

Tullow Swift Survey 2022

December 2022



A Tullow Tidy Towns Survey

Supported with funding from Carlow County Council Environmental Department.

Report by Pádraig Webb

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Figure 1.

**A swift
getting a
drink while
flying.**

1. Summary

- The swift survey of Tullow town identified a total of 26 nesting pairs.
- A total of 9 different structures/buildings were found to house swifts.
- Scoil Phádraig Naofa was found to contain the most nest sites per single structure with 9 nests.
- The highest number of swifts observed at any one time was 60 birds over Páirc Mhuire residential area.



Figure 2. A party of screeching swifts “bangers”.



Figure 3. Swift exiting nest site from behind timber fascia as another bird passes by.
(image from Carlow Youth Centre).

2. Swifts – An Introduction

Biology/Ecology

Swifts, scientific name *Apus apus*, Irish name gabhlán gaoithe, are summer migrants which come to Ireland each year to nest and breed. Arriving in late April/ early May, they are with us until August when they begin their return journey to Africa, wintering south of the Sahara. They are aerial insectivores which feed on insects as they fly. Swifts are uniquely adapted to soaring gliding flight with sickle shaped wings. Swifts lives are spent cruising the skies, unique among all of Ireland's birds they can sleep on the wing and do so for the duration of their time away from Ireland, only coming to rest for the purposes of nesting. Swifts are long-lived birds (up to 20 years). They are site faithful with regards to their chosen nest sites and being social, prefer to nest in communal groups.

Swifts depend on manmade structures, buildings etc. to provide a suitable secure nest space where they can raise their young in safety. They tend to nest in older buildings with established nooks and crannies suited to nesting. Historically our older buildings were able to cater for swifts, their architectural design providing ample nesting opportunities/niches for the birds. Nowadays with increased emphasis on air tightness and modern building design, as well as the demolition and renovation of older builds, swifts are finding it increasingly difficult to find suitable nest sites to breed.

The loss of available nest sites due to renovations of old buildings and modern building techniques restricting the availability of nest cavities are both believed to be significant contributory factors to this observed decline.

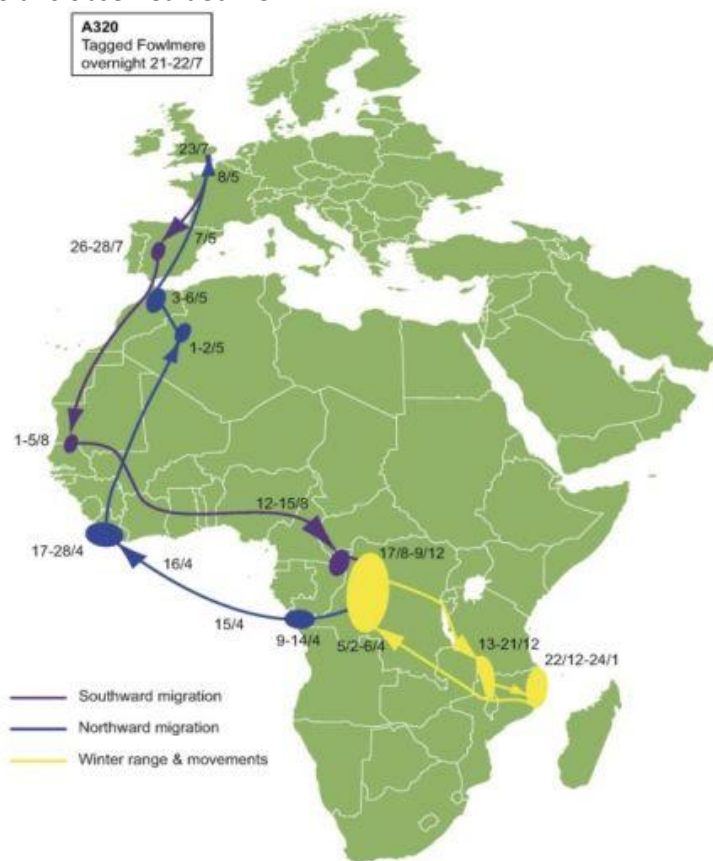


Figure 4.

Example of swift migration route from the British Trust of Ornithology (BTO, 2022). Birds fly to central and southern Africa to winter.

Fun Swift Facts

Did you know swifts never stop flying once they leave Ireland until they return again to nest!

Swifts sleep on the wing at night when not nesting rising to heights of over a kilometre in what are known as twilight ascents!

Conservation Status

The Countryside Bird Survey (CBS) monitors trends in relative abundance of birds in Ireland and in the 20 years to 2008 since the commencement of the survey, swifts were found to have experienced the greatest declines in numbers among the species monitored (Crowe et al., 2010). This worrying decline in swifts was noted in the 1970s and has continued through the CBS monitoring period (Crowe et al., 2014). Swift populations continue to decline, this decline being among the greatest of all species monitored (Crowe et al., 2017) and within the top three experiencing the largest declines (Lewis et al., 2019).

The CBS data has shown a 57% decline in their breeding population over 18 years, with similar losses in breeding distribution of almost 53% since 1972 (Lewis et al., 2019).

Evidently the swift is a steadily declining species. Species such as swifts with long term steady declines are of greater concern than species that can bounce back from severe winter weather for example (Lewis et al., 2020). Among our summer migrants the CBS data shows contrasting trends between aerial insectivores, the swift being the only declining species. While those such as house martin are increasing and both swallow and sand martin numbers remain stable (all recorded during surveys in Tullow) (Lewis et al., 2020).

