

Summary of Black-legged Kittiwake *Rissa tridactyla* breeding data recorded on the River Tyne, northeast England, during 2010 – 2015

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These data include all the known River Tyne breeding locations.

These tables provide summaries only.

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

2010 summary data: Kittiwake nests (AON) and breeding productivity on the River Tyne.

Location	AON (June 4-8, 2010)	Chicks (July 8-10, 2010)	Min. no. of young fledged / AON
1. Tynemouth cliffs (natural site)	189	240	1.27
2. N Shields Ferry Landing	13	20	1.54
3. McNulty, Tyne Dock	49	65	1.33
4. International Coatings	144	211	1.47
5. Baltic Flour Mill	48	57	1.19
6. Kittiwake Tower (Gateshead)	105	76	0.72
7. Newcastle Quayside buildings	53	53	1.00
8. Tyne Bridge – Newcastle side	302	362	1.20
9. Tyne Bridge – Gateshead side	65	86	1.32
10. Newcastle Quay: Guildhall	26	32	1.23
Totals and overall success	994	1202	1.21
Totals (excluding Tynemouth cliffs)	805	962	1.20

2011 summary data: Kittiwake nests (AON) and breeding productivity on the River Tyne.

Location	AON (June 8-13, 2011)	Chicks (July 4-11, 2011)	Min. no. of young fledged / AON
1. Tynemouth cliffs (natural site)	208	267	1.28
2. N Shields Ferry Landing	8	10	1.25
3. McNulty, Tyne Dock	51	68	1.33
4. International Coatings	130	141	1.08
5. Baltic Flour Mill	53	62	1.17
6. Kittiwake Tower (Gateshead)	92	76	0.83
7. Newcastle Quayside buildings	46	60	1.30
8. Tyne Bridge – Newcastle side	317	408	1.29
9. Tyne Bridge – Gateshead side	77	102	1.32
10. Newcastle Quay: Guildhall	27	28	1.04
Totals and overall success	1009	1222	1.21
Totals (excluding Tynemouth cliffs)	801	955	1.19

2012 summary data: Kittiwake nests (AON) and breeding productivity on the River Tyne.

Location	AON (June 3-13, 2012)	Chicks (July 7-9, 2012)	Min. no. of young fledged / AON
1. Tynemouth cliffs (natural site)	197	186	0.94
2. N Shields Ferry Landing	7	12	1.71
3. McNulty, Tyne Dock	55	69	1.25
4. International Coatings	128	115	0.90
5. Baltic Flour Mill	52	61	1.17
6. Kittiwake Tower (Gateshead)	91	96	1.05
7. Newcastle Quayside buildings	67	52	0.78
8. Tyne Bridge – Newcastle side	300	336	1.12
9. Tyne Bridge – Gateshead side	77	93	1.21
10. Newcastle Quay: Guildhall	13	11	0.85
Totals and overall success	987	1031	1.04
Totals (excluding Tynemouth cliffs)	790	845	1.07

2013 summary data: Kittiwake nests (AON) and breeding productivity on the River Tyne.

Location	AON (June 3-8, 2013)	Chicks (July 11-25, 2013)	Min. no. of young fledged / AON
1. Tynemouth cliffs (natural site)	147	117	0.80
2. N Shields Ferry Landing	7	7	1.00
3. McNulty, Tyne Dock	41	28	0.68
4. International Coatings	114	113	0.99
5. Baltic Flour Mill	54	36	0.67
6. Kittiwake Tower (Gateshead)	---	0	---
7. Newcastle Quayside buildings	55	37	0.67
8. Tyne Bridge – Newcastle side	312	209	0.67
9. Tyne Bridge – Gateshead side	78	64	0.82
10. Newcastle Quay: Guildhall	20	21	1.05
Totals and overall success	828	632	0.76
Totals (excluding Tynemouth cliffs)	681	515	0.76

Notes.

1. Kittiwake Tower (Gateshead) was deserted due to crow disturbance (early June 2013).
2. River Tyne breeding was delayed by up to 2 weeks in 2013, possibly due to poor weather in late March.
3. The 2013 summary data table was re-visited and updated, by reference to original notes, on 11.06.2014

2014 summary: Kittiwake apparently occupied nests (AON) and breeding productivity on River Tyne.

Location	AON (June 5-13, 2014)	Chicks (July 11-14, 2014)	Min. no. of young fledged / AON
1. Tynemouth cliffs (natural site)	234	218 (23 July)	0.93
2. N Shields Ferry Landing	10	15	1.50
3. Port of Tyne, S Shields, Tower	0	-----	-----
4. McNulty, Tyne Dock	52	50	0.96
5. International Coatings	129	126	0.98
6. Kittiwake Tower (Gateshead)	77	56	0.73
7. Baltic Flour Mill (Arts Centre)	79	77	0.97
8. NCL quay bldgs.: Akenside Traders	27	29	1.07
9. NCL quay bldgs.: Phoenix House	48	46	0.96
10. NCL quay bldgs.: Lombard Ho.	5	3	0.60
11. Tyne Bridge – North abutment	319	311	0.97
12. Tyne Bridge – North girders	58	44	0.76
13. Tyne Bridge – South abutment	123	98	0.80
14. Tyne Bridge – South girders	16	7	0.44
15. Newcastle quayside: Guildhall	32	30	0.94
Totals and overall success	1209	1110	0.92
Totals (excluding Tynemouth cliffs)	975	892	0.91

Tyne river: free-flying juveniles (2014):

- a) One on 11 July (on top of Guildhall, Newcastle);
- b) One had probably fallen from a nest and was paddling on the river at International Coatings (11 July) – likely not fully fledged;
- c) 1-2 on 12 July in Newcastle quayside area;
- d) 7 on 13 July in Newcastle quayside area;
- e) One at McNulty Offshore yard, Tyne Dock, on 14 July – this land now owned by Port of Tyne. Also one at North Shields ferry landing on 14 July.

