SWIFTS IN TAYSIDE

Newsletter Issue 02

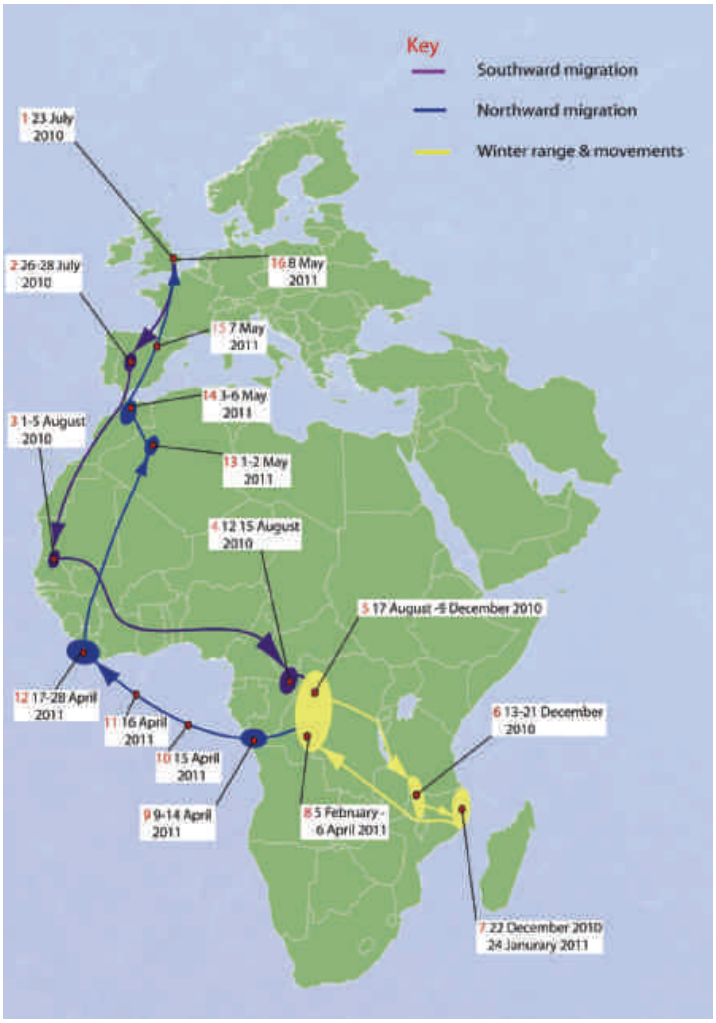
SWIFT MIGRATION SECRETS REVEALED!

When the British Trust for Ornithology published the migration atlas in 1977 a few winter ringing recoveries of Swifts had been made in Africa. These hinted that birds ranged across a large area; however, they did not show when birds used different areas or for how long. The few spring recoveries suggested that while some birds remained over the Congo basin and a few close to the North African coast, most had already made it back to their nesting sites in Europe.

Recent advances in technology have dramatically improved our understanding of bird migration. A geolocator, fitted on the bird's back and held in place by loops which pass around each wing and around the neck, records the time of sunrise and sunset. This enables Latitude and Longitude to be calculated. As geolocators need to be recovered to obtain the data, Swifts are ideal as they return to the same nest every year.

In 2012 two articles were published describing results of migration cycles starting from the nest site in Europe, south into Africa and then back to Europe. One study was from Cambridgeshire [1]; the second reported the results from six birds from Sweden [2]. In a single year we have gone from a few ringing recoveries in Africa to now having the migration routes of birds from two different countries. So what did we learn? During the autumn migration south, all the birds made refuelling stopovers in both Europe and Africa. The birds spent the winter in equatorial Africa, with the Swedish birds using the western half and the Cambridgeshire bird spending a month as far east as the Indian Ocean. Interestingly the Swedish birds used two different strategies: three birds spent the winter in one area; the other three changed feeding areas - two moved east and one moved south.

The Cambridgeshire bird and five of the Swedish birds made a feeding stopover in Liberia in West Africa (see figure) before returning north to their nesting sites for the summer, the remaining Swedish bird using a totally different return route. These two studies have indicated that some areas of Africa are of particular importance to swifts, the most obvious one being the spring feeding site in Liberia. It is locating areas like these, and protecting them, that can help make a significant contribution to Swift conservation.



