

FINAL ANNOUNCEMENT

INTERNATIONAL BEWICK'S AND WHOOPER SWAN CENSUS 16-17 JANUARY 2010

To: The National Coordinators of the International Waterfowl Census
and others involved in coordinating Swan Censuses.

Abcoude, 18 December 2009

Dear colleagues,

In order to monitor northern swan populations, the Swan Specialist Group (SSG) of Wetlands International / IUCN organizes European-wide Swan Censuses once every five years. The swan monitoring program was initialized in the 1970's and is organized simultaneously for three populations once every five years since 1995. These specially organized censuses are meant to achieve information on the full size of flyway populations of Bewick's and Whooper Swans. Moreover, a simultaneous census organized throughout the wintering range offers us unique possibilities to obtain large "snapshot" data sets on ecological aspects such as juvenile percentages in relation to group sizes and habitat choice as well as flock sizes in relation to habitat.

As many of you know already, the census will be organized simultaneously with the International Waterfowl Census in the weekend of **16/17 January 2010**, and will be coordinated by Jan Beekman, Swan Specialist Group of Wetlands International in the Netherlands (Bewick's Swans), Bjarke Laubek, National Environment Research Institute in Denmark (continental population Whooper Swans) and Colette Hall / Jacqueline Reed, Wildfowl and Wetlands Trust in England (Icelandic population Whooper Swans). We kindly invite you to again organize the Swan Census for your country, and hope you will encourage your national network of waterfowl and swan observers to participate.

Monitoring northern swans

A very good scheme for monitoring northern swan population changes has been developed over the past 20 years. Censuses especially focusing on Bewick's Swans and covering all relevant countries were organized in 1984, 1987, 1990, 1995, 2000 and 2005. Earlier population estimates were based on general mid-winter waterfowl counts, but coverage was possibly incomplete. As a result of specially organized Bewick's Swan censuses, the coverage of the IWC for swans seems to have improved, as swan numbers recorded in both became more similar over the last decade.

Special censuses for the Icelandic population of Whooper Swans were organized from 1980 onwards and covered Iceland, UK and Ireland to satisfaction. Recent ringing studies have shown that a small proportion of Icelandic Whooper Swans may also be wintering in Norway, Denmark and the Netherlands.

The continental Whooper Swan population was fully covered for the first time in 1995, and again in 2000 and 2005, and these censuses were also very successful.



Photograph: © Ko Veldkamp

Whooper Swans in particular, but also Bewick's Swans may cause agricultural conflicts in many regions of the wintering range, and (as we saw in 1995) these problems tend to expand into new regions. Therefore, we would kindly like to ask you all to encourage your observers to make the effort on reporting habitat choice as well. With such data, on an international level, we will have very strong documentation of the future development on this issue, which may become increasingly important from a management point of view.

Results of previous Bewick's and Whooper Swan Censuses

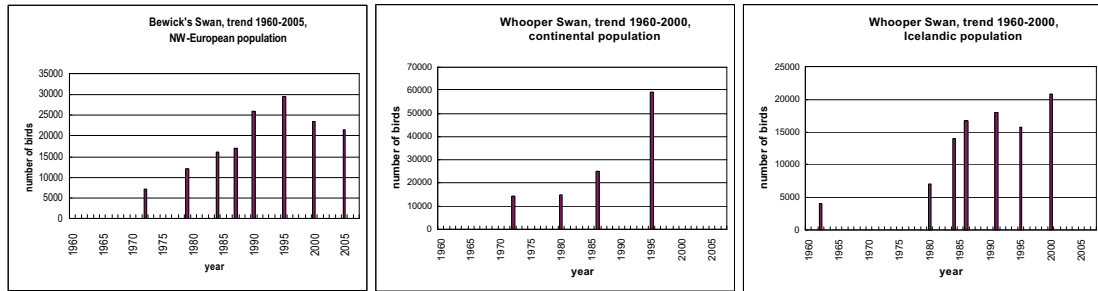
In general, coverage during the last censuses was very good. The most recently estimated numbers of swans for both species and different populations are given in the table below. For continental Whooper Swans, the results were most spectacular: in 1995 more than twice the number previously estimated were actually counted, probably due to the fact that this was the first complete census for this. For this species, the increase still continues.