Ireland publishes a list of Birds of Conservation Concern (BOCCI) every 6 years detailing the threat status of regularly occurring species across the island. In the initial assessment swifts were Green-listed and then subsequently Amber-listed in the following two assessments. Following the repeated observed moderate declines (Lewis et al., 2020) as outlined above swifts are now Red-listed Birds of Conservation Concern in Ireland (Gilbert, Stanbury & Lewis, 2021). Swifts are also listed on the European Red List of Birds as Near Threatened due to declining populations in Europe (BirdLife International, 2021).

Fun Swift Facts

Swifts are the fastest flying birds in the world!

Swifts eat, drink, sleep, preen, and even mate while flying!

Swifts may go 2-3 years without ever landing before settling to nest!

Irish swifts can fly to France and back to get food for their chicks when feeding conditions here are bad!

Table 1: Conservation Status of the Common Swift (*Apus apus*) in Ireland as determined by each Birds of Conservation Concern Assessment.

Assessment	BOCCI1	BOCCI2	BOCCI3	BOCCI4
Period Covered	2000-2007	2008-2013	2014-2019	2020-2026
Status	Green List	Amber List	Amber List	Red List
Citation	Newton <i>et al.</i> , 1999	Lynas, Newton & Robinson, 2007	Colhoun & Cummins, 2013	Gilbert, Stanbury & Lewis, 2021

Birds of Conservation Concern in Ireland 2020-2026

Red-list species (high conservation concern)

Breeding Quail Grey Partridge Red Grouse Black-necked Grebe Stock Dove Nightjar Swift Corncrake Leach's Storm-petrel Woodcock Red-necked Phalarope Kittiwake Puffin Razorbill Barn Owl Golden Eagle White-tailed Eagle Red Kite Kestrel Wood Warbler	Breeding continued Ring Ouzel Common Redstart Whinchat Meadow Pipit Grey Wagtail Twite Yellowhammer Passage Turtle Dove Balearic Shearwater Curlew Sandpiper Wintering Bewick's Swan Long-tailed Duck Velvet Scoter Goldeneye Scaup Slavonian Grebe	Wintering continued Grey Plover Bar-tailed Godwit Black-tailed Godwit Knot Purple Sandpiper Snowy Owl Redwing Breeding and Wintering Eider Common Scoter Pochard Shoveler Oystercatcher Golden Plover Lapwing Curlew Dunlin Snipe Redshank
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**giving
nature
a home**



BirdWatch Ireland
protecting birds and biodiversity

For more information, please see Gilbert G, Stanbury A and Lewis L (2021), "Birds of Conservation Concern in Ireland 2020 –2026". Irish Birds 9: 523–544

The categorisation of species as breeding, wintering etc. refers to the populations against which BoCCI criteria were applied



Figure 5. Swift entering nest site to behind fascia boards (image from Carlow Youth Centre).

3. Rationale for Study

The aim of the study was to survey the buildings in central Tullow to locate existing swift nest sites. This survey was commissioned by the DTA Tullow Tidy Towns and Climate Action Committee to gain baseline knowledge on the whereabouts, distribution and abundance of nesting swifts in Tullow town, Co. Carlow. The survey specifically aimed to record the location and presence of nesting birds in Tullow. This information will help inform future plans for swift conservation and identifies the priority areas needing protection to maintain swifts as a breeding species within the town. In addition a number of management recommendations are included.

As swifts rely on our buildings for breeding they are vulnerable to loss of nest sites. The birds are site faithful returning to the same cavity year after year. Therefore any change to the external fabric or structure of a building housing swifts could lead to the loss of nest sites due to exclusion from the nest entrance. This can happen when buildings are repointed or when fascia, soffit and/or guttering are upgraded for example. Thus knowing where swifts are nesting and pinpointing the exact nest entrance will enable better informed decisions to be made around swift conservation in Tullow.

The Swift Project will have three phases.

Phase 1 involves the baseline survey of swift nest sites in Tullow town. This will provide data on the whereabouts of swift nests and an indication of the breeding population within the town.

Phase 2 will involve a nest box project which will supplement the existing nest sites and provide an educational basis to promoting awareness of swifts in Tullow and help further swift conservation in the town.

Phase 3 of the swift project will be a resurvey of Tullow town including any nest boxes. This phase will identify nest box uptake and help ascertain the status of the swift population.

