the years is Redford Construction. As the Glengate Hall in Kirriemuir recently underwent renovation, the company worked hard to save the existing swift nest site. The entrance hole on the outside of the building was maintained and the nest site on the head wall was boxed in so the swifts cannot access the inside of the building. A triple nest box was also erected on the back of the Hall, in an area where there is a lot of swift activity. As the hall is in the Conservation Area, special paint was used on the nest box to ensure it blends in well with the surrounding stone building.

Natural swift nest site in Glengate Hall, conserved by Redford Construction when converting the building to flats ©Daniele Muir

Focus on Tayside Bat Group Training

This group is very active and as swifts and bats frequently share the same buildings, the group were keen to undergo survey training so they could record any swifts they observe whilst carrying out bat work. The practical training took place in Invergowrie where nest sites in use were observed, screaming parties were counted and swifts were seen to be looking for new nest sites.





Swifts Local Network

Tayside Swifts has recently joined the Swifts Local Network which enables the many UK-based individuals and small groups now working on Swift conservation initiatives to share experiences and ideas more easily. Details can be found on the Action for Swifts website: www.actionforswifts.blogspot.co.uk

After the success of the Carse of Gowrie Swift Conservation Project Pilot, the second and third phases took place from December 2013 to April 2014 and from May to October 2014. The project continued to raise awareness of swifts and what is happening to swift populations in the area. Many residents, schools, churches, businesses and groups across the Carse of Gowrie have taken part in the project – there was a wellattended Church Wildlife workshop held at Inchture which brought together many local people – as well as welcoming people from right across central Scotland.

Over eighty swift nestboxes and bat boxes have been erected, many new swift colonies and nest sites have been mapped, and the future is now looking far brighter for the swifts of the Carse of Gowrie. It is hoped that Carse residents will still keep in touch with the Project Officer with news regarding "their nestbox" and to take part in occasional walks and talks. Tayside Swifts is now working with the Tay Landscape Partnership to widen the nestbox installation aspect of the project across the TLP area, rather than just the Carse.



From the Carse to Africa – Schools Twinned

The Schools' Swift Twinning Project was started as part of the Carse Swift Conservation Project to bring together schools in the Carse of Gowrie with



© C A G Lloyd – Edward Mayer (Swift Conservation) on the left Junior Carsonians in the middle; John Miles on the right

schools in Africa. Primary schools in St Madoes, Errol, Longforgan, Abernyte and Invergowrie were all involved with twinning with various schools in South Africa, Uganda and Malawi. Part of the project has stalled at the moment owing to a change of staffing in Malawi, but it is hoped the project will start up again soon – there are plans to widen it across Tayside.

Ibstock, who manufacture in-built swift nestboxes, offered sponsorship to purchase a number of 'Screamer the Swift' books for the project. This beautifully-illustrated book tells the story of a swift from hatching in the UK to migration to Africa, and covers the trials and tribulations that swifts face throughout their lives. Each Carse school received a copy of the book, and those schools taking part in the Twinning Project received an extra copy to send to their school in Africa.

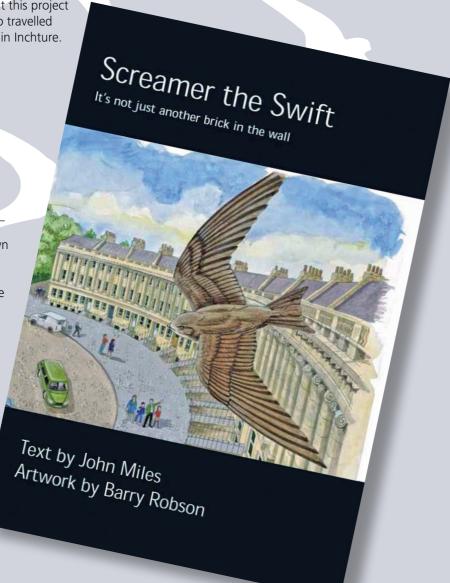
The Junior Carsonians wrote a press release about this project and met the author of the book, John Miles, who travelled up from Cumbria to join our celebratory evening in Inchture.

