

## Results of the international Bewick's Swan age count: 15-16 December 2018

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In the weekend of 15-16 December 2018, the 37<sup>th</sup> annual Bewick's Swan age count was held in ten different countries across Europe, as part of a programme monitoring the breeding success of the NW European population. The percentage of juveniles recorded in 2018 was much better than in 2017, but still below the level required to compensate for annual mortality rates.

### Purpose of age counts

The Swan Specialist Group has monitored the NW European Bewick's Swan populations carefully since the mid-1980s, to assess the conservation requirements for the species. This is important because historically the population size was small and, following an increase in numbers between the 1970s and mid-1990s, trends analyses show that it is now in decline. Indeed, having peaked at just under 30,000 birds in 1995, numbers dropped to 18,100 in 2010, and whether a slight recovery c. 20,000 birds in 2015 is maintained hereafter remains to be seen (Beekman *et al.* Wildfowl 2019). Age counts are an important tool for understanding such fluctuations in population size. Every five years the population size is monitored, and each year after the birds have arrived to the wintering grounds in NW Europe, we monitor their breeding success. These observations, which have been ongoing since 1982, show strong annual variation in the number of cygnets raised each year, as well as in the number of successful breeding pairs (*e.g.* Wood *et al.* 2016).

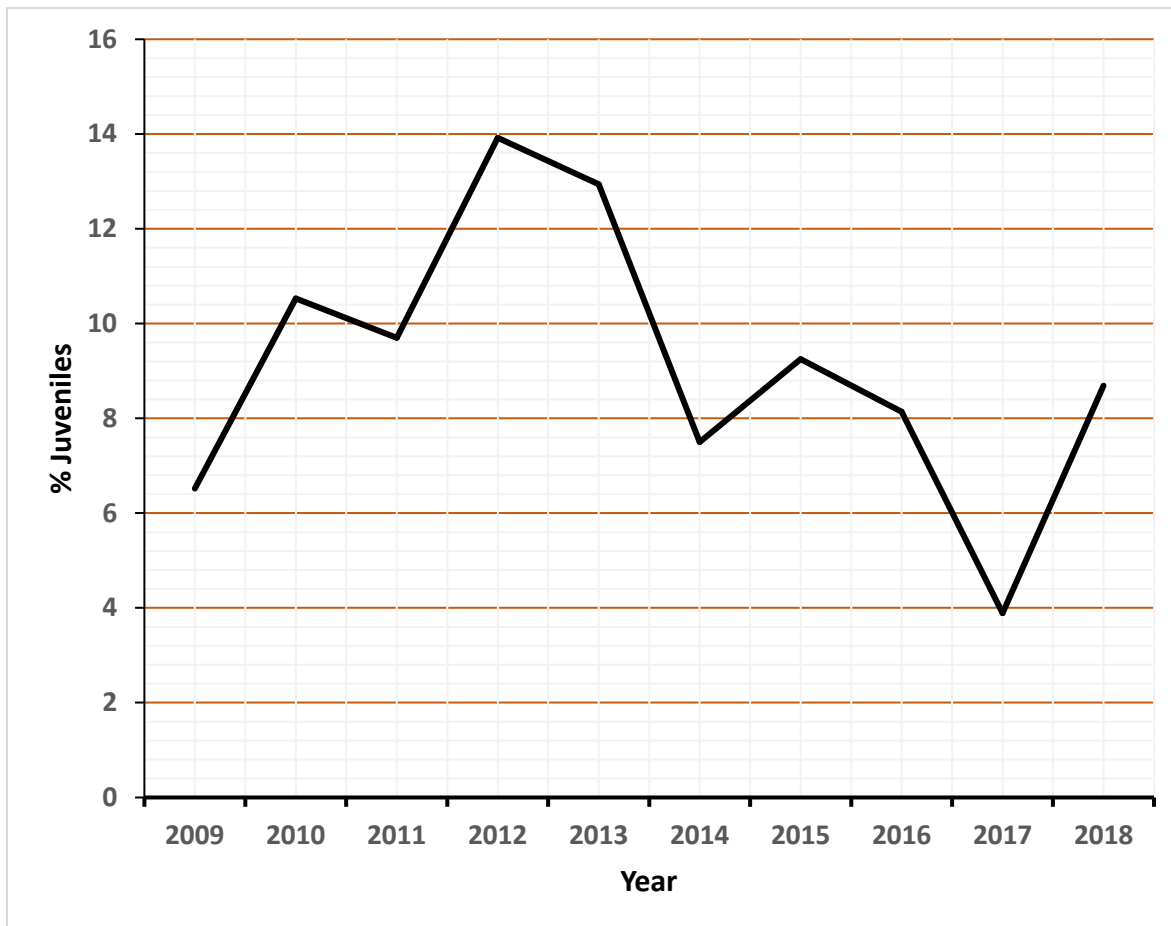
The next age count is due to take place during the weekend of 14–15 December 2019, in conjunction with the mid-monthly waterbird count in many countries.

