Swift | Gollan Mooar



Biodiversity Action Plan | Cummey Yannoo Beiyn-Feie



Background

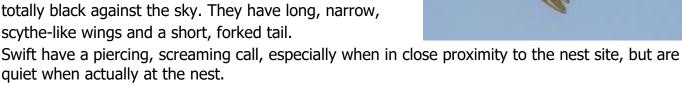
Swifts (*Apus apus*) are in serious decline on the Island, with almost half of the Manx population being lost so far this century at a rate of 3.22% per year. Thankfully several local drivers of this decline are avoidable through simple and cost-effective conservation actions.

Description

The Swift is a long-distance migrant that is closely associated with the built environment where it typically nests within our older urban building stock, forming one of our typical 'building breeding birds'. They are typically only present on the Island for three months a year, however this represents the most important time of their annual life-cycle; their nesting period.

Swifts are a medium-sized aerial bird and are superb flyers, probably the greatest flier of the avian world. Swifts rarely touch the ground; sleeping, eating, drinking, bathing, preening and even mating on the wing. As a result, they have tiny feet and legs and can hardly walk. They are the world's fastest birds in level flight, with an impressive top speed of 111kph (69mph) and are capable of flying 800km (500 miles) in a day.

In flight, Swifts are plain sooty brown and crescentshaped, with a pale throat, however they often appear totally black against the sky. They have long, narrow, scythe-like wings and a short, forked tail.

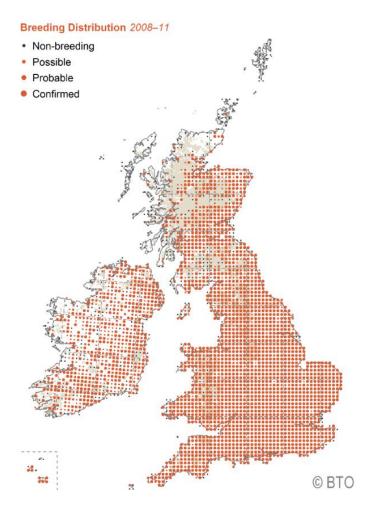


British Isles Distribution and Status

UK breeding: 59,000+ pairs (BTO, 2016) UK breeding population trend: 60% decrease (BTO, 1995–2020) UK rate of population loss: 2.4% per year (BTO, 1995–2020)



Swifts have a broad UK breeding distribution, with higher densities in warm, dry areas such as East Anglia, and lower densities in northern and western regions. Although widespread across much of Britain & Ireland, *Breeding Bird Survey* (BBS) data have documented a significant decline in their populations.



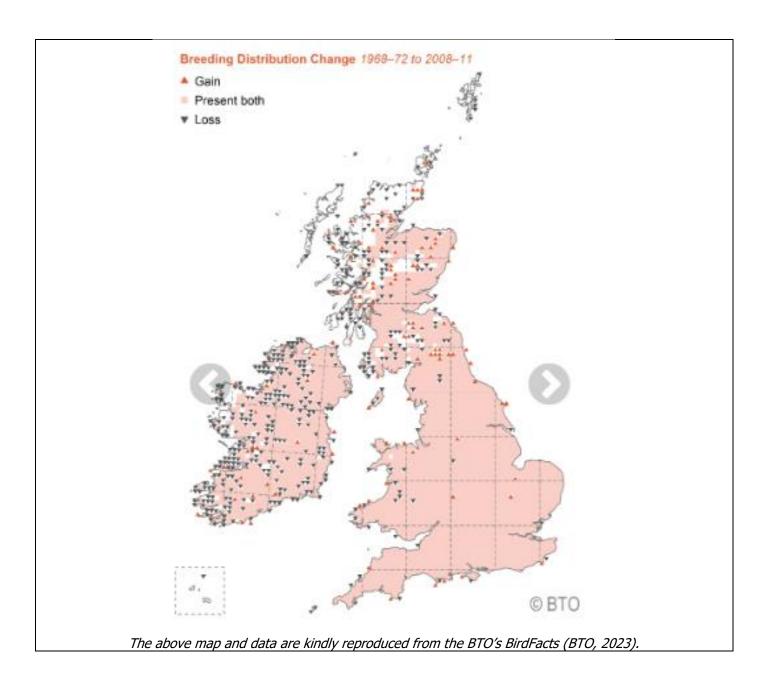
The above map and data are kindly reproduced from the BTO's BirdFacts (BTO, 2023).

