

**Call for international Bewick's Swan age count 12/13 December 2020
And results of the international age
count: 14-15 December 2019**



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The waterbird count around Mid-December 2020 will also be the moment that an international age count in Bewick's Swan is due to be carried out. We hope that all countries, coordinators and observers will continue their contribution to this long term study to 'keep a finger on the pulse' of the Bewick's Swan population. This count is part of the long-term monitoring scheme coordinated by the Swan Specialist Group, in order to assess annual productivity in the species. In 2019, the 38th age count was held in the weekend of 14-15 December. Data were received from nine countries and pointed at 6.6% juveniles: slightly lower than in 2018 and below the level that would be required to compensate for annual mortality rates.

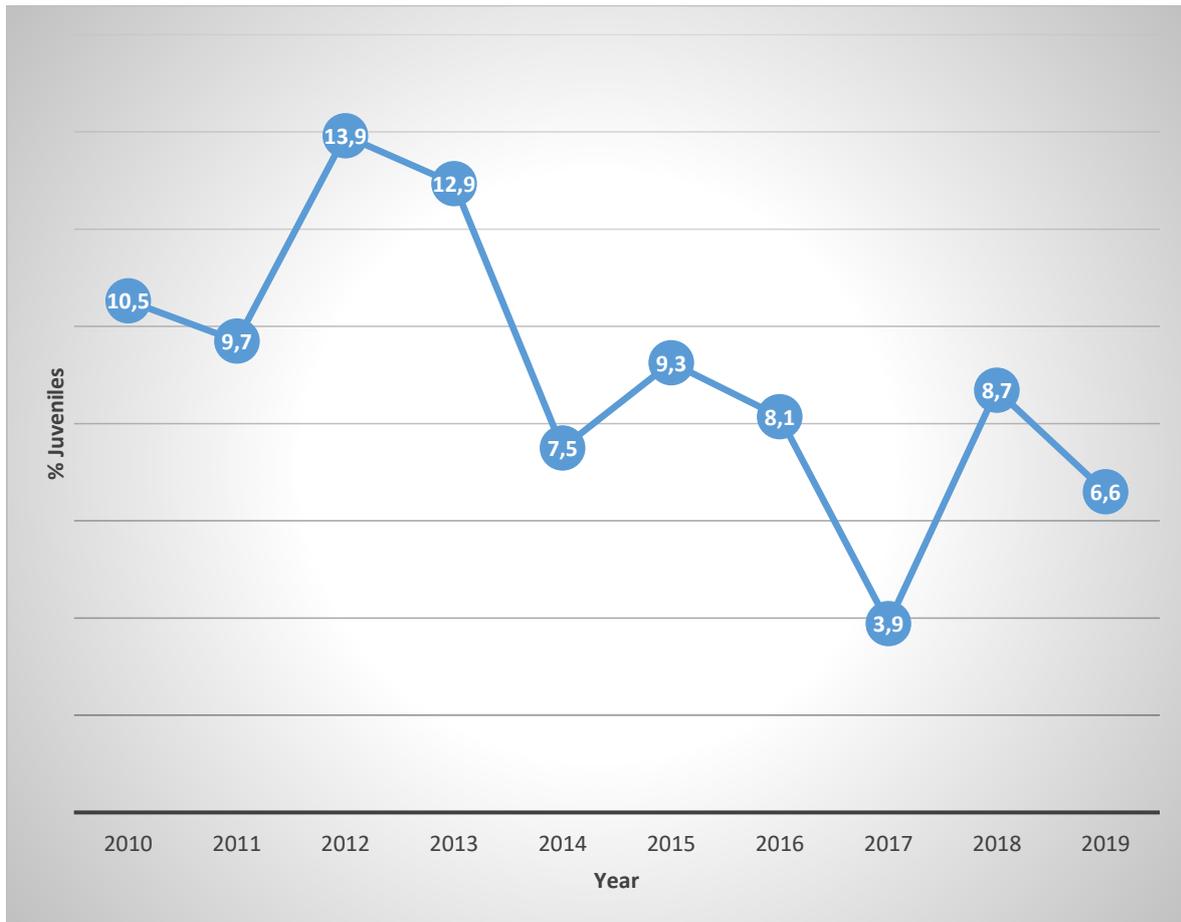
Purpose of age counts

Since the mid-1980s, the Swan Specialist Group has monitored the NW European Bewick's Swan population carefully, to keep track on the population status and assess its conservation requirements. This is important because historically the population size was small and, following an increase in numbers between the 1970s and mid-1990s, is now in decline and subject to major changes in winter distribution. Indeed, having peaked at just under 30,000 birds in 1995, numbers dropped to 18,100 in 2010. Whether a slight recovery c. 20,100 birds in 2015 has been maintained hereafter remains to be seen (Beekman *et al.* 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).

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 20,100 birds (Beekman *et al.* 2019). Even if our age counts do not cover the entire flyway population, several national coordinators mentioned that it has become increasingly difficult to make large samples during the age count, suggesting that the population is still not in recovery and more scattered.