The author, Barry Caudwell, thanks the British Trust for Ornithology for permission to use so extensively the article in BTO News.

[1] Appleton G, pages 16, 17. Swifts start to share their secrets
[2] Akesson S, Klaassen R, Holmgren J, Fox JW, Hedenstrom A (2012) Migration Routes and Strategies in a Highly Aerial Migrant, the Common Swift Apus apus, Revealed by Light-Level Geolocators. PLoS ONE 7(7): e41195. doi:10.1371/journal.pone.0041195

DID YOU KNOW?

- Swifts live entirely on the wing - feeding, mating and sleeping.
- They only land to breed.
- They arrive in 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 at high speed around the buildings where they nest .

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.

CAN YOU SPARE ONE HOUR A YEAR FOR THE TAYSIDE SWIFT SURVEY?

Concern for Swifts (Scotland) has been running a Swift Survey for over a decade. In 2005 the Tayside Biodiversity Partnership adopted it and has been sharing its findings ever since, particularly with the local authority planning departments who now add all swift sightings to their GIS planning maps. The Tayside Swift Interest Group is part of the Tayside Biodiversity Partnership's Urban Working Group and meets regularly to work with volunteer surveyors across Angus, Dundee, Perthshire and Kinross-shire. Past surveys of the Angus coastal towns proved very useful, but more help is needed for this area. Swifts have also been sighted in the Angus Glens and more proactive survey work is needed there too.

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. Look out for news of our new mobile texting survey – text SWIFTS!

© Martin Ridley

CARSE OF GOWRIE SWIFT CONSERVATION PROJECT

An exciting new pilot project is to be taken forward by the Carse of Gowrie Sustainability Group. They will help the Tayside Swift Interest Group undertake citizen science survey work across the Carse, arranging swift walks, talks, training days, church and school visits. They will help to map where the Swift Priority Zones and nest sites are in the area and decide where new nestboxes can be sited. The group, in conjunction with many other local organizations, will help take forward the Tayside Swift Nestbox Trial in conjunction with the Tayside Biodiversity Partnership and Perth & Kinross Council's Buildings Conservation Department.

TWINNING PROJECT VOLUNTEERS NEEDED!

We are keen to set up a Swift Twinning project between a school in Tayside and a school in Africa where the swifts over winter. Do any Tayside schools already have good contacts with a school in Central or Southern Africa that we can build upon? Please get in touch if you would like to be a part of this fantastic new project!

SWIFTS IN BROUGHTY FERRY

Forbes Browne is a member of the Tayside Swift Interest Group. He writes: "My observations have been in the area of central Broughty Ferry - keeping a look-out as I go about my daily business. One new nest was seen in a tenement block in a crack in cement at the apex of the north-facing gable. Another nest hole was spotted just below tiles, again on a north-facing gable.

My first swift sighting in 2012 was on 16th May; the last on 17th August. I regularly saw between one and six birds around the central area of the town, with screaming parties of between six and ten, usually in the early evening. Swifts also congregate to feed near the harbour, usually between 9pm and 10.30pm. Numbers were similar to previous years, though possibly slightly down. There were reports of 40+ swifts having been counted in the east Broughty Ferry/ Monifieth area."

ATTRACTING SWIFTS TO TULLOCH

Last year Perth & Kinross Council gave permission to erect swift nesting boxes on local authority flats around Tulloch Square, Perth. All the tenants were consulted and a mechanical "cherry picker" used to put the boxes under the eaves. Swifts have yet to use them, but they can take some years to do so. Certainly, a few pairs of swifts were seen in and around Tulloch last summer. The tenants have shown much interest in the project and thanks are due to them, the Council, Scottish Natural Heritage (for the funding), Tulloch NET and to EDF Garden Designs for performing an unusual task promptly and efficiently.

Swifts *by Angus Martin*
From 'The Silent Hollow', published 2005

That evening back in young men's time
As we lay out on the summit grasses
And watched another sunset scorch
The soaring vastness beyond Islay

A rush of swifts came hunting
Sleek with unconscious power
Round and round our cooling languor
And we mean less to them

Than the palest flitting moth
As they swept the windless summit
Performing uncomplainingly
Hawks' work for swallows' wages.