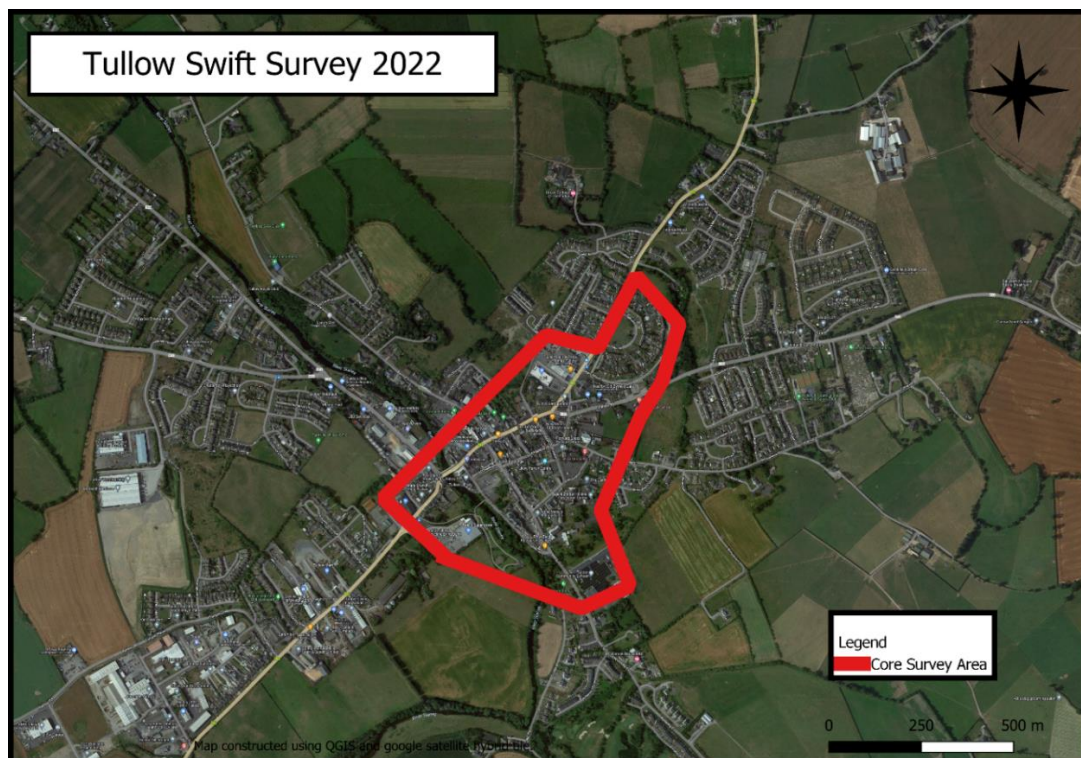


Figure 6. Map showing Tullow Swift Survey 2022 core survey area.

4. Methodolgy

Phase 1 – Swift Survey

The central core area of Tullow town corresponding with the area outlined in Figure 3 was identified as the primary swift survey location. This part of the town contains the most historic, prominent and oldest buildings. These are the most likely places to find nesting swifts.

Survey work was carried out throughout the month of July and into the beginning of August 2022. Surveys were conducted at peak swift activity times on warm sunny evenings after 7pm until dark. An initial walkover of the town was conducted on foot to identify areas of swift activity and suitable structures for nesting swifts. Surveys involved watching these buildings identified as suitable for swifts from a stationary position to ascertain where birds were entering nest sites. Swifts only land on buildings to nest and where birds were observed entering cavities these were determined to be nest sites. Details of the nest locations were then taken to include; a picture of the building with the nest site indicated by an arrow, a description of the exact nest site entry point in relation to the picture taken, the number of nests present, the type of building and nest entrance aspect/orientation. The location of the nest sites were plotted on a map of the survey area.

Nest records were submitted to the National Biodiversity Data Centre (NBDC), a central repository for data on all of Ireland's biodiversity. These records were submitted through the dedicated swift portal and will form part of the increasing database on sites important for swifts across Ireland.

National Biodiversity Data Centre
A Heritage Council Programme

About us | Contact us | Mailing list | Facebook | Twitter

Android App | iPhone App | Latest news | Sign out

Home | Start Recording | Recorder League | County League | Species Stats | View My Records | Compare Years

Swifts

Sample details

Recorder name:

Recorder email:

Record date:

County:

Location name:

Spatial reference:

[Click on map to generate spatial reference.](#)

Observation details

Species name:

Species picture: No file chosen

Type of sighting:

No. of Birds Flying:

No. of occupied nests:

Name of Building:

e.g. St. Anne's Church

Is Building protected?:

Nest site report: No file chosen

[Click for more info on protected buildings](#)

[PDF file \(max size 2mb\)](#) [Click for guidelines](#)

Click map for grid reference

Map showing Tullow town and surrounding areas. Legend: Terrain, Satellite, OSI, Counties.

Powered by Esri | Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS U.

Figure 7. Dedicated Swift record portal on NBDC (NBDC, 2022).

5. Results

Location 1: Former Monastery Merchants, (Old Chapel Lane Building) (4 nests)

Reference = 52.801836, -6.733578

Orientation: Southwest

Description of nest sites.

1. At gap under roof at the very left corner (on western side).
2. To the left of the first window from left at point where gutter bracket meets roof space.
3. To the right of the second gutter bracket right of second window from left in roof space.
4. Above third window from left in roof space under tiles.



Figure 8.

Location 2: Saint Columba's National School, N81 (3 nests)

Reference = 52.804200, -6.732608 Orientation: Northwest

Description of nest sites.

1. The corner on the right looking at the front of the building. In the gap between the timbers above the granite top of the wall.
2. The corner on the left looking at the front of the original building between the wide gap of timbers above the granite top of the wall.
3. Above the right side of the left window on middle section of newer build in the gap between the top of the granite wall and the soffit above.



Figure 9.



Figure 10.

Location 3: Wards Fruit and Veg, Market Square, N81 (1 nest)

Reference = 52.803018, -6.735615 Orientation: Northwest

Description of nest site.

1. To left of downpipe at very right hand corner of Wards shop in gap behind guttering above the top of the wall.



Figure 11.

Location 4: P.J. Duffy, Mill Street, The Square (1 nest)

Reference = 52.802276, -6.735952 Orientation: Southwest

Description of nest site.

1. In the hole above the middle window behind/underneath the gutter and above the top of the wall.



Figure 12.

Location 5: Brigidine Convent (2 nests)

Reference = 52.800948, -6.733555 Orientation: West

Description of nest sites.

1. At downpipe left of second window from right behind guttering at top of wall.
2. At downpipe left of fourth window from right behind guttering at top of wall.



Figure 13.

Location 6: Scoil Phádraig Naofa, Station Road (9 nests)

Reference = 52.803250, -6.732492 Orientation: South

Description of nest sites.

Nest sites as indicated by arrows in pictures. The nine nests are located along the point where the roof meets the guttering. Birds are entering above the gutter and into the roof space under the ridge tiles.



