

The Peregrines of Louth 2021

www.louthperegrines.org.uk

Introduction

For the seventh consecutive year, the resident pair of peregrines falcons overwintered around St. James Church, Louth and by the middle of January 2021 they were observed flying together and 'pair-bonding'. The gravel-filled nest tray was installed on the north walkway on the 21st January, together with the camera that for some years has relayed images to the TV screen in the church coffee shop. For the first time however, we had the bonus of two webcams, purchased by the LBC and linked by a wireless bridge from an antenna located on the south walkway, to a similar one attached to the wall of our house across the church driveway. This was wired to a 3TB capacity HIK hard drive with a 21" monitor attached and linked via our router, to enable live images to be streamed on the LBC and Louth Peregrines websites.

Images were recorded 24 hours a day from the end of January to the end of June, with the salient clips extracted for the websites and YouTube. We had hoped for some cracking images throughout the season – and we weren't disappointed.

Courtship

The first visits to the nest tray were recorded on 11th February. The pair spent 13 minutes there



Creating a depression in the gravel, 11 February (above) and courtship display, 20 March (below).



creating a depression in the gravel, achieved by lying belly-down and pushing forward scraping with their talons pushing the gravel back. All the while, the pair emitted a series of 'cheeps' and 'clucks'. Both birds were involved in creating the depression although not always in the same place, so at this stage, it appeared to be more of a bonding ritual than a practical attempt to create a place to hold the eggs. There were regular visits by the pair, touching beaks and performing a 'head-bowing' display, until on the 8th March the pair were seen through my 'scope copulating on one of the spire crockets. Four visits on the 9th March were followed two days later with the webcam recording the pair briefly copulating again on one of the gargoyles.

From the middle of March, there were 3-4 visits daily starting before dawn, and courtship display continued with an extended sequence on the 24th, when over an hour was spent on the nest and the female sleeping there for several hours during the night.

On the 26th, the male brought in a gift of prey for the female and this was later followed by the pair copulating on one of the gargoyles – again caught briefly on camera. The female spent much of that day on the nest and was there again at first light on the 27th.

The eggs

The first egg appeared at 16.15 on the 27th. It's arrival brought a display of bonding from the pair – the male arriving through one of the trefoil openings in the castellations and inspected the egg, with much heads-down 'clucking' and 'chukking', before the female settled down to keep it covered, at which

point the male left. The female covered the egg for three hours before leaving. On the 28th, the egg was unattended for four hours with both birds returning at 18.40. This was normal behaviour – an egg remaining viable for days providing it doesn't get warm from incubation, as it hasn't started to develop. We have seen from past years that the female won't usually incubate until the penultimate egg has appeared, thereby ensuring the eggs hatch within a day or two of each other. Until then, she just sits over the eggs for protection, her brood patch not making contact with the eggs.

The second egg arrived at 01.22 on 28th March, the infra-red light of the camera recording the female sitting upright and the glistening egg emerging pointed end first. She hesitated for a moment, turned to inspect it, then used her beak to move it close to the other one. (The egg appears, I've read, having arrived at the uterus just before the shell is created and some six hours after it was released from the ovary and fertilised.) The calcium needed to form the shell is acquired from the peregrine's diet, no doubt supplemented by its tendency to eat small bits of gravel from the nest tray. The third egg arrived at 10.49 on the 1st April, with the male starting to spend more time on the eggs, to give the female a break. On the 2nd, the female arrived and



The moment the second egg arrived, in the early hours of 28 March.

with a succession of face to face 'clucks' and 'squeaks' tried to persuade the male to move away. This was only achieved however, when she towered over him, forcing him to retreat. Being far larger, the female can cover the eggs more efficiently. The male returned later with a pigeon carcass that he presented to the female. She took it and clutching it in one talon, 'hopped' away and out of sight. (This hopping and dragging behaviour was soon to be witnessed from the juveniles.) The fourth egg was laid at 23.25 on the 3rd April. Incubation had started two to three days ago, so it was (correctly) thought that four eggs would be the limit.