2014 Notes:

1. up to 12 July, Tyne River, 516 chicks from 594 AON i.e. productivity of 0.87;
2. up to 13 July, Tyne River, 827 chicks from 913 AON i.e. productivity of 0.91;
3. A fairly typical season with regards to timing of nests and young, still many quite small chicks during main July survey period, the rest developing well;
4. On Tuesday morning 8 July, there was very heavy rain from about 08:50 – 11:00. It was torrential for a while, at least 20 minutes. Large pools developed on local roads. Otherwise the summer weather during the breeding season was mostly dry and mild;
5. During surveys 11-12 July, 3 dead chicks were noted at river nests;
6. At Gateshead Tower (11 July) one young crow was standing on a south facing ledge for two minutes, but did not disturb the kittiwakes. It then flew off and joined two adult crows on a nearby aerial (photographed). It proceeded to beg from the adults;
7. During surveys on 13 July, 2 dead chicks found – having fallen from nests at the Baltic;
8. On 11 July, one well developed nestling had fallen from a nest at Newcastle quayside. It was well, collected and handed to Ayres Veterinary Hospital who passed it to a foster carer;
9. Deposition of stone at Redheads Landing, between 13 June and 14 July, appeared to lead to the desertion of two nests at McNulty (Tyne Dock);
10. During the studies of Ellen Dickinson, in June-July 2014 (Dickinson, 2015), a marked increase in productivity was found at the Tynemouth cliffs site to 0.93 by 23 July. Ellen was working on her dissertation project, as a zoology undergraduate at Newcastle University, under the supervision of Dr Chris Redfern. She also determined (amongst other findings) higher productivity on the Tyne Bridge north abutment compared to the south abutment and productivity variation on the north abutment due to nesting orientation.

2015 summary: Kittiwake apparently occupied nests (AON) and breeding productivity on River Tyne.

Location	Min. AON (June 3-5)	Chicks (July 4-11)	Min. no. of young fledged / AON
1. Tynemouth cliffs (natural site)	246 (7 June)	253 (10 July)	1.03
2. N Shields Ferry Landing	12	13	1.08
3. Port of Tyne, S Shields, Tower	0 (new site)	---	---
4. McNulty, Tyne Dock	0 (nesting kestrel)	---	---
5. International Coatings	153	167	1.09
6. Kittiwake Tower (Gateshead)	90	78	0.87
7. Baltic Flour Mill (Arts Centre)	82	70	0.84
8. NCL quay bldgs.: The Chase	8	5	---
9. NCL quay bldgs.: Phoenix House	27	24	0.89
10. NCL quay bldgs.: Akenside Traders	39	34	0.87
11. NCL quay bldgs.: Akenside Studios	2	1	---
12. NCL quay bldgs.: 1 Queen St	3	1	---
13. NCL quay bldgs.: Lombard Ho.	6	4	---
14. Tyne Bridge – North abutment	332	300	0.90
15. Tyne Bridge – North girders	58	48	0.83
16. Tyne Bridge – South abutment	137	135	0.99
17. Tyne Bridge – South girders	18	18	1.00
18. Newcastle quayside: Guildhall	44	44	1.00
Totals and overall success	1,257	1,195	0.95
Totals (excluding Tynemouth cliffs)	1,011	942	0.93

Notes:

- 1) After the first part of the main nest surveys on 3 June 2015 – this showed an increase by 73 a.o.n. (locations 3, 5-13 and 16-18) compared to 536 a.o.n. at those same locations in 2014;
- 2) The ‘Tyne Bridge north girders’ nest total included 2 a.o.n. on girders at road level;
- 3) From chick surveys on 4 July, here are the initial breeding productivity figures:
 - a. Baltic Flour Mill 0.84 chicks / (82) a.o.n.
 - b. Newcastle quayside buildings (beneath Tyne Bridge) 0.81 chicks / (85) a.o.n.
 - c. Newcastle quayside - Guildhall 1.00 chicks / (44) a.o.n.
- 4) From chick surveys on 24 June (162) and 1 July (159) by Dr. Kathy Evans,
 - a. Initial productivity at International Coatings max 1.06 chicks / (153) a.o.n.
- 5) From chick surveys of 4-7 July:
 - a. This showed 581 chicks from 609 a.o.n. i.e. a developing overall productivity of 0.95 chicks per a.o.n. with 402 a.o.n. still to check over further days.
 - b. The first two free-flying juveniles were seen on the afternoon of 7 July in the Newcastle / Gateshead area.
- 6) From accumulated chick surveys of 4-9 July:
 - a. showed 929 chicks from 999 a.o.n. i.e. a developing overall productivity of 0.93 chicks per a.o.n. with more surveys coming over the following days.
- 7) Surveys at the Tyne Bridge north abutment showed 22% nest failure i.e. 73 out of 332 a.o.n.
- 8) On 9 July there were 15 free-flying juveniles noted in the Newcastle/Gateshead Tyne Bridge area.
- 9) Port of Tyne confirmed (20 July) that the kittiwakes did not return to nest at the McNulty building following nesting by kestrels earlier in the summer;
- 10) Reduction in numbers of nests at Phoenix House, between 2014 and 2015, (a reduction by 21 a.o.n. to 56% of the number of a.o.n. in 2014) was due to illegal netting (of incorrect mesh size) before the season began.

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References

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