Swifts are summer visitors, typically arriving from the start of May, with the main arrival in mid-May. They remain here to raise a single brood before departing again from mid-July. Most birds have usually departed by early September, but odd birds can be seen later.

Their monitoring is complicated by the difficulty of finding occupied nests, by the (weather-dependent and sometimes extraordinary) distances from the nest they may travel to forage, and by the often substantial midsummer influx of non-breeding individuals to the vicinity of breeding colonies.

BBS results indicate that steep declines have occurred in England, Scotland and Wales since 1995. The BBS <u>map</u> of change in relative density between 1994-96 and 2007-09 indicates that decrease has been widespread. This has been mirrored with a decrease in the Republic of Ireland since 1998 (<u>Crowe 2012</u>) and also on the IOM.





Isle of Man Distribution and Status

Historical strongholds included Ramsey, Peel, Port Erin, Port St Mary and Douglas. The *Manx Bird Atlas* (Sharpe et. al, 2007) considered that the Manx population grew throughout the twentieth century, faring well and reaching a peak in the early 1980s, after which it has clearly declined. As of 2023 Castletown and Ramsey are the primary breeding sites on the Island.

Encouragingly, while no breeding was confirmed in Peel during the 1998-2003 first *Manx Bird Atlas*, in 2022 the species was breeding in Peel; showing that a reversal in fortune is possible.



Table 1: comparison of the 1998-2003 and 2006-2016 Manx breeding bird atlases (Morris & Sharpe, 2021).

Decline in breeding population:	-41.9%		
Short-term decline 1998-2003 to 2006-16	(Meets criterion for amber-listing)		
	This equates to a decline of 3.22% per year		
Decline in breeding range:	-18.2%		
Short-term decline 1998-2003 to 2006-16, assessed at 1km square resolution			
Decline in breeding range:	-18.8%		
Longer-term decline 1977-81 to 2006-16, assessed at 5km square resolution	(Meets criterion for amber-listing)		
Breeding:	74 pairs		
Estimated annual breeding population (pairs) 2006-16			
Localised breeding population:	1.8%		
Number of 1km squares in which definite or probable breeding recorded 2006-2016	(Meets criterion for amber-listing)		
Breeding/Wintering importance within UK & IOM:	0.1%		
IOM population as a proportion of the combined estimated breeding population within the UK & IOM from (Woodward et al. 2020)			

Volunteer monitoring coordinated by the Manx Ornithological Society (MOS) throughout 2023 found 42 occupied nests across the Island.



Habitat

The species originally nested in trees, but over millennia has changed it habits to nest in human buildings. On the Island, Swifts nest exclusively in holes inside old buildings, or sometimes in specially designed Swift nest boxes in urban areas, such as at the Manx Museum in Douglas. Presence of a nearby nesting area can be determined by low, fast and loud flight around urban streets or by birds swooping at speed into a little crevice within a building.





Photographs 1 & 2 – Typical habitat demonstrated by a pair of Swift entering a nesting site, showing how the smallest of holes are utilised for this species (Photographs: David Bellamy).

Diet

Swifts eat airborne invertebrates such as winged insects and spiders drifting on the wind.

Survival and longevity

Maximum age from UK Ringing: 17 years, 11 months, 5 days (set in 1999)

Typical Lifespan: 9 years (with breeding typically at 4 years)

UK adult annual survival: 80.8%



Breeding

Swifts pair for life, returning to the same site each year. Minor nest renovation occurs before the laying and incubating of eggs. Unlike other birds such as House Martins or Swallows, Swifts do not leave any signs of habitation such as a visible nest or guano at their nest site. Young are immediately independent upon leaving the nest and will migrate promptly, with the adults following a few days later. Swifts do not normally begin breeding until they are four years old.

Number of broods each year: 1
Number of eggs: 2-3
Egg weight: 3.5g
Incubation: 3 weeks
Fledging period: 6 weeks

Over-wintering and migration

Swifts over-winter in sub-Saharan Africa, especially the Congo and Tanzania with a return migration of around 22,500km (14,000 miles).