The female (left) encourages the smaller male to leave the eggs, allowing her to cover them more effectively. 2 April.



A gift of prey. 2 April.

Incubation

With incubation well under way, the pair swapped places initially 3-4 times in a 24-hour period, increasing to around 8 times, although the female spent far longer on the eggs – on the 15th April she sat overnight for 12 hours without a break. With her brood patches and larger size, she was more capable of incubating the eggs on the chilly spring nights. Invariably, changeovers were accompanied by contact calls, the male 'whining' and the female responding with 'clucks' and 'cheeps', and the eggs were often rolled during changeover.

On the 19th April, with the eggs keeping warm in the afternoon sun, the pair spent several minutes airborne, chasing each other, coming together, tumbling and diving – a great display of bonding.

Emergencies

At various times throughout the breeding season the adults, ever alert, reacted to any threat to their eggs and young. Passing raptors are the main perceived threat and this year there were 3 observations of overflying common buzzards being harried. Also in June, the female went after a very high-flying red kite.

On the 1st May, 3 hours into his stint on the eggs, the male was alerted to the female's 'cack-cack-cack' alarm call. He hurled himself out of the nearest opening in the castellations to support the female



The male responds to the alarm call of the female and tumbles out of the nest. 1 May.

in chasing off a visiting peregrine. The female returned to the eggs 5 minutes later. A more real threat to unattended eggs or small chicks, is the herring gull, which now breeds in the town and with nests just across the road from St. James. On 12th May, our camera caught the moment an adult gull appeared in the castellation opening opposite the nest. Both adults were feeding the young at the time and the male immediately broke off to chase the gull, while the female issued her 'yapping' call, before resuming the feed.

Hatching

The first three chicks arrived as expected, on the 7th May, 41 days after the first egg was laid, 36 days after the third. The first hatched at 05.25, the others at 6-hour intervals. The female was seen to eat the



Female eating the eggshell (above) and the 2nd chick hatching (right). 7 May



shell of the third egg (presumably she ate the other two), replacing the calcium lost in the production of the shells before laying. The fourth chick arrived the following day at 22.00.

Feeding & brooding

Management of the four chicks now began in earnest. On the 10th May, the camera recorded the adults swapping brooding duties on 13 occasions, accompanied by whining calls. The female spent more time covering the chicks, sometimes with her wings splayed out for greater protection, particularly when Louth suffered some unseasonal weather and hail clattered down on the walkway and the nest roof. The chicks themselves were starting to huddle together for warmth, something they continued to do even after fledging.

Six feeds were recorded on the 10th – mostly prey brought in by the male who usually left it the female to dissect, before offering delicate morsels to the chicks while all the time issuing 'chucking' sounds. It did appear that the chick which pushed itself forward received the greater portion, but close



How quickly they grow! 8 May (above left) and 22 May (above right). The chicks' crops are clear to see.

observation revealed that as one chick was satiated, it withdrew and another took its place. They had insatiable appetites and by the 22nd May, their swollen crops were clear to see.

Ringling

Ringling took place on 26th May. I accompanied Alan Ball and his wife to the tower walkway. Within seconds of our arrival the peregrines spotted us and the adults took to the air, emitting their alarm call.



As in previous years, the smaller male flew higher above the church, while the female flew low, circling the spire.

The ringling took around 15 minutes and the juveniles were found to be three females and one male. All were thought to be healthy and well-fed. Each bird had a metal, uniquely-numbered BTO ring attached to its right leg and an orange East Midland ring on the left leg. These read PXL, PZL, PAN, and the male, PBN. We have been able to record these using our 'scope from the garden as the birds perched on various crockets and gargoyles around the church.

Towards fledging

At the beginning of June, the juveniles were seen to regularly exercise their wings, shedding the white, downy feathers. Earlier than expected, two of the juveniles 'escaped' from the nest tray, though they stayed close by, unable to return to the nest due to their inability to climb over the side of the tray.

