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3rd SESSION OF THE MEETING OF THE PARTIES TO THE AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS (AEWA)

23 – 27 October 2005, Dakar, Senegal

STATUS REVIEW OF FOUR POPULATIONS OF THREE DUCK SPECIES (COMMON EIDER *Somateria mollissima*, MALLARD *Anas platyrchynchos* AND PINTAIL *Anas acuta*)

INTRODUCTION

AEWA's 2nd Session of the Meeting of the Parties noted "apparent declines in the North-west European and Northern European/West Mediterranean populations of *Anas platyrhynchos*, the North-west European population of *Anas acuta*, and the Baltic, Denmark and Netherlands population of *Somateria mollissima*", determined to retain existing categorizations for these populations in Table 1 of the Action Plan, and called upon "*the Technical Committee, working with Wetlands International and other experts, as a matter of priority, to review further the status of these four populations in the light of additional information, and to report their findings to the Meeting of the Parties at its third session"* (Resolution 2.1).

The Technical Committee at its 4th meeting in May 2003 initiated these evaluations by setting up a working group, dealing specifically with these populations.

The Baltic, Denmark and Netherlands population of the Common Eider *Somateria mollissima*

The working group evaluated the contents of a recently published paper by Desholm *et al.* (2002)[1] (available as document AEWA/Inf. 3.11), which reviewed the current status of the Baltic, Denmark and Netherlands population of *Somateria mollissima.*

In brief this paper describes the current status and conservation issues related to the population.

The paper highlights an apparent major decline, judged from country-wide aerial surveys of waterbirds in Danish waters, by far the most important wintering area for the population.

These counts indicate the wintering population in Denmark had declined from c. 800,000 individuals in the winter 1991/92 to 370,000 birds in 2000/01, and that the whole population had declined from 1.2 million to 760,000 birds over the same 9 years, representing an annual decline rate of 4.8%.

It should be mentioned that this decline has been observed after a long period (from the 1970s to the 1980s) of increase, and that the population as such cannot be considered to be in long-term decline (according to the proposed guideline for interpretation of a long-term decline *Doc: AEWA/MOP 3.11).*

[1] Desholm, M., Christensen, T.K., Scheiffarth, G., Hario, M., Andersson, Å., Ens, B., Camphuysen, C.J., Nilsson, L., Waltho, C.M., Lorentsen, S.-H., Kuresoo, A., Kats, R.K.H., Fleet, D.M. & Fox, A.D. (2002): Status of the Baltic/Wadden Sea population of the Common Eider *Somateria m. mollissima*. - Wildfowl 53: 167-203.

The population may nevertheless be considered as having had problems in recent years, and the paper lists several issues causing the recent rapid decline:

- increased mass mortality of adults, particularly females, due to disease in Denmark (avian cholera outbreaks were reported in 1996 and 2001) and potentially elsewhere (unconfirmed) in the Baltic
- increased mass mortality of birds (all age-groups) in the Wadden Sea due to starvation in the 1990s
- lowered duckling survival in some Finnish breeding areas due to viral infections in 1996 and 1999
- poor fledging success in some important breeding sites in Finland in the second half of the 1990s.

The first two issues described above are potentially of major concern, because the Eider is a long-lived species with relatively low breeding output but (normally) high annual survival rates. Poor and lowered survival of adults, especially breeding females, is therefore of major concern, and at present seems to have caused a major rapid decline in the population.

The working group concluded that information in this paper was sufficient to justify reclassification of the Eider in the Action Plan of AEWA. Later, the working group presented their considerations in Plenum (full TC), and the Plenary adopted the report/amendments made by the working group to allocate the Eider to Column B, with category 2d.

Column B, Category 2 deals with populations numbering more than around 100,000 individuals and considered to be in need of special attention as a result of:

(a) Concentration onto a small number of sites at any stage of their annual cycle;
(b) Dependence on a habitat type which is under severe threat;
(c) Showing significant long-term decline; or
(d) Showing extreme fluctuations in population size or trend.

