

Black-legged kittiwake *Rissa tridactyla* breeding data recorded on the River Tyne during 2019

Summary report for presentation on Natural History Society of Northumbria website

Daniel M. Turner

These breeding data relate to surveys performed by the author and Dr Kathy Evans.

Key: AON Apparently Occupied Nests (well-built nests capable of containing eggs, with at least one adult present).

Breeding Productivity Minimum number of young fledged per Apparently Occupied Nest.

Table 1. 2019 River Tyne kittiwake AON (minimum) and minimum breeding productivity

Location	Min. AON (4 to 10 June 2019)	Chicks (and brood sizes) (July 12 to 16)	Min. breed prod.	% of failed nests
1. Tynemouth cliffs (natural site)	350 (18 June)	376 (24 July) (102x1, 134x2, 2x3)	1.07	32 %
2. N Shields Ferry Landing	9	12 (4x1, 4x2)	(1.33)	(11 %)
3. Port of Tyne, S Shields, Tower	0	0	----	----
4. McNulty, Tyne Dock – Now demolished	----	----	----	----
5. Akzo Nobel, International Paints (Felling)	212	224 (81x1, 67x2, 3x3)	1.06	29 %
6. Kittiwake Tower (Saltmeadows, Gateshead)	111	88 (40x1, 24x2)	0.79	42 %
7. Baltic Flour Mill (Arts Centre, Gateshead)	130	144 (74x1, 35x2)	1.11	16 %
8. NCL quay bldgs.: Vermont ApartHotel	6	1 (1x1)	(0.17)	(83 %)
9. NCL quay bldgs.: Shilling (between Vermont ApartHotel & Phoenix House)	0	---	---	---
10. NCL quay bldgs.: Phoenix House	24	19 (13x1, 3x2)	0.79	33 %
11. NCL quay bldgs.: Akenside Studios	1	0	(0.00)	(100 %)
12. NCL quay bldgs.: Akenside Traders	0	---	---	---
13. NCL quay bldgs.: R/way Bridge, Dean St.	62	60 (34x1, 13x2)	0.97	24 %
14. NCL quay bldgs.: 1 Queen St corner block	0	---	---	---
15a. NCL quay bldgs.: Lombard Ho.	11	11 (5x1, 3x2)	(1.00)	(27 %)
15b. NCL qb: Lombard St, Premier Inn	1	1 (1 x 1)	(1.00)	(0)
16a. NCL qb: Redhouse (opp. Guildhall)	5	8 (2x1, 3x2)	(1.60)	(0)
16b. NCL qb: Rasika, beside (E of) Redhouse	5	0	(0.00)	(100 %)
16c. NCL qb: on top of four street lamps	3	2 (1x2)	(0.67)	(67 %)
16d. NCL qb: Quilted Camel, W of Redhouse	0	---	---	---
17. Tyne Bridge – North abutment	361	343 (182x1, 79x2, 1x3)	0.95	27 %
18. Tyne Bridge – North abutment girders	106	80 (54x1, 13x2)	0.75	37 %
19. Tyne Bridge – South abutment	199	221 (113x1, 54x2)	1.11	16 %
20. Tyne Bridge – South abutment girders	70	61 (37x1, 12x2)	0.87	30 %
21a. Newcastle quayside: Guildhall	31	24 (16x1, 4x2)	0.77	36 %
21b. NCL qb: floodlight just N from Guildhall	3	4 (2x1, 1x2)	(1.33)	(0.0 %)
22. St Mary's Heritage Centre (Gateshead)	1	0	(0.00)	(100 %)
23. High Level Bridge (close to south bank)	4	4 (2x1, 1x2)	(1.00)	(25 %)
24. Brett Oils / Ovoline (Gateshead)	0	0	----	----
Totals (including Tynemouth)	1,705	1,683 (763x1, 451x2, 6x3)	0.99	28.4 %
Totals: River Tyne (excluding Tynemouth)	1,355	1,307 (661x1, 317x2, 4x3)	0.96	27.5 %

Notes to Table 1.

- Site 4, the McNulty engineering workshop at Tyne Dock, was demolished in summer 2018. Kittiwakes last successfully nested there in summer 2014.
- Where there were less than 20 AON at any site, the figures for: a) minimum breeding productivity and b) % of failed nests, have been placed in brackets due to small sample sizes.
- Nest failure at Newcastle quayside buildings (including Guildhall) was 32.9 % i.e. 50 nests failed.
- The dates of the surveys at Tynemouth, depicted in Table 1, show later dates than in the column headings since the kittiwake season on the cliffs at Tynemouth runs a little behind that on the river.
- **What is a 'failed nest'?** This is an occupied nest on which the adults failed to rear (fledge) any chicks. So, the table records a short-hand term '% of failed nests' which represents 'percentage of pairs which fail'. These 'failed nest' percentage figures are rounded to the nearest whole percentage, while one decimal place has been retained for the rows dealing with totals.

Further notes:

1. 2019 produced the most nests ever on the river ... 1,355 apparently occupied nests (AON).
2. The previous peak of AON was in 2017 ... with 1,308 nests (excluding Tynemouth).
3. Number of well-grown nestlings in summer 2019 was 1,307 (excluding Tynemouth) which was only slightly behind the peak of 1,320 nestlings recorded in the summer of 2017.
4. Overall strong breeding productivity for the river at 0.96 chicks per nest (AON).
5. This summer produced the first successful breeding (i.e. chicks fledged) on the High Level Bridge after the two previous seasons when the nests there had failed.
6. Premier Inn (Lombard St, Newcastle quayside; item 15b in Table 1) had new avishock deterrents. One nest was recorded on the building (east side; recorded by Twitter account KittiwakesOnRTyne). The main upper ledge with the newly installed avishock deterrent was really too wide for kittiwakes to nest on and the deterrent served to stop the gulls from resting on this ledge around the upper building. The single nest (which produced one nestling) was at a slightly higher level and on a narrower ledge (without deterrents) of a more suitable width for kittiwake nesting to take place.
7. Phoenix House (Newcastle quayside) had new deterrent optical / fire gel pads, but these were ineffective and nesting proceeded as usual.
8. Newcastle Guildhall had new deterrents: avishock and optical / fire gel pads. The avishock worked as designed, though one nest was close to some avishock on upper south face. The optical gel generally worked as designed, though one nest was built on the ledge with pads. The 31 nests recorded on the Guildhall were otherwise mostly on the unprotected ledges of the clock tower.
9. Strongest breeding productivity: Akzo Nobel, the Baltic and South abutment of Tyne Bridge.
10. Total nests at Newcastle quayside buildings including Dean St Railway Bridge: 152 AON.
11. At the North Shields Ferry Landing location, early in the season (7 March) it was noticed that anti-vandal paint had been used as a deterrent. This is an inappropriate wildlife deterrent and the property owner was informed so that remedial action may be quickly made. As a consequence the site was more difficult for the kittiwakes to use, resulting in a reduction in number of nests (down to 9 from 13 in 2018). The plumage of some of the kittiwakes using this site became soiled with the paint.
12. Netting entrapments during summer 2019. We became aware of entrapments as follows:
 - Vermont ApartHotel – two dead birds reported (adult and juvenile), July & August.
 - Tyne Bridge, north abutment – three dead adults during season, hole in netting found and resolved, birds removed. The resolutions were undertaken very swiftly by Newcastle City Council.
 - Tyne Bridge, south abutment: on 23 August, one live bird was reported with a leg caught in netting, later that day the bird was not present.