Swan populations	Most recent estimate
Bewick's Swan <i>Cygnus columbianus bewickii</i> (NW-European population)	21,500
Whooper Swan <i>Cygnus cygnus</i> (continental European population)	59,000
Whooper Swan <i>Cygnus cygnus</i> (Icelandic population)	20,900

Bewick's Swan population sharply declines

Contrary to the strong increase of continental Whooper Swans, the present situation for Bewick's Swans is very worrying. The population is declining rapidly since peak numbers in 1995 were counted. Between 1995 and 2005 the decrease was as much as 35%, and from recent midwinter counts in The Netherlands, this downward trend seems to continue. At present, we suspect a possible collapse of the population, where the much needed increase of this vulnerable species in the late eighties and early nineties has melted away again.

The negative trend, which also follows from the IWC figures, is very alarming and in itself justifies a new population census. Moreover, implementation of the European Bird Directive and its nature conservation and management goals require up-to-date population figures. A publication of the International Bewick's Swan Census results 2000 and 2005 is currently being prepared.



The graphs given above show long-term changes in northern swan populations, please note the different scales on the Y-axis. For all three populations, the mechanism behind population regulation is yet to be discovered. Limitations in nesting, moulting or staging habitat are all important factors, and their impact on survival and reproductive output is currently being studied. Another factor which may affect population trends is climate change. Current climate models predict regional changes in the Arctic which overlap with different waterfowl populations.

Low birth rates

The observed decline in the Bewick's Swan population is considered to be a result of continued very low breeding success over the past 10-15 years, in combination with an increase in mortality rates. Birth rate is an important parameter in population models. Therefore, we encourage observers to determine the proportion of juveniles in the flocks they count, and also to assess brood sizes (number of cygnets per successful pair). A publication relating reproductive success, density dependence and climate change is also underway.

Bewick's Swan Action Plan

In September 2009, Wetlands International, WWF Russia and the Dutch Ministry of Agriculture, Nature and Food Quality organized a workshop with specialists from all countries along the Bewick's Swan flyway range gathering in St. Petersburg Russia, in order to discuss population trends, potential factors causing the current decline and possible conservation measures to be taken. A draft Bewick's Swan Action Plan is now being prepared and will probably appear in early spring 2010. Continued monitoring of population size, demographic parameters and distribution are essential actions for the years to come.



Data requested

Enclosed you will find a digital datasheet plus a list of codes for habitats and food types used by the swans. We trust in your continued support for the swan monitoring scheme, and we hope that you will be able to achieve full coverage for all areas in your country where Bewick's and Whooper Swans may be met. In case you have questions regarding the 2010 census, please don't hesitate to contact us.

Please confirm your cooperation by e-mail a.s.a.p.

Thank you very much for your continued support and efforts. We wish you a very successful swan census and look forward to the results from your country.

Also, we wish you and your dear ones a Merry Christmas and a Happy New Year!

Yours sincerely,

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Data requested

With the ambition of obtaining a data set that gives more than just a population estimate, and in order to make data more easily comparable in the next analysis, we would greatly appreciate if you could encourage the observers to report the following data:

1) Location

For each observation please also give geographic coordinates (degrees and minutes) (longitude/latitude) (e.g. 58 05N/11 06E) or decimal-degrees (e.g. 58,08N 11,10E) this will save much time in collecting all data in a common database for making GIS-based illustrations.

2) Flock-size

Preferably the size of each individual group and not the total from e.g. the coast around Saltholm, or the total from Mittel-Elbe. This means that also discrete groups from the individual sites should be reported separately – in order to separate such data we have introduced a small tickmark-field indicating whether groups are reported separately or if the figure is a total number from the site. It is important that null-observations are reported too. So please, if a site was counted, always fill in the results, also when no swans were observed.

3) Age

Adults and juveniles, i.e. first winter birds, counted separately.

4) Brood size

Register the size of broods in counted flocks if possible.

5) Habitat

Habitat in which birds are observed should be noted for each group/flock reported. As a minimum level habitat should be reported as aquatic or terrestrial, but preferably habitat should be specified e.g. in some of the categories indicated in the table below.

Many of you probably already have your standard reporting scheme as well as your own electronic way of storage. However, we hope that the enclosed proposal for reporting sheet as well as the structure of our database (enclosed as Excel-sheet) could be used by all of you for reporting results of the International Swan Census.

Should anyone of you have questions please do not hesitate to contact us.

Table of habitat categories.

List of habitats most commonly used by wintering Bewick's and Whooper Swans.