For the time being there are no guidelines for the interpretation of several of the sub-categories listed in Table 1 of the Action Plan (these guidelines are being proposed as a forthcoming issue for development by the TC for the 4th Session of the Meeting of the Parties, see draft Resolution 3.3 *Doc: AEWA/Res. 3.3)*.

It is, however, likely that issues such as those listed for the Eider above, i.e. sudden increased mortality and/or decreased natality in a population, causing rapid declines of populations with rates well over those necessary to declare a significant long-term decline, would be important elements in guidelines regarding interpretation of category d, i.e. addressing populations showing extreme fluctuations in population size or trend.

- The recommendation from the Technical Committee to the 3rd Session of the Meeting of the Parties is therefore - while awaiting more formalised guidelines for interpretation of category B 2d - to adopt on a precautionary basis a decision, and to list the Baltic, Denmark and Netherlands population of *Somateria mollissima* in Table 1 of the Action Plan under category B 2d.

The North-west European and Northern European/West Mediterranean populations of *Anas platyrhynchos* and the North-west European population of *Anas acuta*

The working group established at TC 4 also discussed briefly the status for the three *Anas* populations. For these the working group advised the TC to wait for further information in the form of trend analysis from Wetlands International.

These trend analyses had not yet been undertaken when the Technical Committee held its 5th and 6th meetings in April 2004 and May 2005. During the summer of 2005 Wetlands International completed trend analyses for several waterbird populations wintering in the Western Palearctic, in preparation for the AEWA Report on the Status and Trends of Populations of Waterbirds in the Agreement Area and the Waterbird Population Estimates, fourth edition. These analyses include the *Anas* populations subject to discussion, and Wetlands International kindly allowed the TC to use the results in the interim between the 6th Meeting of the Technical Committee and the 3rd Session of the Meeting of the Parties.

The methods applied are basically the same as those used previously by Delany *et al*. (1999)[2] - i.e. counts compiled during mid-winter in the so-called International Waterbird Census (IWC) are analysed with TRIM software. This software provide estimates of annual indices, numbers of waterbirds, and population trends by combining counted numbers at covered sites with imputed estimates of numbers that are likely to have been missed at sites (otherwise normally covered) that had not been counted in a winter.

The North-west European population of Mallard *Anas platyrhynchos*

The status of this population was discussed at AEWA's 2nd Session of the Meeting of Parties because it was proposed to change classification in Table 1 of the Action Plan from Column C Category 1 to Column B, Category 2c (i.e. showing significant long-term decline). The supposed change in classification was apparent in the 10-year dataset analysed by Delany *et al.* (1999), but with the proposed guidelines for interpretation of long-term decline (25 years, cf. *Doc: AEWA/MOP 3.11)*, a longer time-series must be used if available.

The recent analysis carried out by Wetlands International indeed includes data from 1974 to 2002, i.e. a span of 29 years, enabling consideration as to whether populations have been subject to changes that may be considered a long-term decline.

The population of the Mallard now under review winters in the Baltic and in the Northwest European regions, according to Scott & Rose (1996)[3]. In the trend analyses by Wetlands International these have been treated as two separate regions

It is apparent that the population in the Baltic region had been increasing from the mid-1980s to the mid-1990s, and for the whole period (1974-2002) there is a slight increase (2% per annum) (*Figure 1a*).

It is also apparent that the population in the North-west European region was declining from the mid-1980's to the mid-1990's, but has recovered in recent years (Figure 1). For the whole period, there is a slight decline, but not a 25% decline over 25 years (*Figure 1b*).

- The recommendation from the Technical Committee to the 3rd Session of the Meeting of the Parties is therefore that the North-west European population of the Mallard *Anas platyrhynchos* shall continue to be listed in Column C Category 1 of Table 1 of the Action Plan.

[2] Delany, S., Reyes, C., Gubert, E., Pihl, S., Rees, E., Haanstra, L. & van Strien, A. 1999: Results from the international waterbird census in the Western Palearctic and Southwest Asis 1995 and 1996. - Wetlands International Publication No. 54, Wetlands International, Wageningen, the Netherlands. 178 pp.