As they never land away from their nest site, it has been estimated that a fledgling bird may fly some 480,000km (300,000 miles) non-stop between fledging late one summer and their first landing at a potential nest site two summers later. A long-lived bird may fly over 3.2 million km (2 million miles) in its lifetime (including both migration and winter/summer feeding).

Legal protection

The Isle of Man is the only jurisdiction in Britain and Ireland to list Swift as a specially protected bird (on Schedule 1 of the Wildlife Act 1990).

Isle of Man: Section 1 and Schedule 1, Wildlife Act 1990: Special protection is given to all adult birds, chicks, eggs and active nests. Swifts are also protected against deliberate or reckless disturbance when at the nest.

International: Appendix III of the Bern Convention, 1979.

Conservation status

Isle of Man: Amber-list (moderate conservation concern – Morris & Sharpe, 2021: based on data from 1998-2016).

UK & IOM (combined): Red-list (highest conservation concern - BoCC5, 2021). Prior to 2021 Swift were on the Amber-list under BoCC3 & 4, and prior to 2009 were on the Green-list. Both upgrades were based on the strength of the decline demonstrated by the *Breeding Bird Survey*.

Ireland: Red-list (highest conservation concern - BoCCI4, 2021). Was previously on the Amber-list under BoCCI2 and BoCCI3.

Europe: Near Threatened ('species not concentrated in Europe, but with unfavourable conservation status in Europe'). Numbers across Europe have been broadly stable since 1980 (PECBMS 2020).

Global: Least Concern (IUCN 3.1, 2016).

The above clearly highlights are concerning, and worsening conservation status of this species.



Threats

The Manx Swift population appears to be limited by the lack of available nesting sites. Swifts have utilised human structures for millennia, however the materials used in the building and renovation have undergone a revolution in just the last few decades. Modern and renovated buildings offer few, if any, nesting opportunities.

Prior to recent decades, the materials used in every building were constantly aging. Despite routine maintenance, this resulted in a certain amount of the building stock always being suitable for nesting (i.e. in a varying state of mild decay), with external crannies common in even well-sealed buildings. For the first time in human history, today, this is no longer the case.

On the Isle of Man, the reasons for Swift decline therefore are likely to include:

- Continued loss of suitable nesting sites from:
 - o demolition of our older building stock,
 - o renovation and re-roofing of our older building stock,
 - the change from traditional building materials towards plastic (especially soffits and fascia boards sealed to the walls to prevent any future access to cavities which may be hidden behind),
 - o increasing weather proofing and insulation of our older building stock,
 - o netting being used within church towers to prevent Feral Pigeon/Jackdaw nesting,
 - o general 'sealed unit' modern building design,
 - o Competition with other building-nesting birds such as House Sparrow.
- Increasingly erratic summer weather on the Island (and on their migration routes leading to occasional late arrival in breeding areas).
- A highly probable decline in abundance of their aerial invertebrate food.

Phenological analysis suggests that Swifts both arrive and depart the UK earlier than in the 1960s, however the length of stay consequently remaining unchanged (Newson et al. 2016).

Low juvenile survival appeared to be associated with poor weather conditions (<u>Finch et al.</u> 2022), implying a reduction in availability of aerial insects was causing additional mortality.

Reason for BAP

Older ornithologists on the Island can recall seeing large flocks of wheeling Swifts in spring and autumn, with good numbers breeding in the towns, including Ramsey, Douglas, Castletown, Peel, Port Erin and Port St Mary. Today, the Swift is a rare breeder and numbers observed migrating, for example over the Calf of Man (since 1959), have become progressively fewer (Sharpe *et al.*, 2007).

Aim

To halt the ongoing decline of this species on the Isle of Man and maintain a stable and enduring breeding population in line with 2006-2016 breeding population estimate, or higher.



Other Beneficiaries

Building Nesting Birds: Swallow, House Martin, House Sparrow, Barn Owl, Starling, Jackdaw.

Bats: All Manx species.