WORKING WITH HILLCREST HOUSING ASSOCIATION

The Tayside Swift Interest Group continues to work with Hillcrest Housing who, last year, donated funds to buy six woodcrete swift nest boxes. In addition, HHA's Toolkit trainees made ten plywood nest boxes. Approximately 250 people participated in events surrounding the installation of these nestboxes which were gifted to the following schools and businesses: Rattray, Coupar Angus and Auchtergaven Primary Schools; Westbank Nursery, Perth; Caledonian Housing Association complex, Birnam; Stanley's Village Hall and Tayside Hotel; Stormont Arms, Blairgowrie; Meigle's Westfield Organics; Co-op Rosemount Farm; and the Old Merket Buildings, Alyth.

(from left: Rattray PS, Coupar Angus PS and Tayside Hotel, Stanley) *© Perth & Kinross Ranger Service*

THE BERLIN COMMON SWIFT SEMINAR

With financial support from Hillcrest Housing Association, Perth and Kinross Council and the Tayside Biodiversity Partnership, Daniele Muir, co-leader of the Partnership's Tayside Swift Interest Group, joined seventy five other delegates at this ground-breaking seminar in Berlin. Speakers came from all across the northern hemisphere: Northern Ireland, Sweden, Turkey, Russia and China – there was a very wide representation of knowledge and experience. Topics included 'The migration of common swifts tracked by geo-locators', 'Will the common swift survive in Slovakia?', 'Swifts and insulation – the challenge', 'What is the minimum practical size for a swift entrance hole?' and 'Results of seven years' nest monitoring with cameras in the Netherlands'. Full summaries of the lectures are available online: http://www.commonswift.org/4951Tigges&Mayer.html.

Daniele's supply of 'Swifts in Tayside' and the Tayside Swift Survey leaflet were all quickly taken up by delegates. A lot of the information gained from the event has subsequently been used in guided walks and talks to community groups and schools throughout Perth & Kinross, and in advising groups on swift nestbox locations. A method to map screaming parties of swifts by using text messaging – successfully used by a conservation group in Israel – is going to be trialed in Tayside. This should hopefully result in additional data for planners to create more detailed Swift Priority Zones.

Seminar delegates © D Muir

SWIFTS IN GLENDEVON

Andrew Rodger reports: "The 2012 swift season began with feelings of optimism - the fabulous weather at the end of March was not a distant memory. Even at the end of May, the weather was warm and sunny and in the evenings I watched the swifts coming and going, feeding close to the buildings. When the weather turned relentlessly cold, windy and wet, though, sightings became few and far between, suggesting long journeys to feeding opportunities elsewhere.

There was little evidence of much activity at Cloan, near Auchterarder, either, despite a group being seen flying around the buildings in May. Reports from various swift spotters suggested numbers were well down. Migrants will have their ups and downs, but how adaptable can swifts be when faced with more than one bad year? Although our swifts arrived on time, only two pairs seemed to breed successfully up to hatching and beyond, but no evidence was seen of young leaving the nest and the swifts left very early during the last week of July."

ANYONE CAN MAKE A DIFFERENCE

Each year wildlife artist Martin Ridley has improved the facilities for swifts at his house in Comrie – he now offers 11 potential nest sites. He writes: "It is rewarding to know that what I'm doing is making a small but valuable difference. The piercing screams of swifts are for me the most evocative sounds of summer and my quality of life would be diminished if the skies were to fall silent. I hope to have at least six pairs breeding next year and am confident of seeing over 100 fledglings leave the house over the next decade. My swifts will use their nest sites for the rest of their lives, which may be many years - seeing them return each year is a renewal of old acquaintances.

Young swifts spend several years learning where all the swift colonies are located. They are attracted by the screams of

breeding swifts and practice flying up at nest entrances. When they have reached breeding age they explore the same sites, entering where possible, until they find a vacant chamber. Sadly, there are many adult swifts unable to find their own nest sites.

