### Summary of Black-legged Kittiwake *Rissa tridactyla* breeding data recorded on the River Tyne, northeast England, during 2016

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These data include all known River Tyne breeding locations

Key:	AON	Apparently Occupied Nests (well-built nests capable of
		containing eggs, with at least one adult present)
	n/c	Not counted
	<b>Breeding Productivity</b>	Minimum number of young fledged per Apparently Occupied Nest

#### Part One: Summary

Table 1. 2016 Summary: Kittiwake AON and breeding productivity on River Tyne.

Location	Min AON	Min AON	Chicks	Min.	% of
	(May 26 to	(June 7-	(July 11 to 19)	prod.	failed
	June 3)	18)			nests
1. Tynemouth cliffs (natural site)	n/c	224	231 (107x1, 62x2)	1.03	25%
2. N Shields Ferry Landing	12	12	11 (5 x 1, 3 x 2)	0.92	33%
3. Port of Tyne, S Shields, Tower	0	0	0	-	-
4. McNulty, Tyne Dock	n/c	0	-	-	-
5. International Coatings	152	165	160 (100x1, 30x2)	0.97	21%
6. Kittiwake Tower (Gateshead)	82	90	66 (36x1, 15x2)	0.73	43%
7. Baltic Flour Mill (Arts Centre)	90	93	89 (63x1, 13x2)	0.96	18%
8. NCL quay bldgs.: Vermont ApartHot	10	10	5 (3x1, 1x2)	(0.50)	(60%)
9.NCL quay bldgs.: Vartans (between	3	4	4 (4x1)	(1.00)	(0%)
Vermont ApartHot & Phoenix House)					
10. NCL quay bldgs.: Phoenix House	14	20	16 (12x1, 2x2)	(0.80)	(30%)
11. NCL quay bldgs.: Akenside Studios	0	1	0	(0)	(100%)
12. NCL quay bldgs:Akenside Traders	0	0	0	-	-
13. NCL quay bldgs.: R/way Bridge	11	26	11 (9x1, 1x2)	(0.42)	(62%)
14. NCL quay bldgs.: 1 Queen St	2	0	0	-	-
15. NCL quay bldgs.: Lombard Ho.	6	6	4 (4x1)	(0.67)	(33%)
16. NCL qb: Redhouse (opp. Guildhall)	0	3	0	(0)	(100%)
17. Tyne Bridge – North abutment	339	352	284 (198x1, 43x2)	0.81	32%
18. Tyne Bridge – North abut. girders	67	65	45 (33x1, 6x2)	0.69	40%
19. Tyne Bridge – South abutment	143	149	115 (79x1, 18x2)	0.77	35%
20. Tyne Bridge – South abut. girders	28	26	19 (11x1, 4x2)	0.73	42%
21. Newcastle quayside: Guildhall	52	52	43 (21x1, 11x2)	0.83	38%
Totals (including Tynemouth)		1,298	1,103	0.85	31.1%
Totals (excluding Tynemouth)	1,011	1,074	872	0.81	32.5%

Notes:

- 1) No chicks seen 26, 27 & 28 May
- 2) 27 May No kittiwakes on Akenside Traders where the optical gel petri dishes are placed; this situation continued throughout the summer observational period.
- 3) 3 June, 9 small chicks (up to 3 days old) seen on North abutment of Tyne Bridge, some broken egg shells at base.
- 4) Ferry Mews, North Shields, 4 June, twelve very well constructed nests smothering any plastic spikes in evidence.