Delivery Options		Active	Challenges	
0	Amend the Wildlife Act to provide year-round protection for nesting sites (current legislation only provides protection when in use).	No	 Lack of civil service resource. Requires support of the legislature. 	
0	Undertake Island-wide survey work to discover and monitor existing nest sites.	Yes (MOS since 2017)	 General difficulty in surveying for this species. Requires more volunteer engagement. 	
0	Collect public records of Swift sightings.	Yes (Manx Bird Life (MBL), MOS, Manx Wildlife Trust (MWT), eBird)	 Misidentification with hirundines (swallows). 	
0	Utilising the Precautionary Principle, assume that all urban buildings may contain nesting Swifts for planning purposes. Wherever feasible, maintain all potential Swift holes (where these do not pose a risk to the fabric of a building or its occupants). Ensure unavoidable losses of cavities are fully mitigated.	Recommended (MOS – Strategic Plan consultation response 2023)	 Change wording of IOM Strategic Plan. Would need an increase of ecological awareness within Planning and architects/developers. 	
0	Update the IOM Strategic Plan to mandate low-cost 'integrated nest boxes' on all suitable urban planning approvals to increase the availability of nest sites on a wider scale (and replace unavoidable losses of nest sites).	Recommended (MOS – Strategic Plan consultation response 2023)	 Change wording of IOM Strategic Plan. Length of time taken to update government policy. 	
0	Encourage use of external nest boxes in urban environments to provide additional nesting sites.	Yes (MOS)	 Requires more volunteer engagement. Issues with burdensome planning requirements for Registered Buildings an in Conservation Areas. Guarantee T&Cs for building finishes (and health and safety concerns) may prevent 	



				mounting of boxes on
0	Place nest boxes (ideally with call systems) within suitable urban church towers.	Yes (MOS)	0	external walls. Need to engage with (and engender greater interest from) church authorities who would likely be receptive given encouragement and education.
0	Recommend use of traditional building materials (especially wooden soffit and fascia boards) within our urban built environment through planning and building control. Where plastic materials are essential or preferred, seek mitigation via integrated nest boxes.	Partial (DEFA Planning)	0	On Registered Buildings and in Conservation Areas only.
0	Raise awareness: annual Swift walk in Douglas, Ramsey, Castletown.	Partial (MOS)	0	Needs more volunteer engagement.
0	Raise awareness: through the press and social media.	No	0	Needs more volunteer engagement.
0	Raise awareness: through Construction Isle of Man.	No	0	Lack of resources.
0	Raise awareness: through Planning & Building Control, especially in relation to Registered Buildings and Conservation Areas.	No	0	Lack of resources.
0	Raise awareness: through lecture to construction-related courses at UCM re building besting birds (as is already provided for bats).	Yes (MBL, DEFA, University College IOM (UCM))		
0	Designate any buildings containing >1 Swift nesting site as Wildlife Sites, and any building containing >5 nests as an Area of Special Scientific Interest.	No (MWT, DEFA)	0	Designation criteria require updating, which would need resourcing, as would the designation process.
0	Action to increase levels of invertebrates across the wider countryside would benefit Swift.	Partial (MWT/DEFA)	0	Agri-Environment Scheme payment levels insufficient to see landscape rollout of impactful, nature- positive farming.
0	Investigate the possibility for 'Swift Towers' within major Manx urban regeneration project.	No	0	Would require significant resources.
0	Annual review and update of this document by end 2025.	By MOS		



Delivery Plan				
Action	Lead			
 Amend Wildlife Act to provide year-round protection for nesting sites. 	DEFA Ecosystem Policy			
Continue regular survey work and data collection.	MOS / MBL / MWT			
 Utilise the Precautionary Principle re Swift in planning (i.e. assume that all urban buildings may contain nesting Swifts for planning purposes – see above). 	DEFA Planning & Ecosystem Policy			
 Update the IOM Strategic Plan to mandate low-cost 'integrated nest boxes' on all urban planning approvals. 	Cabinet Office			
 Mandate use of traditional building materials (especially wooden soffit and fascia boards) within our urban built environment. Ensure any cavity loss during renovation is fully mitigated, ideally through incorporation of 'integrated nest boxes'. 	DEFA Planning & Building Control			
 Raise public awareness through events and social/traditional media. 	MOS / MBL / MWT			
 Raise awareness: through Planning & Building Control, especially in relation to Registered Buildings and Conservation Areas. 	MOS / MBL / MWT			
Liaise with construction industry and construction education.	MBL / MOS / DEFA Ecosystem Policy / UCM			
 Designate Swift nesting colonies as Wildlife Sites. 	MWT			
 Designate significant Swift nesting colonies as Areas of Special Scientific Interest. 	DEFA Ecosystem Policy			

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