Screamer the Swift

Extract from "Screamer the Swift" by John Miles -

"It was winter in Britain but Screamer, having flown 7,000 miles (just over 11,000 kilometres), was enjoying summer down here in the Southern Hemisphere. He even flew to Mozambique where he saw the Indian Ocean. His wings never got tired, but his legs were tucked away, waiting for the time he would finally use them again!

As the daylight started to shorten, this was the signal for the adult Swifts to start heading north again. This time the Swifts used the west coast of Africa to avoid the heat of the Sahara, crossing back into Europe over "The Rock" and through Spain to France and across the English Channel."





Swift nestboxes on Tayside Hotel, Stanley. The one on the right was used by swifts in 2014. © Daniele Muir

Stanley Community Swift Project

The idea of a Stanley Swift Project came about during an evening Wildlife Walk in Stanley last summer. The wildlife walkers were delighted to hear that Stanley is a hot spot for swifts in this part of Perthshire and said that it would be great to do whatever they could as a community to not just protect them, but also ensure the birds continue to have a safe place to return to and breed each year after their 6,000 mile migration back from Africa.

In July 2014, a small group of keen volunteers undertook a survey of swift numbers and nest sites in the village, focussing in particular on the area around Mill Street, Mill Brae, Store Street, Percy Street and King Street. The group surveyed the town three times at weekly intervals on beautiful summer evenings and counted – as best they could – given the sweeping and swirling of ever—

changing group sizes in the skies above them, the swift screaming parties. The village residents also added information from sightings in between times. There were frequently groups of about 40 swifts, and once or twice the numbers increased to around 70 to 80 birds, which at that time of year is likely to have included late arriving non-breeding juveniles.

Through their observations, the group began to recognise when birds were gathering to roost, and by standing and watching carefully 15 nest sites were located as the birds whizzed in for the night, which would mean 30 breeding adults. Most of the nest sites were in eaves behind gutters or fascias, but one excellent bit of news was that one of the nest boxes recently installed on the Tayside Hotel was found to be occupied by a pair of swifts.

The 15 nest sites were recorded on street maps provided by Perth and Kinross Council and the information will contribute to the "dots on maps" survey work that is going on throughout Tayside.

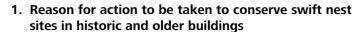
The group hopes more people will want to become involved in Stanley so that a full picture of swift activity in the village can be built up and the information shared with Tayside Swifts. They will continue to raise awareness about this special bird, help to improve their protection, install nest boxes and aim to at least maintain or ideally increase swift numbers in the village over the coming years.

If you would like to join the Stanley Swift Project or set up a similar community initiative as part of the Tayside Village Biodiversity Project, please contact Daniele Muir or Catherine Lloyd (details on the back page).

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Swifts in Historic and Older Buildings

How to protect them during essential repairs and maintenance



Swifts depend mainly on built environments for nest sites, taking advantage of gaps in stone work, broken pointing or chipped or displaced tiles to gain access. They are protected under the Wildlife and Countryside Act (1981) and The Nature Conservation Act (Scotland) 2004. It is therefore illegal to recklessly disturb them, or to damage or destroy their nest or nest sites or obstruct access while in use. Modern building methods tend to deny swifts access to spaces in buildings as ventilation space is now usually either covered with a fine mesh or created by the use of ventilation bricks, special tiles, slotted soffit boards etc. As a result there is increasing concern, internationally, about a drop in numbers of swift populations around our buildings. Various surveys are underway across the country.

2. Examples of action or inaction to provide for swifts [Inaction is always preferable, and cheaper than action]

Leave broken stone or pointing below eaves to give access to wall head.

- Where possible leave existing holes in walls.
- Build holes into new or reconstructed walls; or build nest boxes into cavity walls.
- Cut holes of 25x60mm in ventilation mesh at regular intervals (depending on the size of the buildings) at 2-3 metre intervals.