© Martin Ridley

Reduced nest site availability is considered one of the major problems causing the crash in our population of swifts. Modern building methods don't cater for swifts but we can easily share our homes with them if we think about incorporating nest sites into our designs. Renovations or new-build both provide great opportunities to create nest spaces, which would help preserve our swift populations for future generations. I urge anyone with suitable buildings to get advice on how to help swifts. My own techniques are showing promise and I'd be happy to share my ideas - contact art@martinridley.com. Images of the swifts and nestboxes can be found at www.martinridley.com/wildlife-projects/swifts.html

NEWS FROM ELSEWHERE

ARCHITECT-DESIGNED SWIFT NEST SITES, NORTH LANARKSHIRE

In 2001, a small colony of swifts was recorded nesting under the eaves of the gable end of a 4-storey block of 1960s flats. They were possibly within the boxed-in space created by the soffits, and certainly entering via worn holes in the plywood.

When refurbishment of the flats started in 2010, the site was flagged up by a local Countryside Ranger and this lead to the design and installation of replacement swift nest sites involving Concern for Swifts (Scotland) and the Directors of Housing and Design Services. The existing nest sites could not be retained as the soffits were constructed of marine ply and as the nest sites are not exactly in the same place as before, we do not know if the swifts have found them. However, the design won one of the top three 2011 awards in the national Integrated Habitats Design Competition. The design is cheap, easy to replicate and integrated into the building; plans are available on request via the Interest Group.

© Clare Darlaston

THE OLYMPICS IN LONDON

Seventy new Swift nest boxes have been put up on the Olympic Stadium, together with others on the bridges crossing the canals and rivers on the Olympic site. This followed many years of work, starting in 2004, to persuade the Olympic bid team and later the delivery authority of the value of having Swifts as one of the four birds in their Biodiversity Plan (the others were House Sparrow, Black Redstart and Starling). We hope the new owners and users of the site will respect the Swifts' nest boxes, and leave them in place to encourage future generations of birds to nest, and for visitors to revel in their dramatic aerial activity.

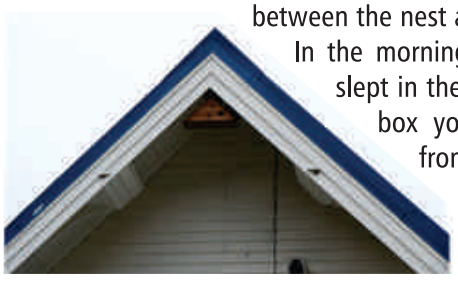
© Edward Mayer - Swift Conservation

NEWS FROM ÅKE JÖNSSON IN ÅBY, SWEDEN

Since the summer of 2001 we have had Swift boxes attached to our home, at first one, later on four. We live 60 miles/100 km south west of Stockholm. From 2003 we have used video cameras connected to our TV to survey the birds. It is wonderful to sit in the garden and watch their elegant flight – often it seems to be a form of joy riding. To study their behaviour in the box adds another dimension. We prefer not to go to bed until all are in for the evening, i.e. at the end of dusk.

When an adult enters and the mate is there, they preen each other and stay close together. Equality is total - both are bringing food to the youngsters. Our birds do not leave for some rainy days and we have not observed any night spent outside the box. They are vigilant in excluding intruders: a hornet is perceived as a major threat so when one suddenly entered the box both the adults attacked and killed it.

One evening in May only one adult had arrived and it was out of the nest. Sometimes it has to wait days for the mate to arrive. Two Great Tits entered the swift's nest, the female methodically arranging the nest, the male nervously strutting back and forth between the nest and the entrance hole. In the morning the lonesome Swift slept in the nest, but all over the box you could see feathers from the Great Tit.



© Åke Jönsson

WHAT CAN I DO?

Whether an architect, builder or householder, there are plenty of opportunities to save existing nest sites and create new ones. There are potential swift nest sites on nearly every building. The aim of swift solutions must be: simple, as nearly cost-free as possible, repeatable, sustainable, appropriate, and unobtrusive. With a 62% decline in the swift population in just the last decade, there is a serious amount of work to do to turn this situation around. Can you recommend a school or church as being a suitable nest site - or could you incorporate new nest sites into a new-build or property renovation? Every action counts!