[3] Scott, D.A. & Rose, P.M. 1996: Atlas of Anatidae Populations in Africa and Western Eurasia. - Wetlands International Publication 41. Wetlands International, Wageningen. 336 pp.

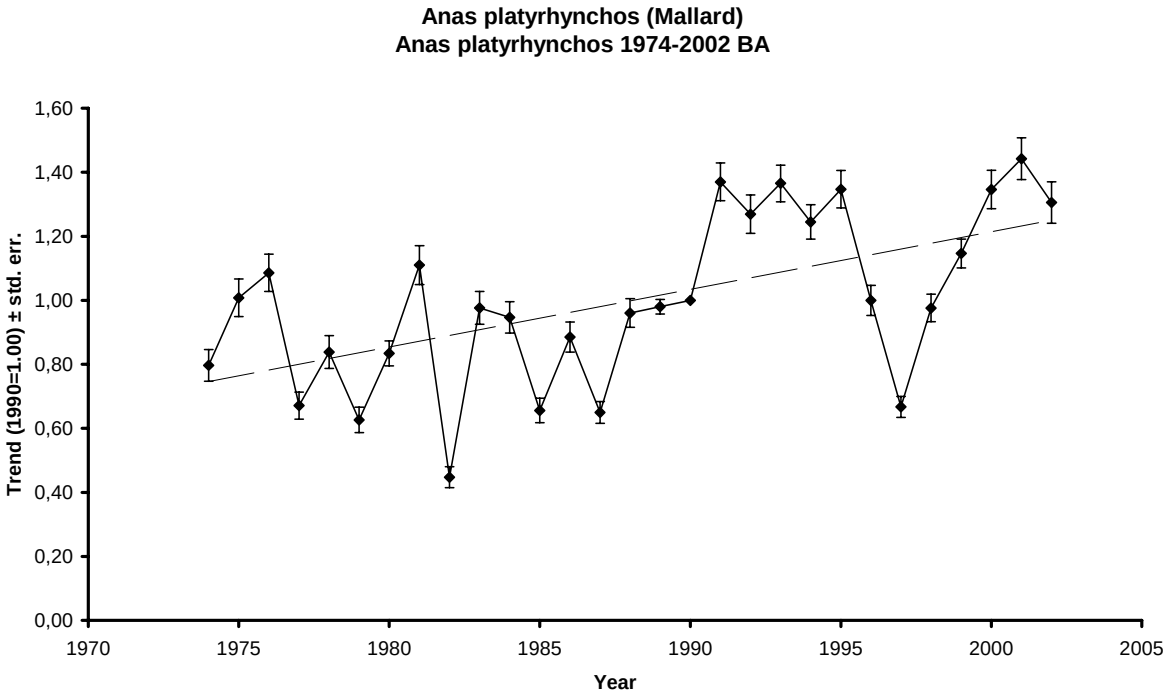

Figure 1a. Population trend for the Baltic wintering Mallard Anas platyrhynchos

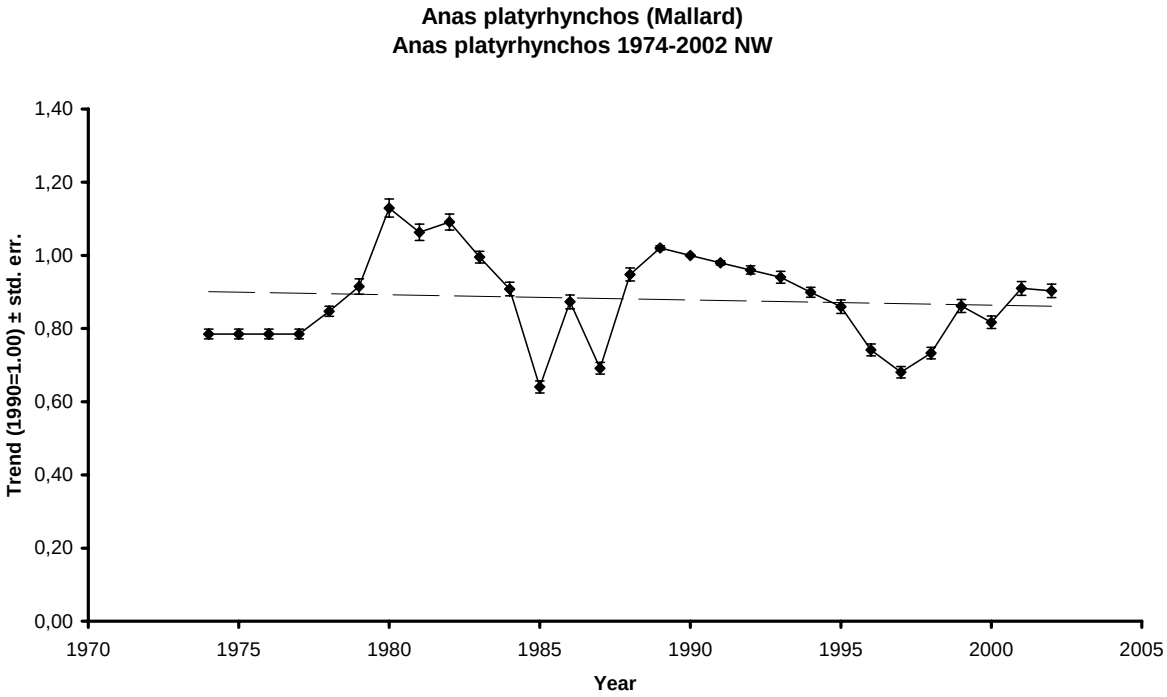

Figure 1b. Population trend for the North-west European wintering Mallard Anas platyrhynchos

The Northern European/West Mediterranean population of Mallard *Anas platyrhynchos*

The status of this population was likewise discussed at AEWA's 2nd Session of the Meeting of Parties because it was proposed to change classification in Table 1 of the Action Plan from Column C Category 1 to Column B, Category 2c (i.e. showing significant long-term decline). The supposed change in classification was apparent in the 10-year dataset analysed by Delany *et al.* (1999).

This population winters in Central Europe and the West Mediterranean regions, according to Scott & Rose (1996), which are treated as two separate regions by Wetlands International in their most recent trend analysis.

From the results of the analyses it is apparent that the population wintering in Central Europe may have been decreasing in the first 10 years from the mid-1970s, but has been more or less stable from the mid-1980s to the present. For the whole period (1974-2002), there is a decline in the population (2.4% per annum) (*Figure 2a*).

It is, however, also apparent that the population wintering in the West Mediterranean region, after a decline in the first 10 years from the mid-1970s, has been increasing from the mid-1980s to the present (*Figure 2b*). For the whole period, there is an increase in the population (1.6% per annum) (*Figure 1b*).