© Daniele Muir



3. Making provisions for swifts without giving access to starlings and sparrows

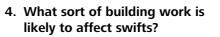
An entrance hole 25-30mm high x 65+mm wide will enable swifts to gain access to a nest space while deterring starlings and house sparrows. Also, swifts are able to fly directly up into a nest space. They rarely penetrate roof spaces, so if they are allowed access to the wallhead, they are not likely to wander into the roof space to nest. For boxes a minimum size of 150 x 150 x 300mm is recommended, with an entrance opening of 25-30mm x 65mm. The nest should be above 4 meters and they need a clear flight path into and out of the nest as they become airborne by dropping out of the nest.



Slots cut into a new fascia in a renovated building. © Clare Darlaston

Noted nest site retained during renovation. © Clare Darlaston





Demolition, structural alterations, refurbishment and maintenance work can affect nests in various ways. Roofing repairs, re-tiling, guttering repair and replacement, work on soffits or eaves, repointing and repair to walls, erection of scaffolding and screens, loft or sarking repair, loft insulation or boarding and pest control in the loft all may affect swifts by destroying the nest site, blocking the nest entrance, obstructing the flight path or disturbing the birds while nesting. Work of this nature should not be initiated or undertaken between the months of May and August if swifts are suspected to be in residence.

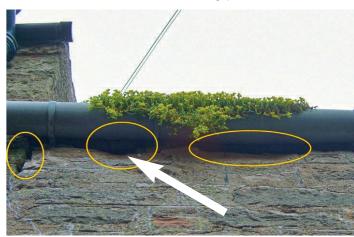


Nest sites have been observed at the wallhead, in holes in stone or brick walls, in boxed soffits, under ridge tiles, pantiles and broken tiles and in church towers. During the nesting season, swifts can be seen in the morning and in the evenings zapping around buildings at great speed, screaming shrilly. These "screaming parties" usually indicate that swifts are nesting nearby. It is this behaviour which attracts attention to their presence and which fascinates their admirers. It may take some time to spot a swift entering or leaving a nest as they do so at high speeds. The pictures indicate the sort of places (circled) where swifts enter a building. Arrows show where the nest sites are.

Outwith the nesting season, it is much harder to spot possible swift nest sites. If they are nesting on the wallhead, signs of nests may be visible from inside. Swifts use little nesting material and gather it in mid-air, so it will consist of feathers, thistle down, bits of hay, hair, willow seed etc. Some droppings may be visible around the nest – though most are carried away by the parents. Some white splashing may be visible on the wall but this is not a reliable indicator. It is also important to distinguish between swift and starling residues – starlings leave far more splashing on the walls. Swifts use small holes to access the nest site, but this is not a decisive factor as they also take over sparrow or starling nests which have larger openings. Asking the owner, occupier or someone local may provide you with the information.



Photographs above and below. © Daniele Mui.



6. Nest site renovation method

Swifts use the same nest site year after year. They do not readily change nest sites, but they will return to a site that has been blocked off for one or even two seasons. Existing nest sites must be retained wherever possible e.g. during renovation. Method: mark and block off existing nearest nest sites/entrances well before swifts arrive (usually in early May). Carry out renovation works. When completed, carefully unblock the original sites in time for the swifts' arrival — and hope they will return.

Advice Note (c) Concern for Swifts Scotland

Working with Hillcrest **Housing Association**

Hillcrest Housing Association continues to be very supportive of swift projects taking place throughout the area and in the past their apprentices have made and donated wooden nestboxes and funds have enabled the ever-popular Tayside Swift bookmark to be published and distributed. As part of the Carse of Gowrie Swift Conservation project, Hillcrest sponsored a swift text survey, which enabled people to text details of where they had spotted swifts whilst on the move. This was then expanded to cover the whole of Tayside, resulting in a number of new records.