"Act from thought should swiftly follow, or what is thinking for" wrote W.H. Auden, aptly. There is a lot of advice available from www.swift-conservation.org and www.concernforswifts.com. Externally-fitted nestboxes should be a last option, but both websites have plenty of advice about how to make such a box.

INFORMATION FOR DEVELOPERS & CONTRACTORS

The Nature Conservation (Scotland) Act 2004 makes it an offence to intentionally or recklessly take, damage or destroy or otherwise interfere with the nest of any wild bird while it is in use, or to obstruct or prevent any wild bird from using its nest. This law applies to all birds and so may affect building demolition, repair and renovation when carried out during the nesting season. It is not only the work itself however, but also to the erection of scaffolding if this stops a bird from getting to its nest.

Ignorance of the law is not a defence and it is the responsibility of owners, factors and contractors to ascertain that no birds will be disturbed when works are carried out during the nesting season.

Swifts nest inside the fabric of a building and gain access via small holes. They tend to nest around the wallhead, or under tiles in the roof but may choose any convenient hole high up on a building. They come and go from the nest at speed, and need a clear flight path to the entrance, hence the need to consider scaffolding placements.

If working between May and mid-August, you should (a) check if there are records of swift nest sites in the area (see the Contact list for Perth & Kinross and Angus on the back page); (b) check for the presence of calling swifts around the building/s; (c) be prepared to programme works to avoid disturbing or obstructing swift nest sites. If in doubt contact Concern for Swifts (Scotland) or the RSPB.

If there are known swift nest sites it is permissible to block off the entrances before the arrival of the birds in May. Retaining these nest sites should always be a priority. If this is totally impossible, then new nest sites should be created to replace them. With sufficient forward planning it is usually possible to complete work without unnecessary delay.

You can also download this information from
http://www.taysidebiodiversity.co.uk/Projects/Swifts/PDFs/Swift_Information_Developers.pdf

WELCOMING SWIFTS – ONE ENTHUSIAST'S EXPERIENCE

As we have seen earlier, Martin Ridley's swift obsession began when he moved to Comrie and discovered a swift nest on his house. He unblocked some holes under the eaves to offer more nesting opportunities and since then has documented his experience:

"2005: One brood fledged - major renovations on the house lasted 11 months and the swifts continued with their nesting as usual. During the course of the construction we incorporated some bird-friendly features into the fabric of the building that we in turn could take pleasure from observing in future years. Home-crafted concrete bricks provided entrance tunnels through the exterior wall, allowing access to the roof space for two swift nest boxes.

2006: One brood fledged - in June juvenile swifts started flying up to the gable end of the house looking for entrances into the building; a CD of swift calls seemed to have attracted their attention. By the end of the season the swifts had still not entered

any holes - they are notoriously poor at finding new nesting locations. As they were exploring along the slate line, I added a mock-gutter placed level with the top of the holes to give them something to explore.

2007: Two pairs, one brood fledged - the gutter above the nest holes gave the prospecting birds something to aim at and on 3rd June a pair of swifts found the entrance hole and occupied the nest chamber. They were too late to breed and were probably young birds. Immature birds normally just occupy a nest site and build their pair bond ready to breed the following year.

Overall, that year was a dire one for swifts: nationally they raised only about a half of their usual number of fledglings. The very wet weather was poor for insects and therefore a poor season for swifts which feed exclusively by trawling for insects on the wing. At the beginning of August two swift chicks bailed out of their nests prematurely, probably because the parents could not bring sufficient food.

One bird was still alive, so with advice from the internet I attempted to hand-rear the bird. It weighed 26g and was about 25 days old; it should have weighed double. However, Swift chicks have a rare capability that allows them to recover from extreme weight loss. The first night I fed the chick every hour and a half, giving very small feeds of some fishing maggots. If you can imagine me catching flies by every means possible you get a picture of my preoccupation over the next couple of days until a postal delivery of live house crickets and wax moth larvae provided a more reliable food supply.

The chick was kept in a plastic storage box in a warm, quiet room. A raised area was created within the box to keep the swift's wing tips off the floor. The box was lined with a towel and layers of kitchen roll to dry out wet droppings before they contaminated the bird's feathers. This bedding was changed as soon as it was soiled.