Fig. 1. Breeding success for swans in the NW European population from 2010–2019, measured as the percentage of cygnets in the wintering flocks, recorded from winters 2009/10 to 2019/20 respectively.



Results from 2019 age counts

In December 2019 and 2018 more than 9,000 Bewick's Swans were aged (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 6.6% in 2019. Sample sizes were pretty good in both years, with c. 46% or more of the population checked last winters. Both winters were categorised as being very mild during the Mid-December counting period. Arrivals at the main wintering sites was rather late.



Table 1. Summary of Bewick's Swan age counts recorded in each country during 15–16 December 2018 and 14–15 December 2019.

Country	Total no. of birds aged in 2018	Total no. of birds aged in 2019	No. of adults in 2018	No. of adults in 2019	No. of cygnets in 2018	No. of cygnets in 2019	% cygnets in 2018	% cygnets in 2019
France	311	253	282	237	29	16	9.3	6.3
Belgium	74	38	51	37	23	1	31.1	2.6
Netherlands	3,878	2,965	3,648	2,817	230	148	5.9	5.2
UK	149	445	130	420	19	25	12.8	5.6
Germany	3,577	4,006	3,198	3,731	379	275	10.6	6.9
Poland	718	1,280	636	1,149	82	131	11.4	10.2
Denmark	555	264	512	251	43	13	7.7	4.9
Latvia	No info	5	No info	4	No info	1	No info	20.0
Estonia	0	13	0	11	0	2	0	15.4
TOTAL	9,262	9,269	8,457	8,657	805	612	8.7	6.6

Overall the 6.6% cygnets recorded in winter 2019/20 was one the lowest recorded in the past years, whereas 2018 was closer to the running mean of 9.1% in the period 2010-2019, thus more of an average season (in current context). Hopefully, the results of the flyway census in January 2020 will become available next year, and the effect of productivity on total population size can be assessed.



Lake Veluwemeer, (Photo Martin Jansen) One of the key sites in the Netherlands with 1.500 birds during November and December, but always a very low percentage juveniles.

