## Black-legged kittiwake Rissa tridactyla breeding data recorded on the River Tyne during 2024

A brief summary report for presentation at the Tyne Kittiwake Partnership (TKP) meeting on 18 Oct 2024 and for later storage on the Natural History Society of Northumbria website

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Note. This is version 2 ('two') of this report; dated 19 October 2024.

These breeding data relate to surveys performed by the author only.

Key: AON

Apparently Occupied Nest (a well-built nest capable of containing eggs, with at least one adult present. Repeated counts in late May to mid-June or a single count in early to mid-June).

### **Breeding Productivity**

ty Minimum number of young fledged per Apparently Occupied Nest.

Table 1. **2024** River Tyne and Tynemouth cliffs kittiwake AON (maximum) and minimum breeding productivity summary.

Location	AON (max) (May 27 to June 11)	Chicks (July 12 to 20)	Min. prod.	No. of failed nests	% of failed nests
1. Tynemouth cliffs (natural site)	353 (27 June)	412 (28 July)	1.17	79	22.4 %
2. North Shields Ferry Landing	16	16	[1.00]	5	[31.3 %]
3. Smiths Dock, North Shields	0				
4. Akzo Nobel (Int. Paints, Felling)	256	257	1.00	69	27.0 %
5. Saltmeadows Tower (Gateshead)	125	124 - 125	0.99 - 1	37	29.6 %
6. H Nichol Tower (RWE Renewables)	0				
7. 200 metres E from Baltic FM, quayside	7	6	[0.86]	2	[28.6 %]
8. Baltic Flour Mill (Art Centre, G/head)	150	163	1.09	44	29.3 %
9. Under HMS Calliope (Gateshead)	0				
10. St Mary's Heritage Centre, Gateshead	5	6	[1.20]	1	[20.0 %]
11. Lombard House (Newcastle quayside)	23	19	0.83	9	39.1 %
12. Queen Street north side (Newcastle)	32	29	0.91	8	25.0 %
13. Phoenix House (Queen St and	34	47	1.38	3	8.8 %
Sandhill, Newcastle quayside)					
14. Tyne Bridge – North abutment	403	400	0.99	111	27.5 %
15. Tyne Bridge – North abutment girders	187	171	0.91	50	26.7 %
16a. Tyne Bridge – South abutment	200	242	1.21	36	18.0 %
16b. Tyne Bridge – S, Tower Hotels (SE+SW)	0				
16c. Tyne Bridge – S, Long Hotel (temp.)	19	14	[0.74]	6	[31.6 %]
16d. Tyne Bridge – S, unintended scaffolding ledges (temporary)	61	58	0.95	15	24.6 %
17. Tyne Bridge – South abutment girders	122	102	0.84	42	34.4 %
18. Guildhall (Newcastle quayside)	43	48	1.12	13	30.2 %
19. Bessie Surtees House (Newcastle)	2	2	[1.00]	1	[50.0 %]
20. Railway viaduct, Dean St. (Newcastle)	111	128	1.15	21	18.9 %
21. Newcastle quayside, miscellaneous	20	20	1.00	5	25.0 %
22. High Level Bridge	19	23	[1.21]	3	[15.8 %]
Totals: River Tyne (excl. Tynemouth)	1835	1875 - 1876	1.02	481	26.2 %
Totals (including Tynemouth cliffs)	2188	2287 - 2288	1.05	560	25.6 %

General Notes to Table 1.

- 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'. 'No. of failed nests' is number of nests which failed to rear any chicks.
- 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 square brackets [] due to small sample sizes.
- The dates of the surveys at Tynemouth cliffs, 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.
- Fine AON detail needs checking, particularly for rows 4 & 14-17. This is mainly due to the fact that the AONs at the river sites were each surveyed twice in detail during the period shown.
- Breeding productivity and chick numbers relate to those dates indicated.
- Many more data were collected and will be incorporated in a future more detailed report.