Habitat code	Habitat	Habitat code	Habitat
100 101	Aquatic unspecified On roost	200 201	Terrestrial unspecified Arable unspecified
110	Flooded meadow, grassland	210	Stubble (cereal unspec.) <i>Unharvested cereal (unspec.)</i>
120	Flooded fields, not included above	211 212 213 214 215 216 217 218 219 219b	Stubble Maize <i>Stubble wheat</i> <i>Stubble rye</i> <i>Stubble oats</i> <i>Stubble barley</i> <i>Unharvested wheat</i> <i>Unharvested barley</i> <i>Unharvested rye</i> <i>Unharvested oats</i>
130 131 132 133 134 135 136 137 138 139	Freshwater habitat unspec. <i>Lake, pond</i> <i>River, stream</i> <i>Artificial pond (e.g fishpond)</i> <i>Feeding on vegetation unspec.</i> <i>Potamogeton sp.</i> <i>Chara sp.</i> <i>Animal food unspec.</i> <i>Mollusc sp.</i> <i>Fish sp.</i>	220 221 222 223 224 225 226 227 228 229	Beet <i>Sugar beet (harvest remains)</i> <i>Fodder beet (harvest remains)</i> <i>Sugar beet (unharvested)</i> <i>Fodder beet (unharvested)</i> Carrots <i>Carrots (harvest remains)</i> <i>Carrots (unharvested)</i> Pea <i>Pea (unharvested)</i>
140 141 142 143 144 145 145b 146 147 148 149	Brackish water (unspecified) <i>Fiord</i> Open coast <i>Skärgård</i> <i>Feeding on vegetation unspec.</i> <i>Potamogeton sp.</i> <i>Chara sp.</i> <i>Zostera sp.</i> <i>Animal food unspec.</i> <i>Mollusc sp.</i> <i>Fish sp.</i>	230 231 232	Potato <i>Potato (harvest remains)</i> <i>Potato (unharvested)</i>
150 151 152 153 154 155 156 157 158 159	Salt water (unspecified) <i>Fiord</i> <i>Open coast</i> <i>Skärgård/archipelago</i> <i>Feeding on vegetation unspec.</i> <i>Chara sp.</i> <i>Zostera sp.</i> <i>Animal food unspec.</i> <i>Mollusc sp.</i> <i>Fish sp.</i>	240 241 242 243	Artificial grassland (unspec.) <i>Stubble with grass sown</i> <i>Commercial grass seed</i> <i>Sown clover</i>
		250 251 252	Meadow (unspec.) <i>Fresh meadow</i> Coastal meadow
		260 261	Oil seed rape, autumn sown Oilseed rape, stubble
300 310 320 330 340 350 360 370	On ice (unspecified) <i>Frozen fiord</i> <i>Frozen Open coast</i> <i>Frozen Skärgård/archipelago</i> <i>Feeding on vegetation unspec.</i> <i>Lake, pond</i> <i>River, stream</i> <i>Artificial pond (e.g fishpond)</i>	270 271 272 273 274	Winter cereal (unspec.) <i>Winter wheat</i> <i>Winter barley</i> <i>Winter rye</i> Winter oats
		280	Fallow
		290	Ploughed field

WHOOPER AND BEWICK'S SWAN POPULATION CENSUS 2010

Sitename: _____ Coordinate (e.g.58 05N/11 06E) _____ N _____ E

Date: _____ Observer: _____

Total refers to individual flocks counted
 Weather during census weekend: _____

Total refers to summed figures from several flocks within an area

Flock nr.	Total	Adult	Juveniles	Not aged	Brood sizes	Habitat	Notes (ring numbers, disturbance etc.)
<i>Example</i>	123	88	25	10	1,2,5,4,1,3,7,2	Oilseed rape	Yellow collar 2R24, bicycle passing group 5 leaving
1. Whooper							
Bewick's							
2. Whooper							
Bewick's							
3. Whooper							
Bewick's							
4. Whooper							
Bewick's							
5. Whooper							
Bewick's							
6. Whooper							
Bewick's							
<i>Habitat types, examples: lake, pond, river, channel, flooded grassland, flooded field, fiord, shallow coastal area, stubble, beet, carrot, maize, pea, potato, grassland, fresh meadow, coastal meadow, oilseed rape, winter cereals, fallow, ploughed, frozen freshwater, frozen fiord/coastal area, in icehole.</i>							

Please return to: Name of national/regional coordinator.