Figure 14.



Figure 15.

Location 7: Cobblers Corner, Old Chapel Lane (2 nests)

Reference = 52.802520, -6.734710 Orientation: Southeast

Description of nest sites.

1. To left of window at top of wall in gap between here and soffit.
2. To right of window at top of wall in gap between here and soffit.



Figure 16.

Location 8: Páirc Mhuire (2 nests)

Reference = 52.804435, -6.731226

Orientation: South

Description of nest sites.

1. In the upper hole on front left corner of house below the slates on the side of the roof.
2. In the hole under the 4th slate up from the gutter at front left edge of house.



Figure 17.

Location 9: Páirc Mhuire (2 nests)

Reference = 52.804900, -6.730912

Orientation: Southeast

Description of nest sites.

1. Back of house above the gutter under the slate at very left corner.
2. Back of house above the gutter under the slate where downpipe is falling away and two houses meet.



Figure 18.

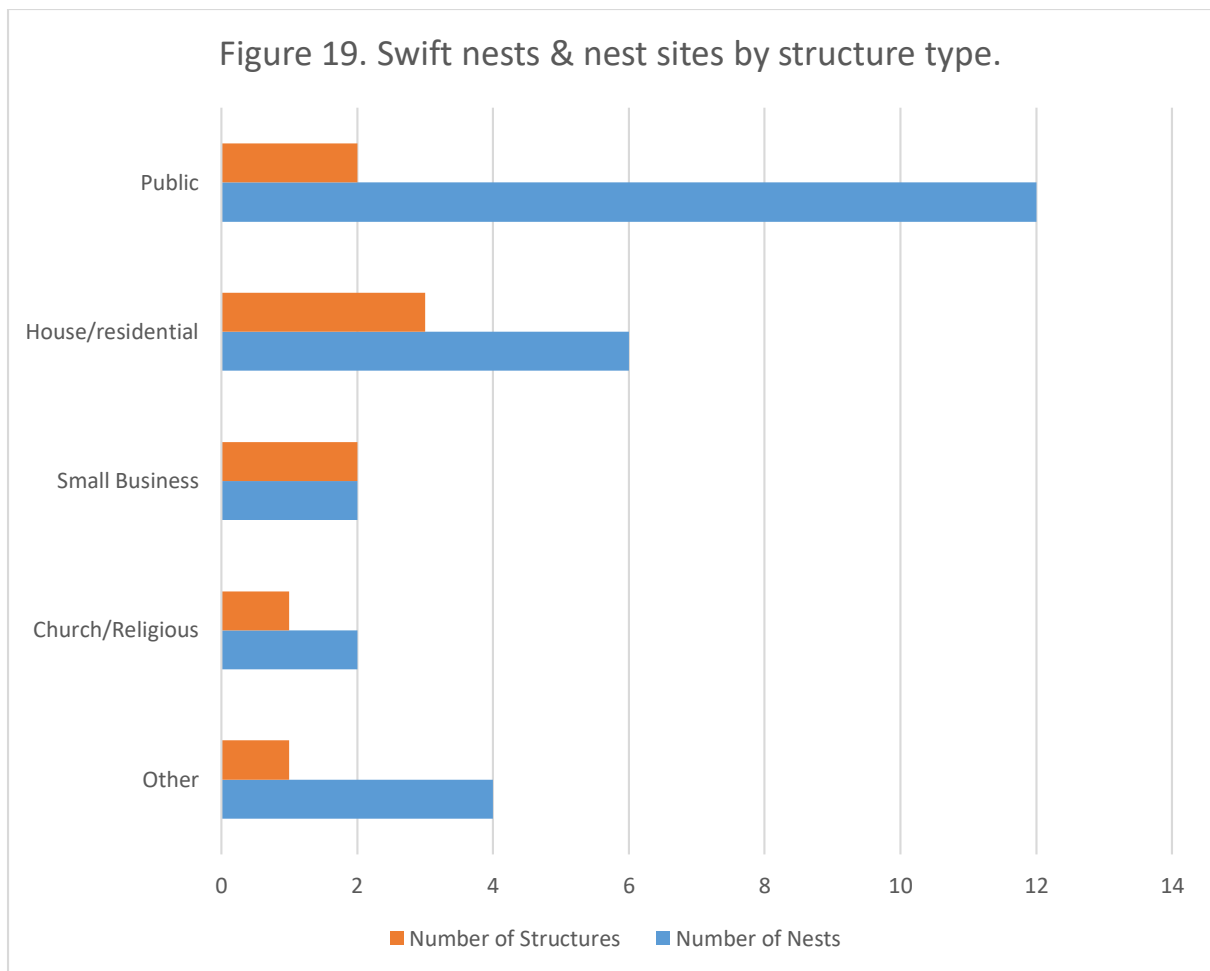


Figure 20. Swift in flight above water.