With Hillcrest properties in Kirriemuir, the Housing Association has been assisting with the swift project there by encouraging their residents to take a free nestbox for their property. Thanks go to the association for their enthusiasm for swifts – when their new headquarters was being built in Dundee, it even included integral nestboxes!



Hillcrest's Doocot Court near the Perth Royal Infirmary may be welcoming swifts in the future, thanks to J M Architects, Edinburgh, who included in-built swift nestboxes in the newbuild's desia

Can you spare one hour a year for the Tayside **Swift Survey?**

If you can spare just one hour during the summer, please look to the skies and let us know if you see any swifts – and if so, how many. The online survey is quick and easy: go to the Swift Section on the home page of

www.taysidebiodiversity.co.uk.

The best time to see swifts flying nearby is at 9pm, although mid-day can sometimes be just as good. This is the time when the adults are returning to the nest to feed their young. Other sightings, especially of swift colonies flying over the area, are just as welcome.

(c) C A G I lovo

Strathearn Pilot **Project**

An exciting new Swift project is taking place in Strathearn. Crieff, Comrie and Auchterarder all have populations of swifts and will be the target of swift conservation action. Schools, householders, businesses and churches will all be approached to become involved in the project and the Crieff Development Trust, which has received funds to upgrade the town centre, will be offered advice on how to maintain existing nest sites.

It is hoped sponsorship or further funding will enable a much largerscale project to be rolled out across this region in the future. If you can help with funds, or indeed if you would like further details of this project, please contact Tayside Swifts direct.

Good Practice: Mill Street Premier Inn, Perth

Positive change has been happening for some time now within the Whitbread Company. Their subsidiary, the Premier Inn hotel chain, prepares Biodiversity Enhancement Plans for each of its newbuilds and highlights specific sections within these reports on what bird nesting and bat roosting opportunities can be included. Their first swift-friendly hotel, in Exeter, had 21 swift nest boxes installed into the fabric of the hotel, creating the natural space the birds need to reproduce.

Now, as one of their press releases, says "travellers human and avian can enjoy a well-earned rest after a hard journey another example of how we are leading the hospitality industry to be more environmentally friendly". Similar bird box schemes are being introduced by the company elsewhere in other Devon Premier Inns, plus in Portsmouth and Cambridge.



Whitbread's good practice has been applied more locally too – in Perth. Many years ago the Tayside Biodiversity Coordinator enjoyed a birds-eye view from her office of swifts nesting in the old Mill Street buildings. Subsequent plans for renovating and converting the property into a Premier Inn sparked concern for the swifts but true to their word Whitbread installed external swift nestboxes adjacent to the old nest site. We hope the swifts use them and continue to fly over the centre of Perth for a long time to come.

2016 Scottish Swift Gathering

Such have the successes been in bringing Swift enthusiasts together across the world with the International Swift Conferences in Berlin and England, Scotland is now planning its own Swift Gathering. Check the website (www.taysidebiodiversity.co.uk) for details nearer the time, but we are planning a best practice get-together in 2016 to highlight all the good work going on across Scotland, and importantly, discuss action needed to safeguard our Swift populations and the various Citizen Science surveys everyone can get involved in.

News from Elsewhere

Swift Population Crashes in Glasgow

Clare Darlaston of Concern for Swifts Scotland reports: "Ten Years ago, I used to walk through the streets in parts of Glasgow, seeing and hearing screaming parties overhead until it was almost dark. Year on year they have become fewer and I regret not taking more time recording numbers as they are clearly declining, even in areas not badly affected by renovation. My focus was, and still is, on locating and conserving nesting sites.

In the early days I recorded swifts in the older buildings of the West End (around Queens Park, Battlefield and Pollockshields), and the East of the city in Dennistoun and Tollcross. Many of the larger numbers were found on the peripheral estates where the buildings date from the 1940's and 50's. Gaps in the concrete lintels of these houses make magnificent nesting sites for swifts who would congregate in nearby screaming parties of up to 30 individuals.