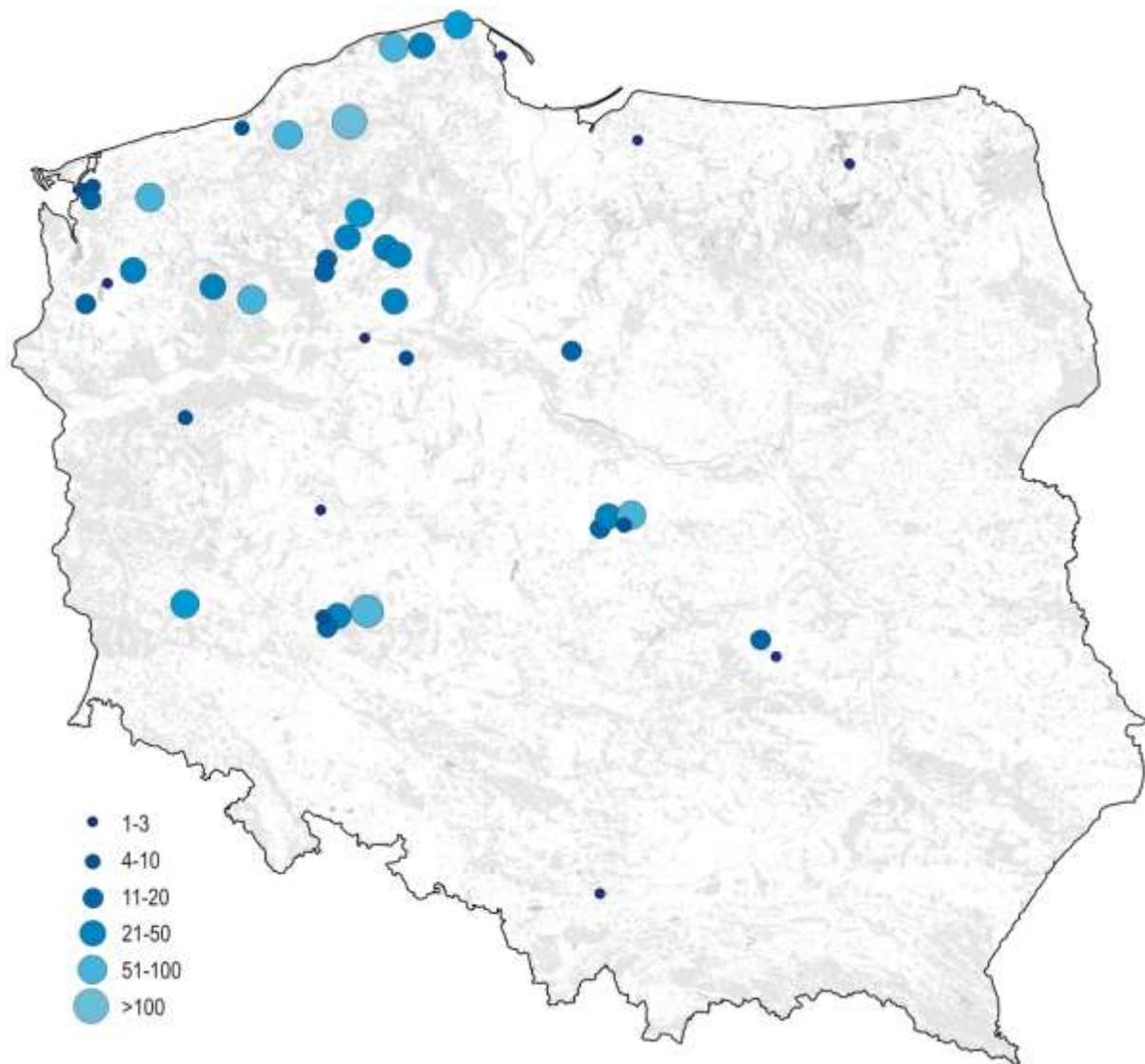


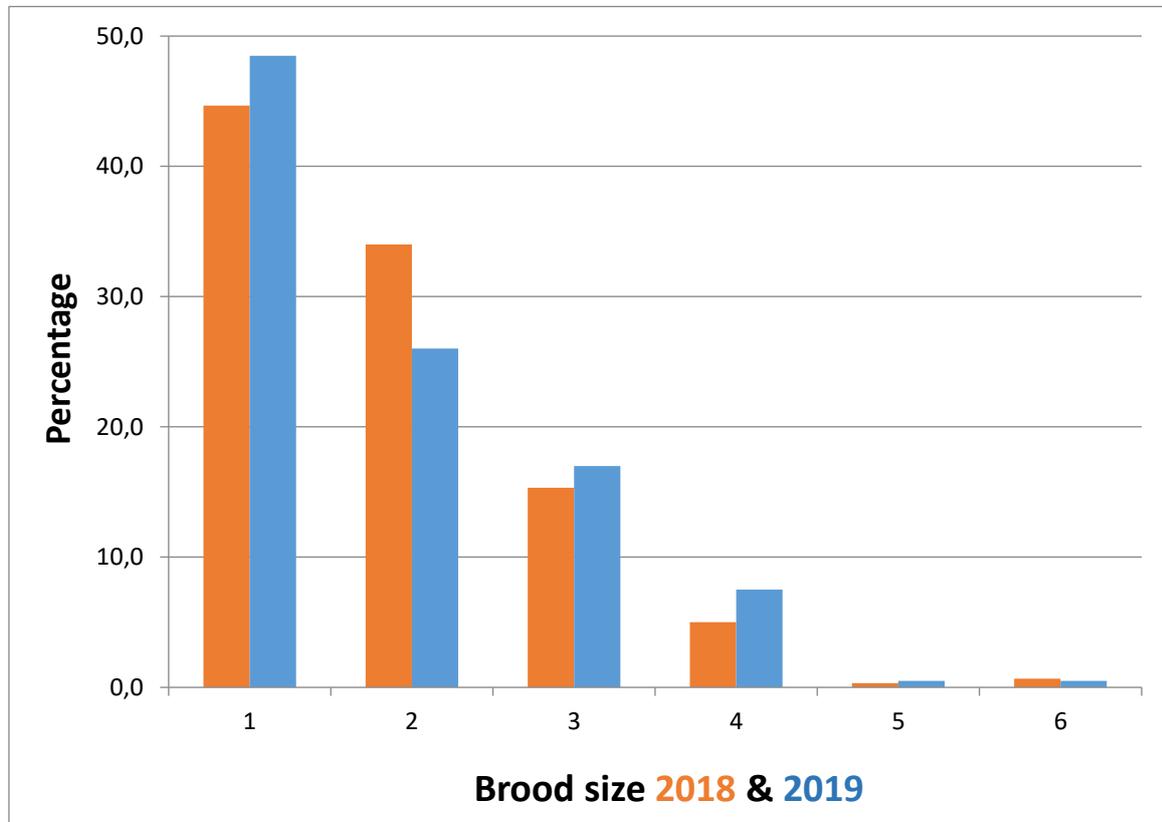
Fig.2 Distribution of Bewick's swans in Poland during breeding success count December 2019 (Data P. Wylegala and others).

Major effort in Poland in December 2019

Poland made a great effort in participating in the age count in December 2019, with Przemek Wylegala and his team organising age counts for most of the main wintering locations, where 1.280 Bewick's Swans were present at the time!

Such information will provide further insights into changing conditions on the wintering grounds associated with warmer winters, which makes it easier for Bewick's Swans to remain at sites in eastern European countries well into the midwinter period. Most birds were seen on fish ponds, although 32% of the birds were located on maize stubble fields. The increasing numbers in Poland also coincides with the major eastward shift in the swans' distribution over the past decades (Nuijten *et al.* 2020).

Fig. 3 Brood size (number of pairs with 1 cygnet, 2 cygnets, etc.) in **2018** and **2019**.



In addition to the percentage of cygnets in the wintering flocks, most observers also reported on brood sizes, *i.e.* the number of cygnets recorded in each family. As a reflection of the lower brood success in 2019, we received information from exact 200 pairs with cygnets from nine countries. While in 2018 we got information from 300 successful pairs. The average brood size in 2019 was 1.87 which was almost the same as in 2018, when 1.84 cygnets per pair were recorded. In 2019 almost half of the pairs had only cygnet, instead of 44% in 2018. And 26% of the families raised two cygnets, which was 8% lower than in 2018.

Next age count: 12-13 December 2020

As mentioned before the date for the next International age count will take place in the weekend of 12-13 December 2020. We have little information about the conditions in the breeding areas, as due to the pandemic field expeditions were not possible. At least it seems that weather conditions in many parts of the Arctic were very warm. Several goose species have returned with moderate to good numbers of offspring, so perhaps we may also see a better breeding output in Bewick's Swans this year. We hope that all coordinators and organisations will continue their efforts in collecting these important data, which helps to understand the fluctuations and changes in the population. We are very grateful to all those observers, coordinators and institutes for the response.

We will send the excel-sheet to collect the data for the international age count in a separate email.

Many thanks and with all best wishes,

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