

# **Kestrel**

Falco tinnunculus

UK List of Priority Species: Yes
Scottish Biodiversity List: Yes
Birds of Conservation Concern UK (2020) Amber

# Summary

It is not rare to see a kestrel in North Lanarkshire now and we, through recent raptor study work, are beginning to make progress towards reaching what their exact numbers may be. One limiting factor for breeding is down to the lack of suitable nest sites that are optional to them. Displacement, mainly through housing development, is another main contributing factor. There remains a substantial amount of suitable hunting habitat available for the population of the species to be higher though. It continues to be an aim for us to further our successful work with the species. We will be maintaining our good working relationships with landowners and farmers to erect, or install, nest boxes in areas of good kestrel habitat.

A steady decline over most of Europe in kestrel numbers during the 20<sup>th</sup> century has accelerated to such a degree that the current UK population is estimated to be around 45,000 breeding pairs, from a 1950 estimate of 7000. Scotland's Barn Owl numbers have reflected this decline. Even so the UK population is probably the third largest in Europe. The Barn Owl is found in the Americas, Africa, India, South East Asia and Australia, none of the populations here have suffered the marked declines of the European population.

## **Species Profile**

Kestrels, in Scotland, can be located within a wide variety of surroundings. It is not uncommon to see a kestrel on the edge of a city or town and, likewise, perched on the fringe of a secluded woodland. The main prey of the species is small mammals, particularly field voles. Being very adaptable, they will also take small birds, if they are more easily available and, particularly, if feeding chicks. Insects and worms complete the birds diet. Although generally widespread, the kestrel is absent in areas of most extreme north and west of the country but adapt well to a wide range of habitats and are commonly found within our urban areas, farmland, open heathland and uplands. Areas of moist, moderately long grassland are especially important for foraging, as is unmanaged ground below, and alongside, hedgerows. Motorway embankments often have a kestrel hovering above. The natural provision of woodland belts for shelter, nest locations and hunting perches are also of benefit to the species.

It is generally believed that, whilst hunting, "hovering" birds watch for movement and this may, partially, be the case. The kestrels head remains remarkably still whilst carry out this technique and it concentrates on directly looking at the ground below. Voles constantly dribble urine whilst going about their everyday life, this fluoresces and leaves trails that, to the kestrel, being equipped with ultraviolet vision, exposes their location,



Despite being known for their hovering hunting technique, kestrels will quite happily just sit and wait on prey from a hunting perch on a building, rock or pilon for example. These latter techniques will help conserve energy. Kestrels often hunt at daybreak and dawn, being adapted to this, and it helps reduce competition.

It is more common to class the kestrel as a cavity nesting bird and this is rather unusual for a British bird of prey. The bird prefers cracks or crevices on cliffs, tree cavities and holes in buildings. In North Lanarkshire, we also have them successfully breeding on quarry faces, behind signs on buildings and old crows nests. They will also, quite happily, use a vacant barn owl box but, much to their preference is a nest box built solely for this species alone. We have found that kestrels take quite quickly to a nest box that is erected within, or close to, good habitat and/or within an existing territory. The correct placement of kestrel boxes are the main contributing factor in the conservation and enhancement of our breeding population. Working quarries throughout our area are also vital, and play a huge role, to our North Lanarkshire council areas breeding kestrels needs. The reasons that our kestrel still requires assistance from us are evident. We have found that kestrels tend to distance themselves from nesting within woodland where buzzards hold a territory and our buzzard numbers have plummeted. Grey squirrel populations alongside kestrel hunting habitat also hold the species back. We are identifying also that there is enough hunting habitat for the kestrel for their numbers to be greater and that there are available territories to accommodate them. Although barn owl and kestrel do come into conflict, and will overlap a territory, we have them breeding alongside each other and producing fledged owlets/chicks annually. It obviously helps that the barn owl is nocturnal, on this point, daybreak and dawn are collision times for them.

Kestrel hunting ground, within our North Lanarkshire Council area, includes a mixture of the following habitats:

- rough grassland, supporting a high field vole population
- · damp, tussocky grassland in fallow or lightly grazed pasture
- weedy field margins
- hedgerows with rough margins
- woodland edge
- stubble fields
- drainage ditches
- · farms and outbuildings
- roadside/motorway verges
- . quarries
- . large gardens
- . urban parks and greenspaces

## Additional data collated from the Scottish Raptor Monitoring Scheme (SRMS)

Kestrels, that are intending to breed, begin to establish nesting territories from March to late April.

During the breeding season, home ranges overlap, the degree of overlap increases with distance from the nest.



Home range size varies from less than 1km squared to over 10km squared and is related to prey abundance.

Kestrels can be tolerant of human activity and will nest, in close proximity, to people. They will readily use nest boxes, certainly if they are placed near grassy areas that contain a vole population.

Kestrels do not build a nest but will scrape a depression in the nest substrate. A fresh bed of clean, fresh and dry woodchip is added into newly erected boxes. Boxes are preferably placed high, with the entrance facing eastward to reduce wind and direct, lengthy, incoming sunlight. It is also good practise to refresh substrate in boxes annually in winter whilst removing old pellets and spent debris within. It is common practise to locate kestrel and barn owl boxes within close proximity. It is much to the preference if boxes are constructed with good quality wood that will stand up well in wet weather, a box like this will last 10 years.