To generalise, from 2000 onwards the number of swifts seen in these areas decreased significantly and, in several places. disappeared completely. The three years from 2010 to 2012 were very difficult for swifts as we had a string of cold, wet summers with many swift pairs giving up on reproducing and leaving for Africa in mid-July instead of the more usual mid-

August. At the same time renovations were spreading through these same estates, with the concrete eaves – which are so good for swift habitation – being clad with PVC, thus excluding the birds. I toured three of the previous Swift Priority Areas in 2011: they had fallen silent owing to the renovations.

The replacement nest boxes, which had been put up in different locations, were and continue to be a failure. Now in the summer, there is an oppressive silence over the streets which were once the centre of large screaming parties. The remaining sites I know of are in Castlemilk, Barmulloch and Lochend. Although many houses in Drumchapel were not renovated I did not see any swifts on either of my two visits two summers ago. Nesting sites in one half of Barlanark and much of the East End have also been lost because of demolition work.

It is now difficult to find swifts in Glasgow. It is clear that if some nest sites cannot be retained during renovations the birds will leave the area entirely with chances of their return, I believe, being non-existent. One of the big unanswered question is, of course 'what happens to dispossessed swifts?' There is no evidence for new colonies in Glasgow, only a potentially catastrophic decline in numbers."

Baku Re-population

The Maiden Tower, an 8th Century BC national monument in Baku's UNESCO World Heritage Old Walled City, Icherisheher, in Azerbaijan, is being conserved after many years of weather damage.

Holes in its crumbling walls provided nestplaces for about 250 Swifts for the past 30 or 40 years. But the conservation, when completed, will leave only about 40 holes usable by the Swifts.

A nearby site was selected and the International Dialogue for Environmental Action (IDEA) initiated a special project providing the displaced Swifts with alternative nest places by installing 500 Schwegler Swift nest boxes.

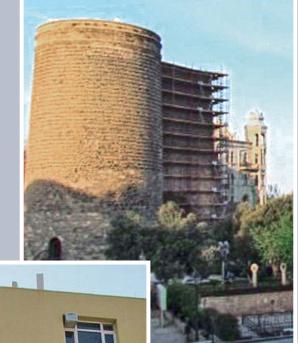
The number of new nests has been doubled with the aim of increasing the future population of Baku's Swifts.

Checks made after the Swifts finished breeding in summer 2012 showed that some 30 nests had been made in the new boxes, a very promising start. Since then further efforts have been made to attract more Swifts to breed in the new nestboxes.

Article courtesy of Swift Conservation UK. To learn more about Swifts and Swift Conservation please visit

www.swift-conservation.org

Photos © Samir Nuriyev / State Historical Architectural Reserv



Above: The 8th Century BC Maiden Tower, undergoing conservation.

On the left, the new Swift nest boxes installed on the wall of an adjacent building.

International Swift Conference

Cambridge hosted the last International Swift Conference with talks from some of the most sought-after and well-known names in the swift conservation sector including introductions from Edward Mayer and contributions from Erich Kaiser, Jan Holmgren, Roy Overall, Derek Bromhall and Ulrich Tigges.

Discussions varied from whether there was a migration pattern between sexes, which it has been found there isn't, and Susanne Akesson from Sweden reported further on the Swift tracking which made the front page of our last Newsletter. This showed the different areas of Africa which swifts from Europe migrate to. Until this research, we did not know where our Swifts went, nor that they spent time in different parts of Africa. The Summary Proceedings for the conference can be downloaded from www.cambridgeswifts2014.blogspot.co.uk – there is much to read!

Highland Perthshire Swifts

We are fortunate in the enthusiasm of small community groups taking forward projects in Kinloch Rannoch and Pitlochry. Kinloch Rannoch is a key Swift hotspot in Tayside and as such the Rannoch & Tummel Tourism Association is working with a number of local groups to safeguard their nest sites throughout the area.