Table 2. 2024 River T	vne and Tynemouth	n cliffs kittiwake AON	(maximum), cł	nick totals and brood sizes.
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Location	AON (max)	Chicks	Brood sizes
	(May 27 to	(July 12 to	(broods of 1, 2 or 3
	<b>June 11</b> )	20)	chicks )
1. Tynemouth cliffs (natural site)	353 (27 June)	412 (28 July)	136x1, 138x2
2. North Shields Ferry Landing	16	16	6x1, 5x2
3. Smiths Dock, North Shields	0		
4. Akzo Nobel (Int. Paints, Felling)	256	257	118x1, 68x2, 1x3
5. Saltmeadows Tower (Gateshead)	125	124 - 125	52x1, 1x1-2, 34x2, 1x3
6. H Nichol Tower (RWE Renewables)	0		
7. 200 metres E from Baltic FM, quayside	7	6	4x1, 1x2
8. Baltic Flour Mill (Art Centre, G/head)	150	163	51x1, 53x2, 2x3
9. Under HMS Calliope (Gateshead)	0		
10. St Mary's Heritage Centre, Gateshead	5	6	2x1, 2x2
11. Lombard House (Newcastle quayside)	23	19	9x1, 5x2
12. Queen Street north side (Newcastle)	32	29	19x1, 5x2
13. Phoenix House (Queen St and	34	47	15x1, 16x2
Sandhill, Newcastle quayside)			
14. Tyne Bridge – North abutment	403	400	185x1, 106x2, 1x3
15. Tyne Bridge – North abutment girders	187	171	103x1, 34x2
16a. Tyne Bridge – South abutment	200	242	86x1, 78x2
16b. Tyne Bridge – S, Tower Hotels (SE+SW)	0		
16c. Tyne Bridge – S, Long Hotel (temp.)	19	14	12x1, 1x2
16d. Tyne Bridge – S, unintended	61	58	34x1, 12x2
scaffolding ledges (temporary)			
17. Tyne Bridge – South abutment girders	122	102	58x1, 22x2
18. Guildhall (Newcastle quayside)	43	48	13x1, 16x2, 1x3
19. Bessie Surtees House (Newcastle)	2	2	1x2
20. Railway viaduct, Dean St. (Newcastle)	111	128	52x1, 38x2
21. Newcastle quayside, miscellaneous	20	20	10x1, 5x2
22. High Level Bridge	19	23	9x1, 7x2
Totals: River Tyne (excl. Tynemouth)	1835	1875 – 1876	838x1, 1x1-2,
			509x2, 6x3
Totals (including Tynemouth cliffs)	2188	2287 - 2288	974x1, 1x1-2,
			647x2, 6x3

General Notes to Table 2.

• The finer AON detail may need checking for certain rows (e.g. 4 & 14-17) due to the fact that two full AON surveys were completed for all river sites.

Year	AON	Chicks	Minimum	% of nests that
	(Apparently	(and brood sizes)	breeding	failed to raise
	Occupied Nests)		productivity	young to fledge
2019	1,355	1,307: (661x1, 317x2, 4x3)	0.96	27.5 %
2020	1,639	1,507: (798x1, 353x2, 1x3)	0.92	29.7 %
2021	1889 - 1895	2,481: (700x1, 853x2, 25x3)	1.31	16.6 %
2022	[2,030]	2,196: (871x1, 643x2, 13x3)	1.08	24.8 %
2023	2,002	1,377: (955x1, 211x2, 0x3)	0.69	41.8 %
2024	1,835	1,875-1,876: (838x1, 1x1-2,	1.02	26.2 %
		509x2, 6x3)		

Table 3. River Tyne (excluding Tynemouth) kittiwakes, summary 2019-2024.

Note. AON for 2022: fine detail needs to be checked.

Table 4. Tynemouth cliffs (natural si	e) kittiwakes, summary 2019-2024.
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Year	AON (Apparently Occupied Nests)	Chicks (and brood sizes)	Productivity (chicks per AON)	% of nests that failed to raise young to fledge
2019	350 (18 June)	376 (24 July): (102x1, 134x2, 2x3)	1.07	32 %
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2020	328 (20 June)	334 (24 July): (135x1, 98x2, 1x3)	1.02	28.7 %
2021	357 (29 June)	417 (27 July): (132x1, 135x2, 5x3)	1.17	23.8 %
2022	387 (30 June)	428 (1 Aug): (159x1, 133x2, 1x3)	1.11	24.3%
2023	327 (24 June)	263 (24 July): (123x1, 70x2, 0x3)	0.80	41.0 %
2024	353 (27 June)	412 (28 July): (136x1, 138x2)	1.17	22.4 %

Report Discussion (Version 1 of this discussion was read out at the TKP online meeting of 18 Oct 2024).

The first live River Tyne chick this season was seen in the nest on 6 June at the main nesting ledge on the north face of the Baltic Art Centre.

Overall breeding productivity for the River Tyne during the 2024 breeding season was 1.02 young fledged per Apparently Occupied Nest. This was a big improvement on the 2023 nesting season when productivity stood at 0.69 in comparison. During the 2023 season bird flu featured heavily and had a big impact. The birds have bounced back during the 2024 season to return to more normal levels of breeding productivity. Overall numbers of AON were reduced compared to the 2022 and 2023 nesting seasons, most likely mainly on account of the bird flu experienced by our colony especially in 2023. The AON population in 2022 and 2023 had been a little in excess of 2,000, while in 2024 the AON total for the River Tyne was 1,835 (a fall in population of around 9%). Percentage of failed nests during 2023 had reached 41.8% compared to a much improved figure of 26.2% in 2024. The Baltic Art Centre experienced a particularly large reduction in its numbers of AON from 193 in 2023 to 150 this season i.e. a fall of 22.3%. At Bessie Surtees House the deterrent measures taken since the 2023 nesting season (including installation of optical gel pads) resulted in a fall in AON from 24 (2023 nesting season) to 2 this year. The property owners will need to ensure they carefully maintain and review their deterrents. New and unadvised deterrent measures at Phoenix House this season included large plastic panels, spikes and chicken wire and resulted in the reduction of its population from 53 AON in 2023 to 34 AON in 2024 – though with a high nesting productivity of 1.38 – the highest recorded along the Tyne this season. By adjusting the netting deterrent at the Ferry Mews property at North Shields Ferry Landing, the landlord ensured a further reduction in the size of that small colony to 16 AON compared to 23 AON in 2023. The adjustment involved making the netting along the base of the small south-facing roof slate section project further and more securely from the roof so that the gulls could not grip onto that roof edge to build nests there where they had previously done. Neither the landlord of Ferry Mews nor the property owners of Phoenix House had discussed their new deterrent plans with the TKP.