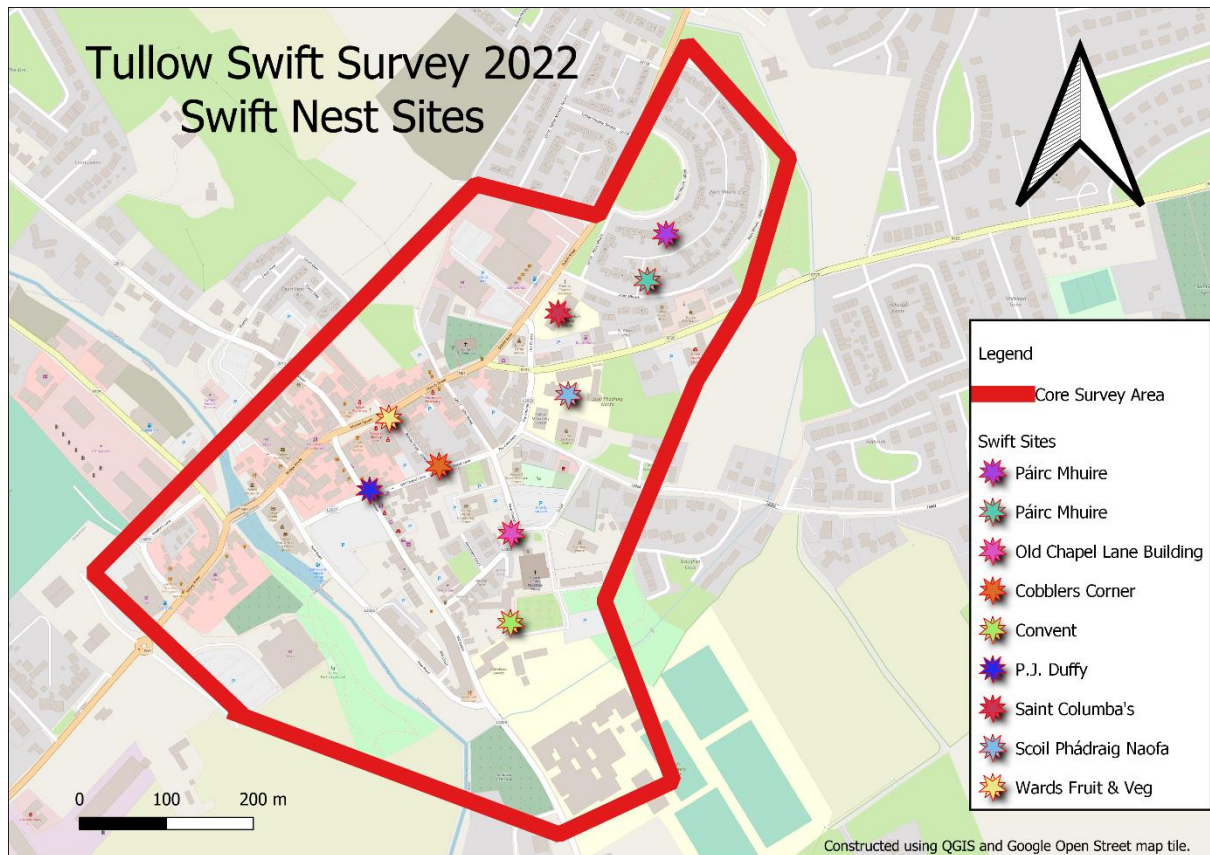


Figure 21. Map showing location of nesting swifts in Tullow.

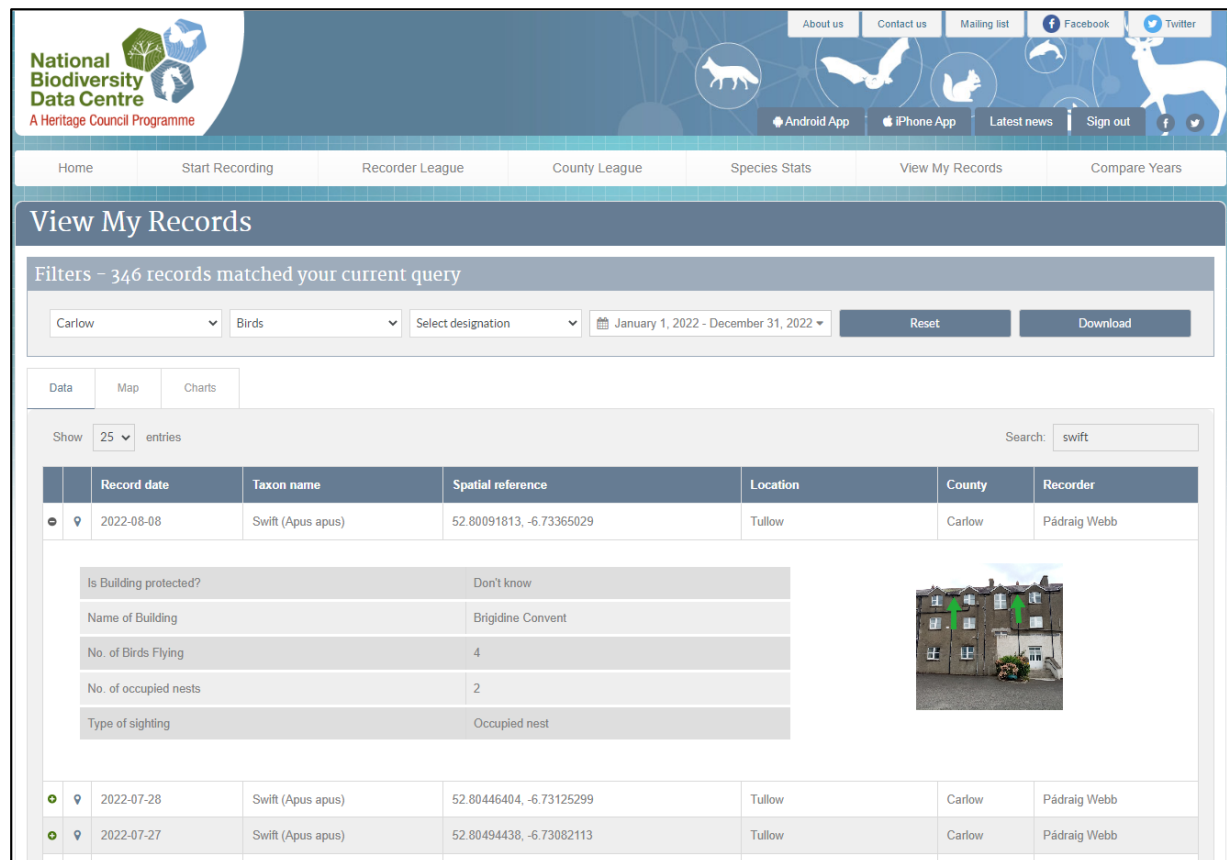


Figure 22. Swift records submitted on NBDC portal (NBDC, 2022).

