

Addendum

Burke, B., McElwaine, J.G., Fitzgerald, N., Kelly, S.B.A., McCulloch, N., Walsh, A.J. & Lewis, L.J. 2021. Population size, breeding success and habitat use of Whooper Swan *Cygnus cygnus* and Bewick's Swan *Cygnus columbianus bewickii* in Ireland: Results of the 2020 International Swan Census. *Irish Birds* 43: 57-70.

Following the publication of the results of the 2020 International Swan Census as above, re-examination of the ageing data for Whooper Swans in County Limerick allowed for the inclusion of an additional 202 aged birds, 30 of which were juveniles, and the brood sizes identified. The corrected ageing data is included in an update to Table 1 of the original paper (presented as Table 1 here). This did not change the total Whooper Swan numbers for the county.

Furthermore, the percentage changes of total counts at county-level in the original paper were compared with the results presented in Crowe *et al.* (2015). This was incorrect for several counties, as the comparison should have been made with the updated results for the 2015 census as presented in Hall *et al.* (2016). Corrected percentage changes at county level are also presented in Table 1 here. Corrections

are also illustrated in updated versions of the maps in the original paper, presented here in Figure 1a-d (replacing Figure 2a-d in Burke *et al.* 2021).

Though these updates and corrections are important, the overall results of the census in the Republic of Ireland, and the island of Ireland remain largely the same. The additional ageing data for Limerick increased the percentage of juveniles to 13.3%, and the mean brood size to 1.7. The updated percentage-changes at county level are of similar scale to those originally published.

Acknowledgements

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References

- Burke, B., McElwaine, J.G., Fitzgerald, N., Kelly, S.B.A., McCulloch, N., Walsh, A.J. & Lewis, L.J. 2021. Population size, breeding success and habitat use of Whooper Swan *Cygnus cygnus* and Bewick's Swan *Cygnus columbianus bewickii* in Ireland: Results of the 2020 International Swan Census. *Irish Birds* 43: 57-70.
- Crowe, O., McElwaine, J.G., Boland, H. & Enlander, I.J. 2015. Whooper *Cygnus cygnus* and Bewick's *C. columbianus bewickii* Swans in Ireland: results of the International Swan Census, January 2015. *Irish Birds* 10: 151–158.
- Hall, C., Crowe, O., McElwaine, G., Einarsson, Ó., Calbrade, N. & Rees, E.C. 2016. Population size and breeding success of the Icelandic Whooper Swan *Cygnus cygnus*: results of the 2015 international census. *Wildfowl* 66: 75–97.

Table 1. The county, total, number of flocks, age structure and brood sizes of Whooper Swans *Cygnus cygnus* in the January 2020 census, with All-Ireland totals from previous censuses, with updates and corrections to those figures originally published in Burke *et al.* (2021). Note that original census figures have been updated in subsequent publications when counts submitted late are subsequently included and not all relevant revised figures (e.g. flock numbers) are subsequently published.

County	Total	Change	Flocks	Aged	Juveniles	% Juv	Broods	1y	2y	3y	4y	5y	6y	Mean Brood Size
Antrim	1,146	49	32	974	179	18.4	71	29	25	9	6	2		2.0
Armagh	490	5.4	16	490	84	17.1	42	15	15	9	3			2.0
Down	788	53	17	718	182	25.3	93	42	27	13	8	3		2.0
Fermanagh	492	-37.2	23	451	62	13.7	18	9	4	3	1	1		1.9
Londonderry	1,478	128.1	27	1,253	283	22.6	126	51	34	22	9	8	2	2.2
Tyrone	250	-25.8	14	239	35	14.6	23	14	6	3				1.5
NI Total	4,644	32	129	4,125	825	20.0	373	160	111	59	27	14	2	2.0
Carlow	27	↑	2	24	4	16.7	-							-
Cavan	813	-22.8	37	633	147	23.2	59	15	23	16	3	2		2.2
Clare	875	38.4	20	319	57	17.9	14	8	5		1			1.6
Cork	488	100	9	480	61	12.7	34	20	7	6	1			1.7
Donegal	1,159	122	48	1,058	279	26.4	136	55	50	21	7	3		1.9
Dublin	40	↑	3	40	8	20.0	4	4						1.0
Galway	1,485	-17.2	38	1,261	162	12.8	62	28	20	8	6			1.9
Kerry	419	-10.9	16	312	28	9.0	15	8	4	3				1.7
Kildare	175	8	3	175	15	8.6	1	1						1.0
Kilkenny	81	268.2	2	81	18	22.2	0							
Laois	197	64.2	8	185	51	27.6	19	8	3	3	3	2		2.4
Leitrim	386	27.8	20	289	72	24.9	41	18	17	5	1			1.7
Limerick	493	175.4	8	300	40	13.3	23	12	7	2	2			1.7
Longford	394	85	13	208	35	16.8	13	4	5	3	1			2.1
Louth	208	123.7	2	0		-	-							-
Mayo	973	-22.7	55	823	167	20.3	52	16	27	8	1			1.9
Meath	119	-43.1	8	119	29	24.4	12	3	3	5	1			2.3
Monaghan	172	-65.3	12	127	14	11.0	1	1						1.0
Offaly	1,506	208	15	714	116	16.2	19	5	9	2	3			2.2
Roscommon	1,322	-3.3	39	683	137	20.1	60	20	18	13	6	2	1	2.3
Sligo	273	37.9	15	190	38	20.0	14	8	4	1	1			1.6
Tipperary	441	45.1	11	351	89	25.4	13	2	7	3	1			2.2
Waterford	432	-0.7	12	382	78	20.4	41	21	9	5	6			1.9
Westmeath	982	152.4	13	627	136	21.7	47	11	17	14	2	2	1	2.4
Wexford	928	18.2	9	900	130	14.4	49	7	21	13	3	5		2.6
Wicklow	79	-31.9	3	79	21	26.6	6	2	2	2				2.0
ROI Total	14,467	22.1	421	10,360	1,932	18.6	735	277	258	133	49	16	2	2.0
All Ireland Total	19,111	24.3	550	14,485	2,757	19.0	1,108	437	369	192	76	30	4	2.0

