

# PYLONS AND POWER STATIONS

◀ Many Peregrines now breed on man-made structures.

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The sight of Peregrines breeding on buildings, pylons and quarry ledges is becoming more common, even as this species becomes scarcer in the craggy uplands with which it is more typically associated. Research Ecologist and raptor specialist **Mark Wilson** explains how Peregrines are faring in the face of a changing world.

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The sight of a stooping Peregrine – the fastest bird in the world, and a masterful aerial hunter – is one of nature’s most thrilling spectacles. Since the middle of the last century, the course followed by Peregrine numbers in the UK has been no less dramatic.

In the late 1950s and early 1960s, after more than a decade of gradual recovery from wartime persecution (in order to reduce losses of carrier pigeons) the Peregrine population crashed. Over a period of less than 10 years, contamination of the environment by organochlorine pesticides, such as DDT and dieldrin, reduced Peregrine numbers by more than half. The steepness of this crash has been matched by few other population declines recorded in the UK. In contrast, the recovery of Peregrine populations following measures to reduce and then ban the use of these pesticides is one of the most emphatic and compelling conservation success stories of the past 50 years.

In 2014, I had the great pleasure and privilege of helping to coordinate the sixth national survey of breeding UK Peregrines. As well as monitoring

## New method helped surveyors to keep pace with Peregrines

Derek Ratcliffe, author of the most authoritative work on UK Peregrines and the main force behind the first national surveys of the species, wrote in 1963: "The fidelity of the Peregrine to traditional nesting cliffs greatly simplifies the task of census-making." Happily for Peregrines, but sadly for their census-makers, this is no longer the case. The recent expansion of Peregrines into lowland areas and their ability to nest on a wide range of man-made structures make it harder to predict where they might be found. For this reason, alongside checks of historical Peregrine sites, the 2014 survey included searches of randomly selected 5 km squares. This greatly improved the estimates of Peregrine numbers in recently colonised areas.

### ESTIMATED NUMBER OF BREEDING PEREGRINE PAIRS FROM THE LAST TWO UK SURVEYS

Country/region	2014 estimate	2002 estimate
Channel Islands	16	-
England	825	469
Isle of Man	22	31
Northern Ireland	103	81
Scotland	523	573
Wales	280	283
<b>TOTAL</b>	<b>1,769</b>	<b>1,437</b>



## It may not be long before the species is associated more with pylons and power stations than with the wild open landscapes of its past

known sites (similar to previous surveys), the 2014 survey included a new element comprising searches for Peregrines in randomly selected squares. All this fieldwork was organised and carried out by hundreds of volunteers including individuals involved in long-term studies of Peregrines, dedicated members of raptor study groups, and BTO stalwarts. Thanks to the hard work of all these volunteers, we now have a better idea of how the UK population of breeding Peregrines is faring.

The results of this survey (published in the latest edition of BTO's scientific journal, *Bird Study*) show that, remarkably, the population has continued to increase well beyond historically recorded levels, and may now be larger than it has ever been. This is, in large part, due to its expansion into lowland

areas where Peregrines were previously scarce or absent. Over the past few decades, Peregrine populations have taken off in many areas that would previously have been regarded as unsuitable for them. The newly demonstrated ability of UK Peregrines to tolerate human presence and activity, and to take advantage of suitable breeding sites on buildings, pylons and in quarries, has enabled them to colonise much of lowland Britain.

### WHAT DOES THE FUTURE HOLD?

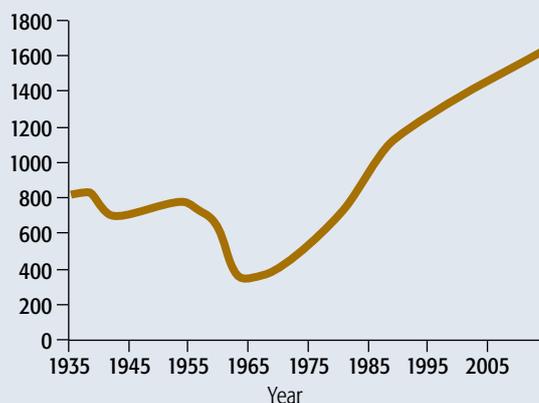
Conversely, traditional crag-nesting Peregrines are not faring so well, particularly in many upland areas. The population trends and breeding productivity of Peregrines in upland regions such as the Scottish Highlands and the Pennines are less buoyant than in other areas. Even in the upland Special Protection Areas (SPAs) designated to protect Peregrines, the 2014 survey showed that many historical territories were unoccupied, and the remaining breeding pairs managed to fledge few offspring. Likely reasons for the poor performance of upland Peregrines include illegal killing and disturbance (associated with management of upland gamebirds and with breeding and racing of domestic pigeons), and changes to their prey base.

The results of the most recent survey are, overall, good news for Peregrines. However, unless we can find ways to improve the status of upland populations, it may not be long before the species is associated more with pylons and power stations than with the wild open landscapes of its past. In addition to the issues described above, Peregrines remain exposed to a wide range of environmental pollutants other than the compounds responsible for their previous decline. Many of these are relatively new chemicals whose potential to affect Peregrines (as well as other organisms) is poorly understood. However, any risk is likely to be particularly high in coastal populations with dietary links to the marine environment, where many pollutants are especially persistent. If the recent ups and downs of this species teach us nothing else, it is that the fortunes of Peregrines in the face of further human-driven change should not be taken for granted. ■

### Publication

Wilson, M.W. *et al.* (2018) The breeding population of Peregrine Falcon *Falco peregrinus* in the United Kingdom, Isle of Man and Channel Islands in 2014. *Bird Study* **65** (1)

### ESTIMATED NUMBER OF BREEDING PAIRS



The line tracks the approximate course taken by estimates of breeding Peregrine pairs in Britain over the past 80 years. Adapted from Figure 18 in Derek Ratcliffe's *The Peregrine Falcon* (T & AD Poyser, London, 1993).