6. Discussion

The 2022 survey of swift nesting sites in Tullow identified a total of 26 nest entrances across 9 buildings indicating the presence of at least 26 nesting pairs. When we look at the number of nests per structure type, we see that there is a high dependency on public buildings followed by residential properties (Figure 15). Scoil Phádraig Naofa was found to contain the most nest sites per single structure with 9 nests, over a third of the total nests found. As expected most of the swift nests were in close proximity to other pairs of nesting swifts indicating the colonial nature of their breeding habits. Interestingly though, two sites contained just one nest each, Wards Fruit and Veg and P.J. Duffy shop. The highest number of swifts observed at any one time was 60 birds over Páirc Mhuire residential area. This count would include both breeding and non-breeding birds, the young immature swifts that return for the summer and prospect for nest sites being among the existing pairs.

Swift nests were distributed throughout the core area (Figure 16). There was some variation in the type of nest site entry point the swifts have chosen with most birds entering the roof space of buildings at the top of the wall where it meets the roof under either soffit or fascia and behind the guttering. Birds were also observed entering holes in the roof spaces and under roof tiles where one below had slipped. Another interesting way of entering nest sites known from other locations in Ireland was observed by the birds at Scoil Phádraig Naofa. Here the birds enter the roof space by landing in the gutter before crawling up under the ridge tiles to the roof space inside.

The phenomenon of twilight ascents whereby non-breeding swifts fly higher and higher into the night sky to roost on the wing for the night was observed on a couple of occasions. These young birds would not have had a nest to go to in Tullow at night and instead climb higher into the sky to spend each night aloft.

Other bird species also encountered during the survey included swallows and house martins, summer visitors, which also depend on our dwellings for nest sites. Sand martins were observed flying over the town likely attracted by the River Slaney. Rooks, jackdaws, hooded crows, ravens, house sparrows, woodpigeons and starlings were observed using Tullow town too. Of note was the presence of a communal pied wagtail roost in Market Square where the birds are using the trees here as roosting sites.

Going forward

Additional locations outside the core town centre area were identified as harbouring swift activity indicative of nesting activity. These include areas where swifts were observed over the season and areas where bangers/screamers were seen to fly low by at buildings (which is indicative of nesting swifts). It is likely that these mainly residential sites contain nesting swifts and additional surveying of these sites and those already known to be harbouring nesting swifts should lead to the discovery of new nests.

7. Recommendations

The Tullow 2022 Swift Survey successfully identified and mapped swift nest sites within the town. The survey gives an overview of the type of structures swifts have chosen to nest in and the distribution of nests within the town. Arising from the survey the following recommendations are included.

1. Make the findings of the report available for the protection of swift nest sites in Tullow. The local council should be informed of nest locations to enable planners and architects to better plan developments with regard to swifts in Tullow and protect existing nest sites.
2. Organise a swift themed walk during the summer in Tullow to help raise awareness of the project and swift conservation.
3. Engage with the schools in the town on the swift project and swift conservation initiatives such as nest box projects, education and awareness raising, especially Scoil Phádraig Naofa and Saint Columba's.
4. Incorporate the use of swift bricks into any new public/community developments where possible, such as a school extension for example. This can be done by approaching schools at the construction stage or through submissions made during the ordinary planning process. The recommended nest box for inclusion in build in projects is the Woodstone Swift Nest Box Deep.
5. Erect swift boxes as per nest box plan (see below).
6. Carry out a follow on survey outwith the core survey area to cover the whole of Tullow town in either 2023/24.
7. Conduct a complete resurvey of the swift population in Tullow within the next 5 years.



Figure 23. Schwegler 17A triple cavity swift nest box (Schwegler, 2014).

8. Nest Box Plan

As mentioned previously, swifts are colonial nesters nesting in groups with pairs forming small colonies. Therefore when putting up nest boxes it is recommended to have multiple boxes rather than single isolated ones. Nest boxes come in many forms and those for swifts are specially designed to cater for their specific needs when breeding, especially the dimensions and hole size.

Designs

Boxes can be made from wood to the “Zeist” nest box design or out of more durable materials such as woodcrete and magnesium oxide board. These boxes all have a standard size and specifications for swifts. Boxes come as single units or double or triple units, the double and triples accommodating two and three pairs of swifts respectively. Exact details are available from manufacturers and additional information is available from Swift Conservation Ireland (SCI) and the Heritage Council and BirdWatch Ireland’s publication - Saving Swifts (<https://birdwatchireland.ie/app/uploads/2019/10/Saving-Swifts-Guide-pdf.pdf>).

Important - Boxes should have a hole size with dimensions of 28mmx60mm to allow for entry of swifts and the exclusion of starlings which will take over the sites if the holes are any larger.

Recommended Boxes

- The primary recommended boxes for use in Tullow are the widely used and successful **Schwegler 17A** swift box models. These high quality boxes come with a 25 year guarantee and are available from SCI or direct from Schwegler manufacturers in Germany. They have been used widely in Co. Mayo with much success and most notably at the GMIT (now ATU) nest box project.
- The secondary recommended boxes for use are the **Genesis nest boxes**. These are available from Genesis Nest Boxes in Killarney and are made in Ireland.