Kestrels mainly lay in April and through to mid May. Eggs are normally laid in 2 day intervals and clutch size is related to laying date with early clutches being larger (5 or 6 eggs). Later clutches tend to have 4. Clutches of 7 or even 8 can be reached in years when voles are doing really well (good vole years)

Hatching can be synchronous or asynchronous, sometimes taking 4-5 days. Young kestrels are brooded by the female until they are about 10 days old. After brooding, an average of 13 food items are delivered to the nest in one day. Chicks fledge after 28-35 days and are fed by their parents for a further 2-3 weeks. Most breeding failures take place at the pre-laying or clutch stage.

Around 60% of kestrels breed I their first year.

## **Legal Protection**

The kestrel is protected under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or intentionally to destroy its nest, eggs or young.

#### **Current Status**

Kestrels are now breeding in most of the suitable areas that may be available within North Lanarkshire. We have, through recent years, been assisting the species by identifying possible territories and erecting nest boxes. We now have over 24 territories that are monitored, this number was at, around 12, 3 years ago. Most sightings are caught along the motorways and busy roads that dissect our council's countryside. Kestrels, along with other quarry nesting species, are frequently sighted throughout the year within these sites and will produce fledged chicks whilst nesting alongside top predators, like peregrines, or maybe ravens. Breeding kestrels are more than capable of protecting their nests during the breeding season and their chicks, even at a very young age, are pretty fierce. In saying all this, we have identified suitable areas within our council boundaries where breeding kestrels are absent and this is what we aim to, either assist with, or correct. This year, of 2021, ignites a comprehensive 3 year study on the kestrel by Scotland's Raptor Study Groups.



## National Kestrel Survey 2021 – 2023

This, 3 year rolling, survey will be carried out, mainly, by members of Scotland's Raptor Study Groups, of which our council has members. Our kestrel Local Biodiversity Action Plan will be a major contribution to this study and be of great value Each study group member is asked to cover a 10km grid reference square within our council area. Casual records, or sightings, are put into BTO BirdTrack online and is already ongoing. Breeding pairs are noted and forwarded to our Central Scotland Raptor Study Groups Species Co-ordinator for kestrel. 2021 may be considered to be a learning year with the study, due to the current Covid 19 pandemic that we are experiencing.

#### **Future Status**

Continued expansion of urban areas into surrounding farmland will reduce potential feeding areas but this can be mitigated to an extent by the creation and suitable management of Greenspace within these urban areas, and the maintenance of habitat corridors. The population of kestrels is low at present, so this will only become an issue when all available habitats are occupied, and expansion of the population is limited by the lack of suitable habitat.

Pine martin are now recorded in North Lanarkshire, mainly in the Cumbernauld/Palacerigg area. The location of kestrel boxes should be taken into consideration whenever there is any records of pine marten in that area, or if there are any provisions made for them at these locations.

## **Current Factors Affecting This Species**

The main limiting factor affecting this species is reduction of suitable nest sites caused by, ever increasing, housing or road development, resulting in loss of good prey habitat and nest site opportunities.

#### Other Minor Factors

- Vermin proof grain storage has lessened the availability of prey around farmyards.
- Land take for new roads, factories and housing schemes has reduced and fragmented suitable grassland habitats around urban areas.
- Secondary poisoning due to the use of toxic rodenticides.
- Kestrels hunting along road verges and railway lines can be killed.
- Egg, or chick, thief's, falconers or illegal breeders.

#### **Current Action**

- The construction and distribution of 10 boxes taken forward by North Lanarkshire Councils Countryside Ranger Service and Central Scotland Raptor Study Group Biodiversity Partnership 2020.
- Landowners with boxes have agreed to record use of the boxes by species.
- A fully licensed Countryside Ranger and qualified ringer has been monitoring boxes, liaising with landowners and ringing any kestrel chicks that may be accessible.



- Pest control firms are currently advised to take into account the risk to fauna when carrying out their work. Increasingly rodenticides less toxic to birds are used and dead rodents are quickly removed.
- A national kestrel survey, within Scotland, began in 2022. All breeding records, and sightings, will be collated by experienced surveyors who are allocated a 10km grid reference square to cover.

## **Proposed Objectives, Targets and Actions.**

# **Objectives**

- 1. Increase, stabilize and maintain, the number of breeding kestrels in North Lanarkshire.
- 2. Improve, monitor and protect kestrel habitat.

Actions	Meets objective number	Action by	Target
Policy and legislation			
1.1 Incorporate Planning and developer guidance to encourage the construction of artificial kestrel nest boxes in proposed developments or conversions of rural or agricultural buildings.	1	NLC	Advice and information included in planning and developer guidance 2024
Site safeguard and management			
2.1 Work with farmers and land managers to manage and enhance kestrel habitat, through increasing the extent of grass margins and conservation headlands.	1,2	NLC, SWT, FCS, RSPB, CSRSG	6 management schemes, which include habitat improvement for kestrels, implemented by end of 2028.
2.2 Assess current distribution of kestrel boxes and determine if more are needed.	1	NLC, RSPB, CSRSG	Develop a kestrel box strategy 2025.
2.3 Replace boxes	1	NLC, RSPB, CSRSG	Annually as determined by the strategy.
Monitoring and research			
3.1 Monitor kestrel boxes	1,2	NLC CSRSG	Boxes monitored annually by Countryside Ranger Service and Central Scotland Raptor Study Group.
Communications and publicity			
4.1 Appeal for sightings of kestrels.	1,2	NLC, SOC, RSPB, CSRSG	Social Media campaign launched by 2025.

Plan written by Jackie Gilliland NLC Countryside Ranger 2020