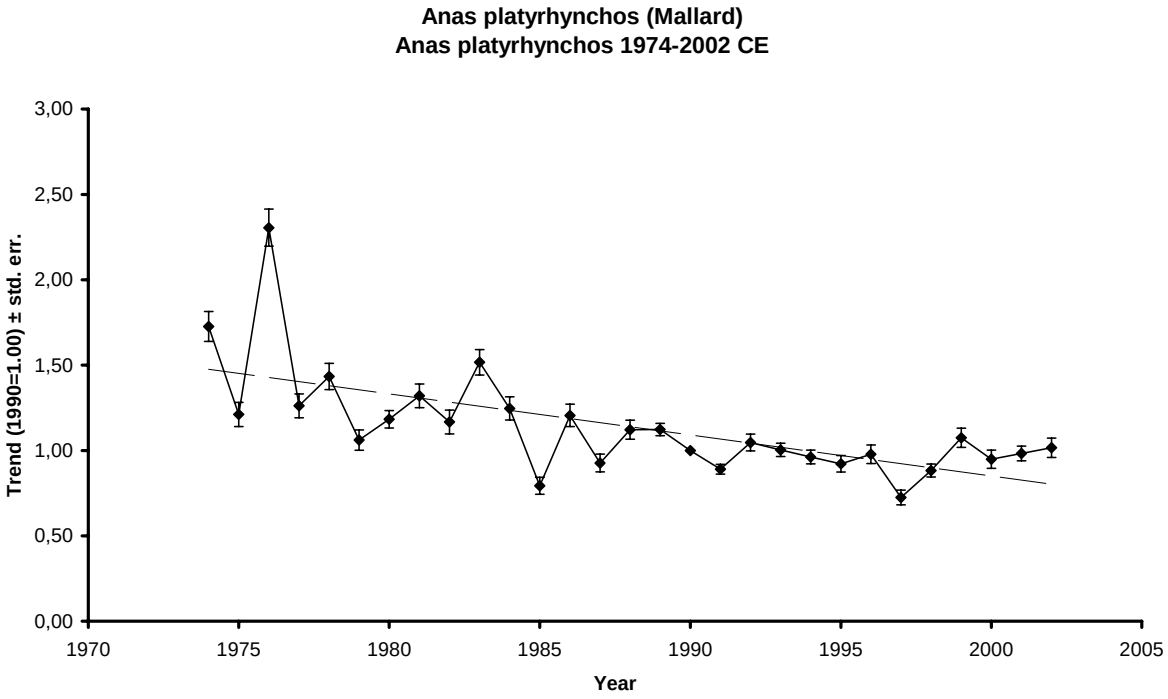

Figure 2a. Population trend for the Central European wintering Mallard Anas platyrhynchos

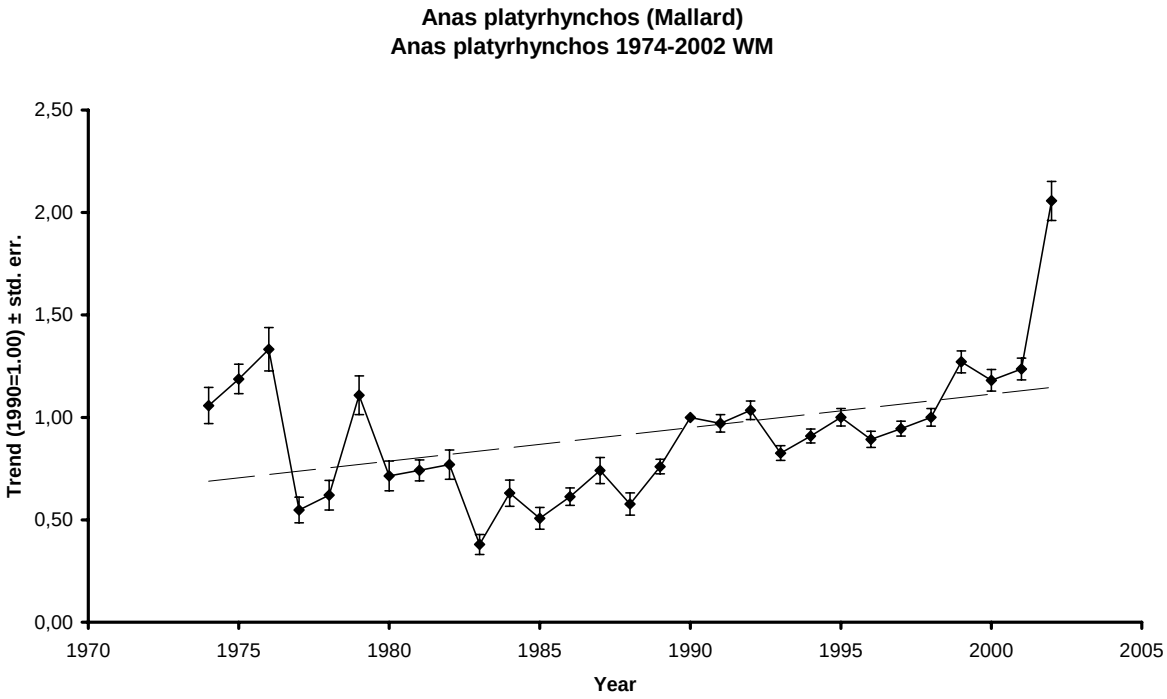

Figure 2b. Population trend for the West Mediterranean wintering Mallard Anas platyrhynchos

Combining estimated numbers counted in sites covered gives an overall picture of initial decline, levelling off and recent recovery in numbers (*Figure 2c*).