- 5) 7 June: from 418 river AON the author noted 8 x 1 and 2 x 2 small chicks (+ 16 attended trace nests).
- 6) 9 June: from 227 river AON, 1 small chick seen (+ 11 attended trace nests).
- 7) 10 June: 224 AON at Tynemouth cliffs, but no chicks seen (+27 attended trace nests).
- 8) Site visit by the author to Port of Tyne (10.06.16, with prior arrangement), accompanied by Stuart McLeod (Head of Environment), to view the McNulty engineering workshop. There was no kittiwake presence. A nesting pair of peregrine falcons had been reported from within the building. In the view of the author the building is currently unsuitable for nesting kittiwakes due to the work that continues on this land. Building surveys indicate the workshop is in poor repair and should be demolished along with adjacent buildings left from when McNulty Offshore ran the site. Port of Tyne hope to demolish these in quarter one of 2017 depending on planning approval. Stuart McLeod today indicated their kittiwake tower cost £70,000 to refurbish and put in position (March 2014); there are no plans to move it in the foreseeable future. This is a considerable sum of money and shows good commitment by the Port of Tyne.
- 9) By end of 11 July from 443 AON there were 387 chicks i.e. 0.87 productivity
- 10) By end of 12 July from 645 AON there were 532 chicks i.e. 0.82 productivity
- 11) On 12 July p.m. the first four fledged juveniles were seen they were on the river, with many adults, between Newcastle and Gateshead quaysides (between the Millennium Bridge and the Tyne Bridge). One of the Newcastle quayside business men spoke with the author (pleasantly).
- 12) On 13 July p.m. two or three fledged juveniles were present i.e. one or two on the river and another on a quayside building top. The author showed four passers-by (at Newcastle quayside) chicks and adults at nest sites through his telescope they asked many questions. He also spoke with another two women who quizzed him as he passed the Baltic with all his equipment.
- 13) By end of 13 July from 1,062 AON there were 861 chicks i.e. 0.81 productivity, plus an additional 4 7 fledged juveniles had been seen by then.
- 14) One of the north girders of the Tyne Bridge nests may have held 3 chicks, but counted as 2.
- 15) Nest failure of Newcastle quayside buildings, excluding Guildhall, 49% (34 nests failed)
- 16) Newcastle quayside buildings: productivity and nest failure % bracketed due to small AONs
- 17) Four surveys were undertaken at International Coatings by Kathy Evans (see Table 7); all other surveys reported here were performed by the author.

Aspect			Chicks total	Productivity Chicks / AON	% of failed nests
North	83	54 x 1, 12 x 2	78	0.94	20 %
South	124	64 x 1, 17 x 2	98	0.79	35 %
East	73	37 x 1, 6 x 2	49	0.67	41 %
West	72	43 x 1, 8 x 2	59	0.82	29 %
Total	352	198 x 1, 43 x 2	284	0.81	32 %

### Table 2. Tyne Bridge north abutment, 2016

Table 3. Tyne Bridge south abutment, 2016

Aspect	AON	Chick clutches	Chicks	Productivity	% of failed
	9 June 2016	12 July 2016	total	Chicks / AON	nests
North	65	32 x 1, 7 x 2	46	0.71	40 %
South	12	7 x 1, 1 x 2	9	0.75	33 %
East	65	35 x 1, 9 x 2	53	0.82	32 %
West	7	5 x 1, 1 x 2	7	1.0	14 %
Total	149	79 x 1, 18 x 2	115	0.77	35 %

#### Table 4. Saltmeadows Tower (Gateshead), 2016

Aspect	AON 7 June 2016	Chick clutches 11 July 2016	Chicks total	Productivity Chicks / AON	% of failed nests
NE	38	15 x 1, 7 x 2	29	0.76	42 %
NW	37	18 x 1, 5 x 2	28	0.76	38 %
S	15	3 x 1, 3 x 2	9	0.60	60 %
Total	90	36 x 1, 15 x 2	66	0.73	43 %

Table 5. Baltic Arts Centre (Gateshead), 2016

Aspect	AON 7 June 2016	Chick clutches 11 July 2016	Chicks total	Productivity Chicks / AON	% of failed nests
North 1	75	50 x 1, 11 x 2	72	0.96	19 %
North 2	14; + 3 (windows)	12 x 1, 2 x 2	16	0.94	18 %
East	1	1 x 1	1	1.00	0 %
Total	93	63 x 1, 13 x 2	<b>89</b>	0.96	18 %

Notes.

North 1: main ledge under BFM lettering;

North 2: ledge above BFM lettering and assoc. windows.