As part of its Campus environmental development, Pitlochry Festival Theatre received funding from the SITA Tayside Biodiversity Action Fund to install a variety of nestboxes. As there is a population of swifts in the town, Tayside Swifts advised on where to install a series of double woodcrete nestboxes. Now we wait and see if any drama-loving birds move in!







Swift over Kinloch Rannoch. (c) C A G Lloyd

Kinloch Rannoch. (c) C A G Lloyd

Advisory Note Roof Repairs and Re-Roofing with Swifts

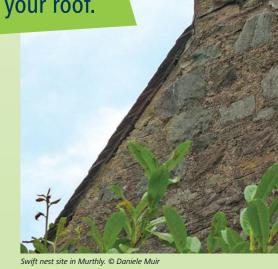
Edward Mayer of Swift Conservation suggests following these simple guidelines to comply with the law and keep swifts safe and breeding in your roof.

Working on roofs where swifts are nesting:

- **Do not** work on the roof while the swifts are nesting (May-August)
- Leave existing Swift nest places undisturbed by any works
- **Preserve** the Swifts access holes or make new ones to match the old exactly.

Repairing and renewing roofs without destroying nests

Repairs and re-roofing are unavoidable, but where there are swifts nesting it usually means the end for them breeding there. The new roof almost always denies them access to the holes, crevices and open eaves where they used to nest, and the colony is finished. This is happening at an alarming rate all over the UK and Europe resulting in major losses of swifts across Britain over the last 12 years.



Below are guidelines on how to keep swifts breeding safely in your building.

Where swifts will be nesting and how to save the nests and let them breed safely:

- **Eaves** under the bottom row of roof tiles, above the gutter in the roof space.
 - For eaves nests, leaving the eaves open is the best solution or cutting slots in the soffits or facing boards to match the old entrances.
 - If necessary, install a ventilated plywood partition at least 30cm inside the loft to enclose the swift nest area and make the loft useable.
- **Holes** holes in walls where pipes have been removed.

Where hole nests are not going to be a problem, leave the holes. Tiles can be fitted above to keep rain out or else fit a swift brick to provide an alternate nest space.

- **Flashings** on brick ends or in holes under loose flashings on chimneys and skylights.
 - Offset or lengthen flashings and ridge/end tiles to let the swifts back in without affecting waterproofing.
- **Gables** behind barge boards and gables, on the brick ends.
- Either leave alone or fit simple wooden nest places behind the bargeboards.
- **Tiles** under loose or displaced tiles, on the roof timbers or felt.

Reinstate the tiles keeping the old gaps exactly where they were. This is easily done by inserting wedges.

Pointing – in voids behind gaps between stones or bricks where the pointing has washed out.

Leave unpointed access to where swifts are nesting

If none of the above is possible – consider installing nest boxes or nest bricks instead.

For more information and advice, you can go to www.swift-conservation.org/

or email mail@swift-conservation.org



© Daniele Muir

Businesses Supporting Swifts

Businesses across Tayside are increasingly getting involved in swift conservation by erecting swift nestboxes on their properties. These will hopefully offer new pairs of swifts the chance to breed and ultimately increase local swift populations. Both Blairgowrie and Murthly have nesting swifts but it is likely nest sites are being lost through on-going restoration works and the population is limited by the number of available nest sites.

Laura MacKenzie, who owns the Murthly Bar & Restaurant said "We are really pleased to be able to do something to try and help the swifts in Murthly. Screaming swifts are such a wonderful sight to see on a summer evening and we hope our nestboxes will help the Murthly population grow".

Jill Merrouche from Gilmore House Bed & Breakfast in Blairgowrie said "Having been on a swift walk with Daniele a couple of years ago and enjoying watching the swifts overhead from my home, I am delighted to do a little bit by installing a nestbox and hopefully encourage these beautiful birds to nest".

Are you a business that would like to help swifts in any way? Please contact us if you are!



Young swift © Bev O'Lone

Tayside Swifts Contacts

Tayside Swifts

There is a comprehensive Swift information section on **www.taysidebiodiversity.co.uk**



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