Due to the Major Maintenance Works on the Tyne Bridge and the associated kittiwake mitigation measures which were introduced, following lengthy discussion with the TKP, I carried out many additional surveys of the Tyne Bridge during 2024. From Feb/March onwards a small group from TKP (including myself) met with the NCC (Newcastle City Council) bridge engineers, Esh contractors and WSP Ecology on a monthly basis to discuss progress and my kittiwake findings. From February I made weekly Tyne Bridge observations, especially recording any interest by the kittiwakes in the mitigation and other scaffolding ledges. Up to late June I prepared almost weekly reports for this group, before my reports became mainly monthly in frequency. My findings with respect to the bridge-nesting kittiwakes were generally positive. The 2024 bridge works were restricted in the main to the northern aspect of the south abutment and associated steelwork / girders up to road deck level out towards the river as far as to include the arch where it descends beneath the road deck. Two mitigation 'Tower Hotels' (southeast and southwest, SE and SW; see Tables 1 and 2 items 16b) were placed on the south abutment towers, but sadly the kittiwakes did not use them. In addition three long mitigation ledges were placed, river-facing, on the scaffolding above By-the-River-Brew (a Gateshead Quayside business) - these were named the 'Long Hotel' (see Tables 1 and 2 items 16c). Kittiwakes nested on the Long Hotel - with 19 AON. Additionally the kittiwakes found the ends of some exposed scaffolding boards to their liking and these housed 61 AON (see Tables 1 and 2 items 16d 'unintended scaffolding ledges'). Therefore although the Bridge Works scaffolding had displaced about 162 pairs, 80 pairs managed to nest on temporary mitigation and scaffolding ledges. Some of the birds from the previous season would have died from bird flu and therefore would not have returned to nest.

As a brief summary for the complete Tyne Bridge, including all scaffolding and mitigation ledges, in 2024 there were 992 AON with a breeding productivity of 0.99. In comparison, in 2022 (an excellent year for the kittiwakes) there were 1,089 AON and an associated breeding productivity of 1.08. Some of the data from my range of Tyne Bridge surveys during 2024 are intended for inclusion in a paper for publication.

Discussions continue with the Tyne Bridge engineers and contractors in the lead-in to the 2025 nesting season and we are working towards useful nesting mitigation measures close beside the north abutment.

During the growth phase of the nestlings I rescued ten fallen chicks of various ages between 4 July and 8 August – with assistance from staff working on the Tyne Bridge (most notably Paige Bell, Stakeholder and Public Liaison Officer with Esh Civils). These nestlings were passed to Blyth Wildlife Rescue for care and later release when fully grown and suitably fit. I also collected ten deceased nestlings (between 26 June and 24 July) and one deceased adult (on 7 May). Three of these nestlings (collected on 18, 19 and 24 July from beneath the north abutment of the Tyne Bridge) were tested by APHA (Animal and Plant Health Agency) for bird flu and found to be negative for the virus. In late February 2024 I had sent nine frozen kittiwake nestlings for bird flu testing – these were birds I had collected at the Newcastle and Gateshead riverside during the 2022 and 2023 nesting seasons. Of the five 2022 nestlings, one tested positive for HPAI (Highly Pathogenic Avian Influenza) – it had been collected at the base of the north abutment (collected on 15 July). I also collected a first-year kittiwake from Tynemouth Longsands on 23 April 2022 – this bird tested negative for HPAI. In addition I collected a deceased adult (a ringed bird) from Saltmeadows Tower, Gateshead, on 20 May 2022, it had been entangled in angler's line and tested negative for HPAI.

On 14 June Welsh author Jon Gower came to meet me, tour the quaysides and discuss Tyne kittiwakes. We had several interesting hours together. He was working on a book 'Birdland: On the Wing around Britain', to be published by Harper Collins in April 2025.

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# Black-legged kittiwake *Rissa tridactyla* breeding data recorded on the River Tyne during 2024

# Brief Summary Report (version 2), 19 October 2024, by Daniel M Turner

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