Both of these types of boxes can be used in conjunction with a video camera system to get footage of swifts at the nest which can be a useful educational tool. Both have the correct entrance size and internal dimensions. **Note** a licence is required from NPWS to record swifts at the nest.



Figure 24.
Example of Triple
Genesis swift nest
boxes with gull
guard on top.
Note speaker also
used to attract
the birds.

Gull Guards

Gull guards are specially designed metal plates which cover the top of the nest box to provide additional shelter to the hole/entrance from the elements. They also help protect the swifts from predators which could land on the box in instances where the box cannot be placed under an overhanging roof or under fascia/soffit for example. They are available from the manufacturers.

Call Systems

Swifts find their own nest sites by exploring our buildings. The young birds are especially drawn to areas where swifts are already nesting, the traditional nest sites. They use the presence and sound of other swifts as an indication as to the likelihood and suitability of finding a nest site for themselves. When nest boxes are erected for swifts there are no visual (live flying swifts) or audio (calling swifts) cues to attract the birds to the boxes. To this effect, a call system with a speaker mounted on the wall adjacent to the boxes and imitating the calls of swifts is commonly used to attract young birds to the boxes. Without the calls occupancy of the boxes will take longer as there are no cues other than the hole entrance itself. This can be also challenging in instances where swifts traditionally enter nest sites that don't typically look like holes, such as behind fascia boards or under ridge tiles.

Complete call systems are available from Swift Conservation Ireland and Genesis Nest Boxes.

Under Irish wildlife law a licence will be required to play the swift calls and these are available under application from the National Parks and Wildlife Service (NPWS).

Additional information on nest boxes for swifts can be found at <https://www.swiftconservation.ie/nest-box-advice/>

Locations

This plan sets out suitable locations for nest boxes within Tullow town but does not necessarily infer that all sites require boxes, rather that these are the locations which would be best suited to starting a nest box project. As not all sites may be possible to secure permissions for putting up nest boxes more sites and nest boxes than are needed are recommended to allow for this. Sites are numbered in order of suitability of location and are based on:

- Proximity to existing colonies of nesting swifts. The closer the nest box is to an existing colony the higher the chance of securing occupancy.
- Benefits in terms of education and awareness raising. Visible boxes in high use areas (such as schools) will allow for greater potential in community engagement with the project.
- Suitability of building structure in terms of aspect/orientation, height, overhanging roof etc. Boxes should not face south unless an overhanging roof provides shade during the middle of the day to reduce overheating. Boxes should be at least 4m above the ground to allow swifts to safely exit their nest site. Boxes should have a clear flight path in front of them to allow for easy access.
- Site ownership. Publicly owned buildings are better suited to swift nest box projects as the ownership is unlikely to change and therefore once permission is secured boxes can remain in situ permanently. This is especially important as swifts are traditionally site faithful.

Primary recommended sites for nest boxes.

Site 1: Scoil Phádraig Naofa

Reference: 52.803267, -6.732316 Orientation: East

3x triple swift boxes with gull guards

Positioning: Placed in a line above the light on the east facing wall at the highest point where they fit as in image below. Ideally this light should be turned off during the summer months to reduce glare when swifts are entering nest sites.

Call System: No caller recommended as birds are nesting on the south facing wall here.



Figure 25.

Site 2: St. Columba's National School

Reference: 52.803936, -6.732805

Orientation: Southwest

6x single swift boxes

Positioning: Placed under the eaves of the southwest facing wall in the gap between the grooves on the timbers as in image below.

The boxes should start from the corner and work back to the middle and not the left part of this image because the school flags are towards this side and they can cause problems for flying swifts.

Call System: Recommended.