Feeding continued apace, with the arrival of an adult, with or without food, greeted by prolonged screeching. The size of prey varied – often a starling, occasionally a feral pigeon. It didn't take long for the remaining juveniles to forsake the nest tray if the feed was taking place away from it. By the 3rd June, the sight of the four young birds being fed was increasingly rare, as many feeds took place on the unmonitored west walkway, however, when visible, the female was seen to be still picking off morsels of meat and feed the juveniles individually, though often, only one or two were hungry enough to bother. On one occasion, a live pigeon was brought in and it flapped away out of sight, pursued by four excited juveniles. The cameras didn't record it's grisly demise!



Wing exercise and their white down disappearing. 1 June.

On 19th June, the first of the juveniles fledged. The female (PXL) made her first flight around 08.30, landing on the nave roof where she sat for several hours. Later, the male (PBN) flew, landing clumsily on the parapet beneath the bell chamber, where it was fed by an adult at 17.40.

By the 20th, three had fledged and were perched at various points around the tower, while the fourth was seen peering through the castellations. At 04.30 the following morning, all the juveniles were seen on the tower walkway, having returned during the night to roost. On the 24th, the remaining juvenile was seen flying well and all were able to return to the tower to sleep, which they did lying on the walkway, heads together and any time of the day.



The juveniles were happy to sleep anywhere, at any time of day, often together as they did when they were chicks. 8 June (left), 23 June (right).

The juveniles still received feeds from the adults and were often seen ‘playing’ with the carcass of long-dead prey, dragging it along the walkway or pouncing on it. They didn’t seem to be fussy what they ate if they were hungry, the camera recorded a pigeon leg being swallowed in one go, along with its accompanying metal ring!



Four healthy juveniles. 25 June

What goes in, must come out, and it took a while for the juveniles to defecate as proficiently as the adults, who perched on the trefoil windows, facing inwards and powerfully expelling the excrement away from the walkway. The young birds, while instinctively knowing what should be done, lacked power and direction, and with a poor aim, their siblings were often on the receiving end of a liquid stream of droppings. It was clear that all the mess requiring swilling down at the end of the season (buckets of water and brooms carried up to the walkway) was a result of the juveniles’ lack of ‘toilet training’.

What the camera didn’t record was the regurgitation of pellets. I hadn’t found any in previous years when cleaning the walkway at the end of the season, but this year I saw several. Soft and grey-coloured, they

were about 5cm long. There were few identifiable items in those I examined – generic bits of feather and bone, but the plastic ring from a racing pigeon turned up in one.

Finally

By the end of June, the four juveniles had become proficient in flying and rarely returned to the walkway. It was a relief to realise the thick gloves and cardboard box, on hand to retrieve ‘grounded’ birds, could be stood down. Apart from 2019 when none fledged, there has always been a need to catch juveniles that land on the ground in the road or private garden. Peregrines are far happier at ‘launching’ themselves from high places and the fledglings we’ve seen landing on the nave roof needed space to run while flapping their wings to get airborne. This behaviour was frequently observed while they were on the walkway prior to fledging, and one wonders how the birds born in nests with no space to leave except on the wing, manage.

The end of July saw all four birds active around the church, hunting their own prey, but willing to accept any handouts from the adults. Frequently, two juveniles would fly in together with a kill, giving the impression there had been a joint effort in catching it.

As August progressed, the juveniles stayed away for longer periods, though often roosting on the spire and leaving at first light. Writing this on the last day of the month, we haven't caught sight or sound of a juvenile for over a week, though both adults are regular visitors – a successful season.

Geoff Mullett

***Summary of prey brought to nest 7th May - 20th June**

chaffinch 1
feral pigeon 42
house sparrow 2
knot 1
pigeon squab 2 (probably feral pigeon, delivered at night)
starling 103
unidentified large 1
unidentified medium 2
unidentified small 4
unidentified pigeon 1
woodpigeon 2
woodpigeon squab 1

* Research by Ed Drewitt who studied the hours of recordings from our webcams