The next complete international census of migratory swans in Europe and more widely will be held in mid-January 2020.

### Breeding success – long term

Breeding success over the past 10 years has been rather poor; on average 9.1% juvenile birds were found in the population over this period (Fig. 1). As a result - with an apparent adult mortality loss of between 15–23% per year (Wood *et al.* 2018) - the population size has declined since 1995, although the latest information from the annual five-year-count in 2015 showed a little increase up to 20,000 birds (Beekman *et al.* 2019).





**Figure 1.** Breeding success for swans in the NW European population from 2009–2018, measured as the percentage of cygnets in the wintering flocks, recorded from winters 2009/10 to 2018/19 respectively.

### Results from 2018 & 2017 age counts

In December 2018 and 2017, > 9,000 and > 8,000 Bewick's Swans were aged respectively (Table 1). In both years, many flocks were checked for cygnet percentages and brood sizes, and the average percentage of cygnets recorded was 8.7% in 2018 and 3.9% in 2017. Sample sizes were pretty good in both years, with c. 45% of the population checked last winter and > 40% of the population checked in 2017. Both winters were categorised as being very mild during the mid-December counting period. Poland made a major effort in 2018, with Przemek Wylegala and Radoslaw Wlodarczyk organising age counts for most of the main wintering locations in the country, where > 700 Bewick's Swans were present at the time! Such information will provide further insight into changing conditions on the wintering grounds associated with climate change, which makes it easier for Bewick's Swans to remain at sites in eastern European countries into the winter months.

Country	Total no. of birds aged in 2018	Total no. of birds aged in 2017	No. of adults in 2018	No. of adults in 2017	No. of cygnets in 2018	No. of cygnets in 2017	% cygnets in 2018	% cygnets in 2017
France	311	148	282	142	29	6	9.3	4.1
Belgium	74	88	51	85	23	3	31.1	3.4
Netherlands	3,878	2,067	3,648	2,015	230	52	5.9	2.5
UK	149	213	130	192	19	21	12.8	9.9
Germany	3,577	5,498	3,198	5,269	379	229	10.6	4.2
Poland	718	No info	636	No info	82	No info	11.4	No info
Denmark	555	350	512	333	43	17	7.7	4.9
Estonia	0	6	0	3	0	3	0	50.0
<b>TOTAL</b>	<b>9,262</b>	<b>8,383</b>	<b>8,457</b>	<b>8,034</b>	<b>805</b>	<b>326</b>	<b>8.7</b>	<b>3.9</b>

**Table 1.** Summary of Bewick's Swan age counts recorded in each country during 15–16 December 2018 and 9–10 December 2017.

In addition to the percentage of cygnets in the wintering flocks, many observers also reported on brood sizes, *i.e.* the number of cygnets recorded in each family. In 2018 we received information from 300 pairs with cygnets from seven countries, which is pretty good, and the average brood sizes in 2018 and 2017 were 1.87 and 1.61 cygnets per pair respectively.

Overall the 8.7% cygnets recorded in winter 2018/19 indicated that 2018 was a much better breeding season than 2017 (which was the worst since 2007), but still an average year. So it was not a year for building the population, and the results of the January 2020 census will determine how this has influenced trends in number in recent years.



## References

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