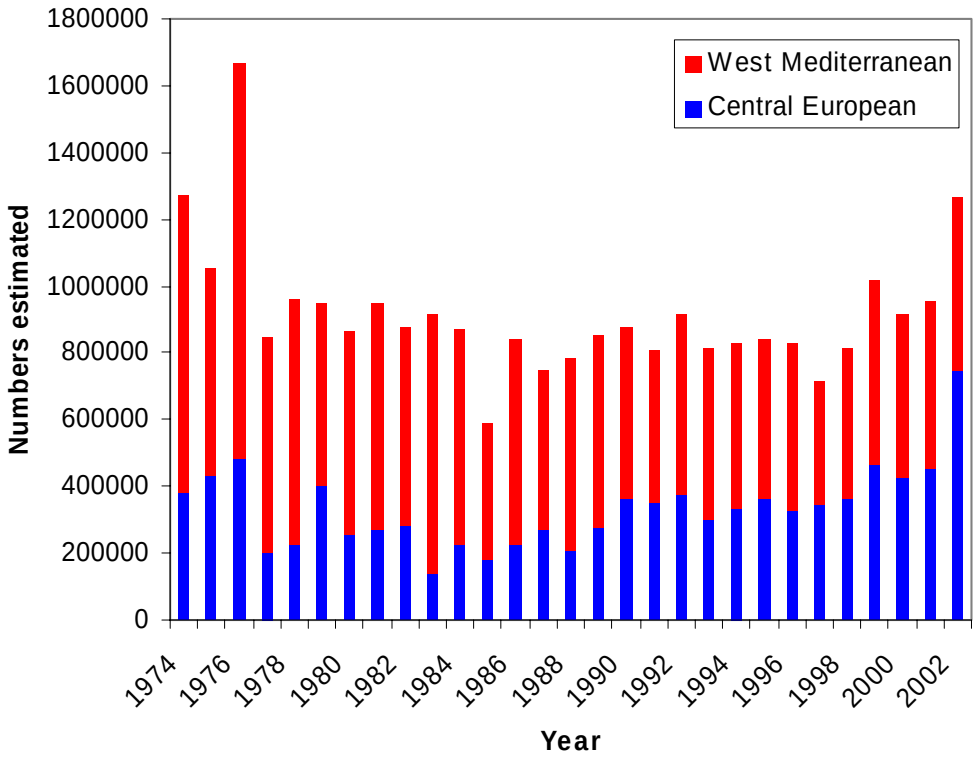

Figure 2c. Total numbers of Mallard Anas platyrhynchos estimated for counted sites in Central Europe and the West Mediterranean wintering regions, 1974-2002.

Present numbers (i.e. recent three winters, 2000-2002, average 1.048 mill.) represent 78.7% of those counted in the first three seasons (1974-1976, average 1.332 mill.), so although an overall decline seems apparent, it cannot be considered a significant long-time decline.

In addition to this numerical assessment, it should also be noted that the delineation of the various populations in Europe is far from well understood: large overlaps between populations seem to exist. Numbers of wintering *Anas platyrhynchos* have been increasing in several countries in Eastern Europe in recent winters, due to a series of milder winters (e.g. Švažas *et al*. 2001)[4]. Although several sites are counted in this region, coverage is not nearly as complete as in Western Europe, and this may mean that substantial numbers of Mallard have been overlooked in Eastern Europe in recent years.

- The recommendation from the Technical Committee to the 3rd Session of the Meeting of the Parties is therefore that the Northern European/West Mediterranean population of *Anas platyrhynchos* shall continue to be listed in Column C Category 1 of Table 1 of the Action Plan.