All feeding was force fed. The swift watched food items but made no attempt to take them itself. To begin with the chick was so weak it barely summoned the strength to swallow. A week later and it was readily taking 6 good sized crickets and other items in one feed. The problem was that the swift had been out of the nest with no food for several days before I collected it. Time was running out! Young swifts need to reach a peak body weight of about 52g at about 25 days. My chick was half that. From 30 days old swift chicks gradually lose weight, until they reach a flight weight of about 43g, but they need that earlier weight as an energy reserve so that they can exercise and get their flight muscles in peak condition for their all important maiden flight. During their final week in the nest chamber their interest in food takes second place as exercising becomes their main drive. My poor chick was fed relentlessly; after 11 days it weighed 44g. Two days later it was a very lively 37g. Besides regular weighing I had also measured the length of the swift's primary feathers. Normally swifts fledge in the range 160 – 171mm. On the fifteenth day our swift was looking ready to go with a wing length of 162mm - another day in captivity and it would probably have been dangerously underweight.

Advice suggested the swift would only leave if it was ready: it should make the decision. We checked the weather for a favourable forecast: there was a tail wind all the way to France and settled warm conditions for several days ahead. Our intention was to use a ladder to offer an elevated takeoff platform, but on the way to the field I placed the swift on a rug laid on the lawn in order to take a final photo. The swift calmly looked around and confidently made a vertical takeoff. Only a fit adult bird is supposed to be able to take off from the ground so it was an impressive achievement!

2008: Two nesting pairs - I rigged up cameras in the nest chambers via the loft. Since installation the cameras have provided fascinating insights into the lives of swifts. I can watch live progress on the computer, take still photos to record stages of development and video clips of noteworthy behaviour. Observing the whole rearing process has been fascinating and brought my admiration of this iconic bird to a higher level. Towards the end of their time in the chamber they determinedly exercise their flight muscles doing what I can only describe as press-ups. Their maiden flight has to be perfect as there is no second chance - once they leave the nest they will not land again for several years. Totally self-sufficient, their lives are an air-bourne existence until they are mature enough to breed.

2009 – 2011 Three pairs fledged each year

2010: Hand-reared another swift - releasing a swift that you've just spent three weeks hand-rearing and then finally watching it circle away to a tiny speck in a blue sky is a moving experience. Rearing a swift chick is a specialist task and a real commitment of time. It is a purely compassionate act; it is not a practical thing to do because you could do so much more for swifts with that time, such as creating nest sites, any one of which could generate over a hundred fledged chicks in the future.

© Martin Ridley

2012 Six pairs, Five broods fledged - significantly, the colony at the house jumped from three occupied nest sites to six. There were four occupied nests across the wall of my studio; two nest boxes are even inside the workspace just above the window. Standing at my easel painting I can hear the swifts shuffling around in their nestbox, which is only a couple of feet from my head.

Neighbouring houses have two additional nests so that the colony has sixteen adults with nests, plus an extra half a dozen birds prospecting. The summer skies in Comrie are now busy with swifts."

TOWER FOR SWIFTS

During 2011 the Birds Protection Society in Warsaw (STOP) announced a competition to design a nesting place for swifts, a so called "Tower for swifts". The President of Warsaw, Hanna Gronkiewicz-Waltz, took honorary patronage over the competition. It is hoped the tower will engage urban communities of all ages as many people have had few, if any, opportunities to interact with wildlife or become directly involved with their conservation.

A design by menthol architects was selected to encourage swifts to nest and eat the local mosquitoes and black flies which are a nuisance to the residents. In the past, Warsaw spent huge amounts of public money on mosquito spraying, the effects of which lasted for only a few weeks, but affected the environment with chemicals toxic to both people and wildlife.

The first tower in Poland was erected at the end of 2012. Its design will protect the nest boxes from overheating and rain, it will be durable and resistant to vandalism. The excavated earth from the foundations has been used on site to form landscaped slopes covered with grass and other plants.

Ninety nesting boxes made of 12mm thick plywood have been placed in especially prepared cascading racks which enable easy access to each of them and the possibility of replacement by sliding off the "drawer". The entry hole dimensions are 65 x 35mm oval and are differently positioned in relation to each chamber.