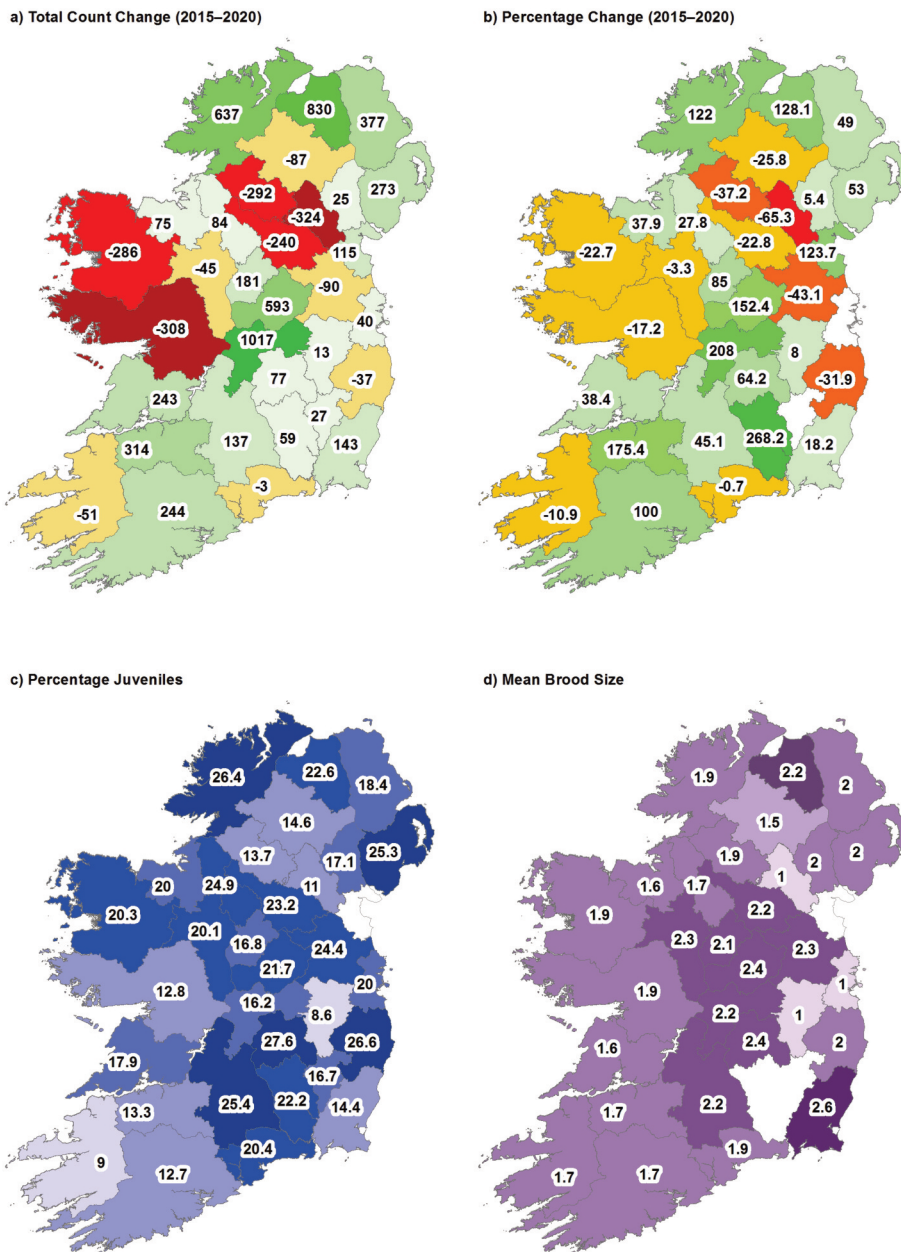


Figure 1. County breakdown of change in numbers from 2015 census (a), percentage change from 2015 census (b), percentage juveniles (c) and mean brood size (d) of Whooper Swans *Cygnus cygnus* in Ireland for the January 2020 census. This updates and corrects those figures published as Figure 2 in Burke *et al.* (2021).