#### Table 6. International Coatings (Felling Shore), 2016 (D M Turner data)

Aspect	AON	Chick clutches	Chicks	Productivity	% of failed
	7 June 2016	11 July 2016	total	Chicks / AON	nests
1	27	9 x 1, 6 x 2	21	0.78	44 %
2	10	7 x 1, 1 x 2	9	0.90	20 %
3	57	37 x 1, 12 x 2	61	1.07	14 %
4	61	42 x 1, 8 x 2	58	0.95	18 %
5	10	5 x 1, 3 x 2	11	1.10	20 %
Total	165	100 x 1, 30 x 2	160	0.97	21 %
Notes.	Aspect 1	Long low ledge to the	e right (west)		

Aspect 1 Long low ledge to the right (west)

Next middle ledge to left (east) of Aspect 1 Aspect 2

Concentrated old central section (i.e. moving east) Aspect 3

Aspect 4 Five windows and long low ledge to left (east) of Aspect 3

Aspect 5 Windows back from river, higher, left and right of 'Akzo Nobel' lettering

Table 7. International Coatings (Felling Shore), 2016 (K Evans data), showing nestling	ing development
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Aspect	Chicks	Chicks	Chicks	Chicks
	30 June	7 July 15 July		20 July
1	19	21	21	18
2	9	9	9	7
3	58	59	59	49
4	38	54	55	54
5	13	12	12	11
Total	137	155	156	139
Summary	73 x 1, 32 x 2	93 x 1, 31 x 2	94 x 1, 31 x 2	95 x 1, 22 x 2

Free flying juveniles noted: 0 (30 June & 7 July), 3 (15 July), 15 (20 July)

Aspect	AON	Chick clutches	Chicks	Productivity	% of failed
	10 June 2016	19 July 2016	total	Chicks / AON	nests
1	72	29 x 1, 26 x 2	81	1.13	24 %
2	75	39 x 1, 15 x 2	69	0.92	28 %
3	34	17 x 1, 13 x 2	43	1.26	12 %
4	43	22 x 1, 8 x 2	38	0.88	30 %
Total	224	107 x 1, 62 x 2	231	1.03	25 %
Notes.	Aspect 1	Steps to arch 1 and a	urches $1 - 13$		

### Table 8. Tynemouth cliffs, 2016

Aspect 2 To right of arch 13 up to artificial gap

Aspect 3 From artificial gap to corner

Aspect 4 From corner towards King Edward's Bay, fairly straight section.

# Part Three: Dunstanburgh Castle (Comparative data)

# Table 9. Dunstanburgh Castle cliffs, 2012 – 2016 (Surveys by D M Turner)

Year	AON	Chick clutches	Chicks	Productivity	% of failed
			total	Chicks / AON	nests
2012	309 (5 June)	113 x 1, 107 x 2, 2 x 3 (10 July)	344	1.11	28.2 %
2013	198 (15 June)	53x1, 31x2, 1x3 (23 July)	118	0.60	57.1 %
2014	346 (8 June)	157x1, 85x2 (15 July)	327	0.95	30.1 %
2015	336 (15 June)	116x1, 113x2, 1x3 (14 July)	345	1.03	31.5 %
2016	211 (11 & 26 June)	64x1, 38x2, 1x3 (19 July)	143	0.68	51.2 %

# Acknowledgements

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# References

Turner, D.M. (2010) Counts and breeding success of Black-legged Kittiwakes *Rissa tridactyla* nesting on man-made structures along the River Tyne, northeast England, 1994-2009, *Seabird*, Vol. 23, 111 - 126.

Turner, D.M. (2014) Summary of kittiwake breeding data on the River Tyne, northeast England, 2010-2013. *Birds in Northumbria 2013*, pages 206 – 208, Northumberland and Tyneside Bird Club.

Turner, D.M. (2015) Summary of Black-legged Kittiwake *Rissa tridactyla* breeding data recorded on the River Tyne, northeast England, during 2010 – 2015. Natural History Society of Northumbria website (<u>www.nhsn.ncl.ac.uk</u>) under 'Activities', 'Conservation & Research', 'Tyne Kittiwakes', 'Tyne kittiwake population data' then 'Data for 2010-15'.

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