The overall tower design allows for the installation of an information board about the swifts and solar photovoltaic panels supplying 'clean' energy. This electricity will be used to power the playing of swift attraction calls, as well as providing four LED strip lights and installed cameras. Illuminated towers at dusk along walking routes and through public parks is an attractive solution, promoting swift protection even during their absence in the autumn and winter and acting as a functional year-round sculpture for all to enjoy.

Ewa Podolska, radio broadcaster from Poland Radio TOKFM, said "through the media, the tower has already begun its most important role: promotion of swift protection and education. An intriguing structure attracts media attention and the public, and draws attention to the problems of swifts, to the fact that they are at risk, although they are very useful to us. I hope that thanks to the tower not only 100 pairs of swifts will gain a safe haven, but that the tower will encourage people to help swifts and to protect them in buildings where they nest."

Considering that the oldest known ringed swift was 21 years old and the fact that they are loyal to their nest sites, generations of urban swifts should be able to populate these towers in the future. Only time will tell, but who else in Europe will be so forward thinking to plan ahead with something similar to help our dwindling swift population?

All Photographs © menthol architects

ACTION TO HALT DECLINE IN SWIFTS

John S Wilson has prepared a comprehensive report on the status of swifts in Scotland which can be downloaded via the Swift section of www.taysidebiodiversity.co.uk. The report is a development of earlier work which was published in Ecologia Urbana during 2011. John acknowledges the work undertaken over the past twenty years by Concern for Swifts Scotland and the inclusion of swift conservation measures in the Scottish Government's Planning Advice Note No. 60 published in 2000. He then highlights illustrated case studies from all over Scotland - with a section on Tayside.

John's conclusions make interesting reading. He points out that intentions enshrined in policy have led to impressive action in some parts of Scotland, but with greater knowledge and resources it would have been possible to achieve more. Although favourable responses are evident from both organisations and the public, indifference and lack of knowledge persists. Incorrectly-installed swift bricks or nestboxes have hampered positive action in some cases, and there is a lack of monitoring which needs to be addressed.

Action in urban areas to improve or create areas of greenspace will potentially benefit swifts with an increase in insect life. However, it is becoming increasingly evident that creation of alternative swift nest sites to replace those destroyed is rarely successful in saving a local colony unless the nest sites are in exactly the same location and position as the pre-existing sites. We still have much work to do to improve the fate of these wonderfully charismatic birds.

Tayside Swifts Contacts

Find out the latest news on our Facebook page – www.facebook.com/taysideswifts

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

E-mail us -

- in Perth & Kinross - taysideswifts@yahoo.co.uk (Tayside Swift Interest Group - P&K) / DWilliamson@pkc.gov.uk (Planning issues regarding Swifts)

- in Angus - BorlandC@angus.gov.uk (Tayside Swift Interest Group - Angus) / caglloyd@pkc.gov.uk (Planning issues regarding Swifts)

Tayside Biodiversity Partnership E-mail caglloyd@pkc.gov.uk / Tel 01738 475373

Also: Concern for Swifts (Scotland) Tel. 07900 637452/ swiftscot@yahoo.co.uk

Tayside Biodiversity Partnership
BIODIVERSITY
THE VARIETY OF LIFE

2011-2020
United Nations Decade on Biodiversity

Hillcrest
HOUSING ASSOCIATION LTD

Thanks to the following corporate partners: Hillcrest Housing Association for their past and current support; Tayside Hotel for contributing towards the rental of a cherry picker; Myreside Organics for displaying the swift banners at farmers markets in Angus and Perthshire. **If any businesses are keen to become corporate partners, please contact us.**

Newsletter compiled and edited by Catherine Lloyd and Daniele Muir with contributions by Barry Caudwell, Clare Darlaston, Andrew Rodger, Martin Ridley, Richard Higginbottom, Forbes Browne, Angus Martin, Edward Mayer, Åke Jönsson, John S. Wilson, menthol architects, Daniele Muir and Catherine Lloyd

Tayside Biodiversity Partnership, c/o Perth & Kinross Council, Pullar House, 35 Kinnoull Street, Perth, PH1 5GD
Tel. 01738 475373; E-mail: caglloyd@pkc.gov.uk

Published by the Tayside Biodiversity Partnership - April 2013