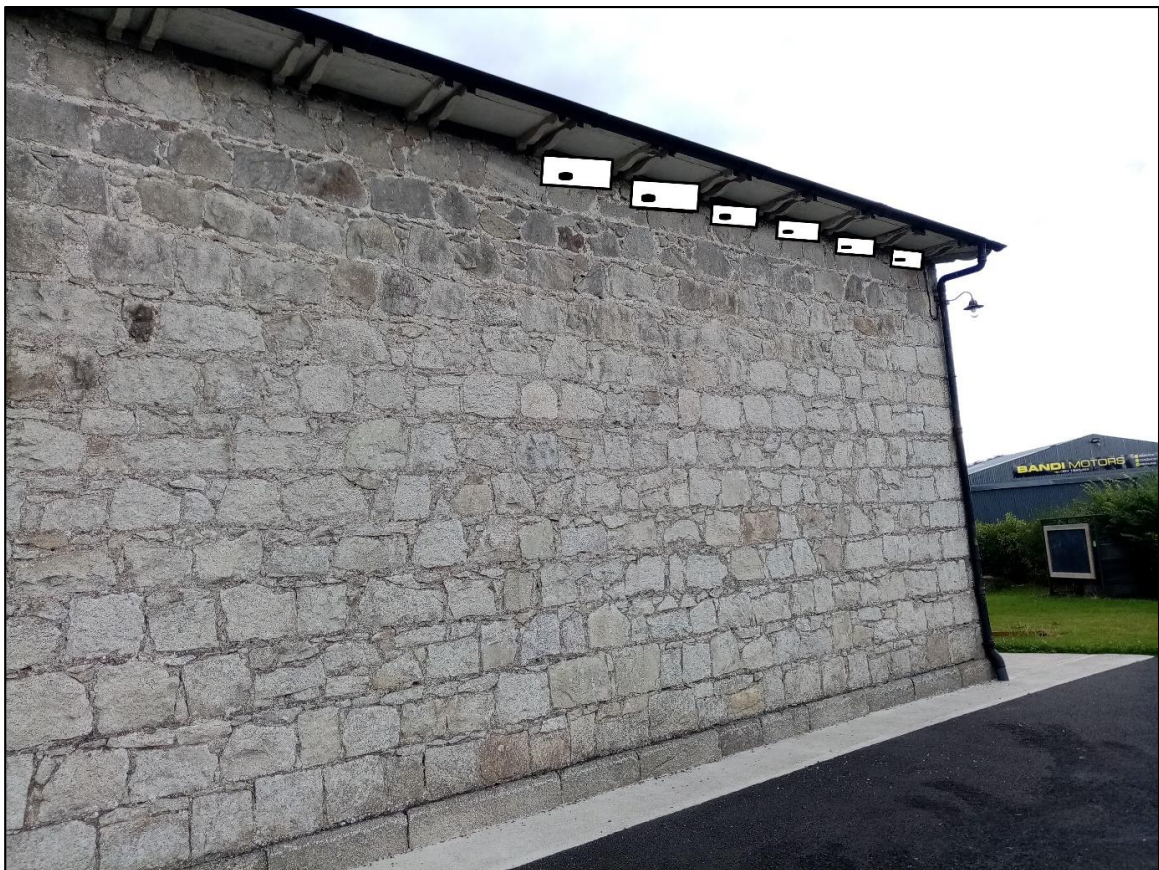


Figure 26.

Site 3: Delaney Court

Reference: 52.801451, -6.733999

Orientation: Northwest

4x triple swift boxes

Positioning: Placed under the plastic soffit under the eaves up at the top of the wall as in image below.

Call System: Recommended.



Figure 27.

Site 4: Former Bank of Ireland

Reference: 52.803227, -6.735709

Orientation: Southwest

2x triple swift boxes

Positioning: Placed under the soffit under the eaves up at the top of the wall as in image below.

Call System: Recommended.



Figure 28.

Secondary recommended sites for nest boxes.

Site 5: Tullow Courthouse

Reference: 52.803452, -6.737374

Orientation: Northeast

2x triple swift boxes

Positioning: Placed at the top of the wall as in the image below.

Call System: Recommended.

Note this is a protected structure so special permission may be required to affix boxes to the historical building.



Figure 29.

Site 6: Tullow Tennis Club

Reference: 52.803945, -6.723978 Orientation: West

4x triple swift boxes with gull guards

Positioning: Placed at the top of the wall as in the image below.

Call System: Recommended.



Figure 30.

Site 7: Tullow Civic Offices

Reference: 52.802001, -6.737466 Orientation: Northwest

4x triple swift boxes with gull guards

Positioning: Placed $\frac{3}{4}$ way up the wall as in the image below.

Call System: Recommended.



Figure 31.

Summary of Recommended Nesting Sites

Primary recommended sites for nest boxes		
Scoil Phádraig Naofa	3x triple swift boxes with gull guards on east wall.	No caller recommended as birds are nesting on the south facing wall.
St. Columba's National School	6x single swift boxes on southwest wall.	Call system recommended.
Delaney Court	4x triple swift boxes.	Call system recommended.
Former Bank of Ireland	2x triple swift boxes.	Call system recommended.

Secondary recommended sites for nest boxes		
Tullow Courthouse*	2x triple swift boxes.	Call system recommended.
Tullow Tennis Club	4x triple swift boxes with gull guards.	Call system recommended.
Tullow Civic Offices	4x triple swift boxes with gull guards.	Call system recommended.

*Note: This is a protected structure, special permission may be required.

9. Acknowledgements

Thanks to the DTA Tullow Tidy Towns and Climate Action Committee group who aided in survey work on the ground with Mary Doyle, Mary Walsh, William Roche, Grace O'Donnell, Sue Treacy, Nicola Timmons and Denis Ryan all giving of their time. Special thanks to Loretta Bentick and Will Paton, points of contact for survey work and whose in-depth knowledge of the town, and community presence was a valuable asset to survey work. It was great to be able to collaborate with such a nice community group committed to the betterment of their town. I'm glad each of you got to see the swifts screeching about the town soaring overhead.



Swift volunteers out for an evening survey.



About the Author

Pádraig Webb (B.Sc. (Hons) Wildlife Biology) has over 8 years of bird watching experience and has developed a wide knowledge of Irish bird species. He has volunteered for organisations including the Royal Society for the Protection of Birds (RSPB), BirdWatch Ireland (BWI) and Swift Conservation Ireland (SCI). He takes part in the annual national water bird monitoring programme - the Irish Wetland Bird Survey (I-WeBS) each winter, as well as the national farmland bird monitoring programme - the Countryside Bird Survey (CBS) each summer. He has experience in ornithological consultancy having completed surveys such as Breeding Woodcock, Breeding Raptor, Breeding Walkover, Wintering Golden Plover, Wildfowl Distribution, Commuting and Migratory Wildfowl, Hen Harrier Roost, and Vantage Point Surveys. He took part in the recent national Red Grouse 2021-2022 Survey and the 2022 Irish Hen Harrier Survey.

He has been involved in surveying for swifts across Ireland for over 4 years and took part in the first ever Irish Swift Symposium. He completed a follow on survey of swifts in Tralee town in 2018 for SCI. Working for BWI on the 2020 County Clare Swift Survey he surveyed swifts across the county and compiled the end of season report. In total he has found over 200 swift nest sites across Ireland.



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