The North-west European population of Pintail *Anas acuta*

The status of this population was likewise discussed at AEWA's 2nd Session of the Meeting of Parties because it was proposed to change classification in Table 1 of the Action Plan from Column B Category 1 to Column A, Category 3c (i.e. showing significant long-term decline). The supposed change in classification was apparent in the 10-year dataset analysed by Delany *et al.* (1999).

The population winters in the Baltic and Northwest European regions, according to Scott & Rose (1996), which are analysed separately by Wetlands International. Numbers in the Baltic are, however, negligible.

From the results of the analysis it is apparent that the population in the North-west European region was declining from the mid-1970's to the mid-1990's, but has recovered in recent years (Figure 3). For the whole period, the population has been stable (Figure 3).

- The recommendation from the Technical Committee to the 3rd Session of the Meeting of the Parties is therefore that the North-west European population of Pintail *Anas acuta* shall continue to be listed in Column B Category 1 of Table 1 of the Action Plan.

[4] Švažas, S., Meissner, W., Serebryakov, V., Kozulin, A. and Grishanov, G. (2001) *Changes of wintering sites of waterfowl in Central and Eastern Europe*. OMPO special Publication, Vilnius.

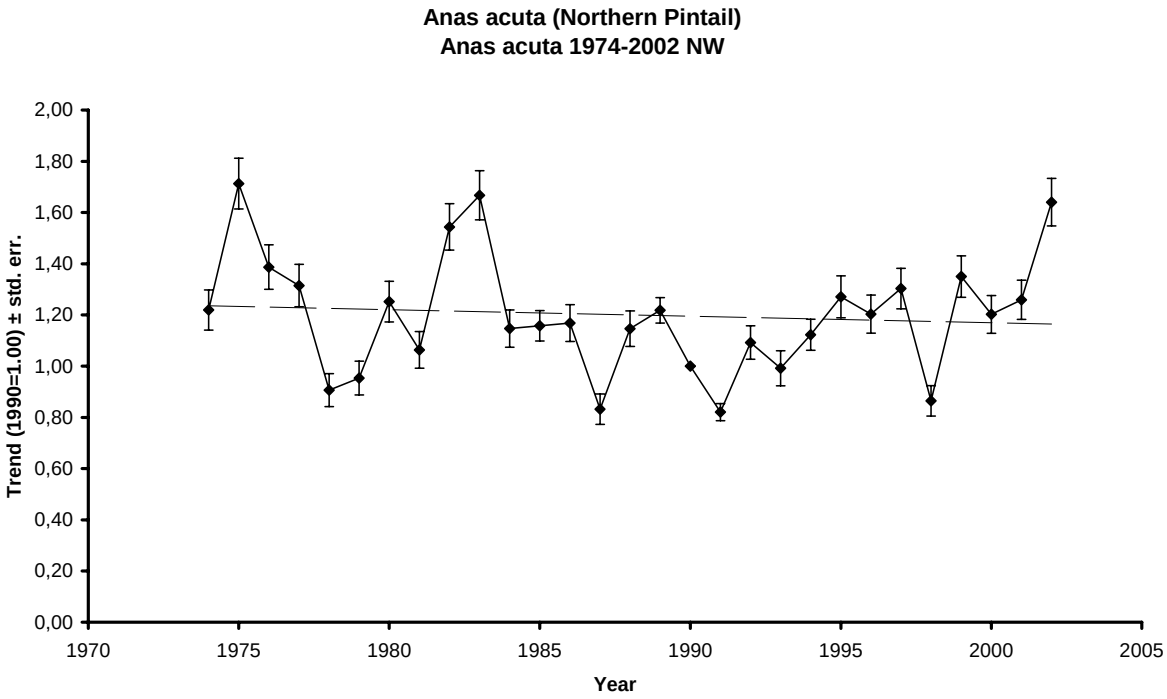

Figure 3. Population trend for the North-west European wintering Pintail Anas acuta

Acknowledgements

We are grateful to Wetlands International for permission to use their most recent trend analysis and to the Wildfowl & Wetlands Trust for permission to circulate the paper published by Desholm *et al.* in Wildfowl on the AEWA website.