## Wetlands International Seaduck Specialist Group Bulletin

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## The Seaduck Specialist Group under Wetlands International and IUCN

The Wetlands International Seaduck Specialist Group (SeSG) aims to enhance international cooperation among seaduck scientists, form links to international organisations, and disseminate information about seaduck research particularly the results of national and international monitoring schemes. The SeSG is also recognised as a specialist group under IUCN.

The SeSG has an overall coordinator who is also the coordinator of the region of Africa-Europe-Middle East. The aim of the group is to become global. So far, a coordinator for North America has been appointed but a coordinator for East Asia is yet to be found. Each major region is divided into subregions. Currently, a regional coordinator is in place for the Baltic Area and the east and west coasts of North America.

Linked to the SeSG is a decentralised database which covers Africa-Europe-Middle East. The aim of the database is to collate and store results from the International Waterbird Census (IWC) coordinated by Wetlands International. The database aims to provide reliable population estimates and information on seaduck trends and distribution.

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#### Editorial

#### Dear colleagues and readers

Welcome to this, the ninth edition of the Seaduck Bulletin. We sincerely apologise for the delay of more than two years since the last issue. In that time, we have had to prioritise our very limited time to plan seaduck meetings and workshops rather than produce the Bulletin. In this Bulletin, you will find brief reports on two of the thematic seaduck workshops held during the last two years. During this period of absence, we held workshops on Scoters in the Western Palearctic (at Fuglsø, Denmark in November 2000) and common eider in the Baltic/Wadden Sea flyway (at Roosta in Estonia in April 2002). Of course, our work continues to be disseminated via the Internet and we remind you of the existence of our web site at <a href="http://seaduck.dmu.dk">http://seaduck.dmu.dk</a>, where you will also find abstracts from both workshops.

After a rather long and difficult birth, the European Action Plan for Steller's eider was finally published, together with those for seven other priority species. In connection with the thematic seaduck workshops, evening workshops on Steller's eider took place in Denmark (2000) and Estonia (2002) and a Steller's eider working group centred on a list server has been established, both reported elsewhere in this Bulletin.

At the time of the last Bulletin, we initiated the development of a database of members, including a skills register. Due to server problems here at Kalø, the process of enlisting via the Internet was not successful, and we apologise to all those who have attempted (and failed) to enlist in this way in recent months. We are currently redeveloping the membership form on the web page, so that membership applications will be entered directly onto a database, and trust that this will be on-line by the time this Bulletin reaches you. We sincerely hope that all seaduck enthusiasts and correspondents will fill in the form on the Internet if you have not done so before. Those members who have completed "yellow forms" also have no need to re-enlist in this way. We appreciate your patience with this matter and trust we shall emerge with an efficient membership and skills list at the end of this process.

As you will be aware, seaduck work continues to develop vigorously in North America, stimulated by the Seaduck Joint Venture (see http://seaduckjv.org/-). We take this opportunity to draw your attention to the Seaduck Conference to be held in Victoria, Canada 6-10 November 2002.

Wetlands International has undergone major changes in the intervening years, so in this Bulletin, we also provide an update of the developments at Wetlands

International, which includes a new strategy for the organisation, which puts the Specialist Groups at the centre of Wetlands International global activities.

We would like to encourage your submission of papers, progress reports, notes news, and announcements for the next issue of the Bulletin. Deadline will be 1 November 2002 and we will aim to finalise and distribute it in March 2003.

Please let us know if you know someone who might be interested in being added to our mailing list and please encourage friends and colleagues to send in contributions to the Seaduck Bulletin.

Stefan Pihl & Tony Fox

#### *Status report*

#### **News from Wetlands International**

My last report of the developments at Wetlands International was written after the Board of Members Meeting in Dakar, Senegal, in 1998. It was at that time stressed, both by the Board of Members and by our partners, that they would like to see us return to science-based work and drop local projects that did not fit with the strategic aims of the organisation. However, this message made little difference to the daily work of Wetlands International or to the nature of the projects taken on in the following years. At the last Board of Members Meeting in Wageningen, the Netherlands in 2001 the urgent need to return to science-based work was stressed, with particular emphasis on the importance of the International Waterbird Census and the Waterbird Population Estimates, which are expected to be published every third year. The Board of Members Meeting in 2001 also endorsed great changes in the structure of Wetlands International, enabling the International Director to take actions in other regions whenever appropriate. This may seem trivial, but the fact is that all regions (Africa-Europe-Middle East AEME, Asia-Pacific and the Americas) have experienced major financial problems during the last triennium. In fact, in December 2001 AEME was finally declared bankrupt and a new united organisation created out of the former constituents. Wetlands International is now one organisation and not three organisations working closely together.

A new and enlarged Board of Directors has meet successfully several times since the last Board Meeting in 2001 and continued the work of formulating an overall strategy for the work and programme action plans to implement the strategy. So, after more than four years in great difficulties, the "super-tanker" Wetlands International seems to have changed course in a more science-based direction.

Back in 1999, Nick Davidson was seconded from the UK to Wetlands International in Wageningen to coordinate the Specialist Group networks. He was quickly recruited to do far more to try and improve the worsening situation the organisation found itself in. Soon after, Nick became Deputy Secretary-General of the Ramsar Bureau, and so Doug Taylor also from UK replaced him. Doug has continued the good work of Nick and been able to direct not only the work of the Specialist Groups but also the scientific profile of Wetlands International. Most recently, Tunde Ojei was appointed Specialist Group Network Development Support Officer, which means that the Specialist Group network can finally look forward to substantial logistic support from Wetlands International. We look forward to seeing a Wetlands International representative at our next Seaduck SG workshop.

At the Specialist Group Coordinators meeting in Wageningen (that unfortunately coincided with the Seaduck SG workshop in Estonia) a new Specialist Group - the Harvest SG - was unveiled. Seaducks are subject to hunting in some countries, thus overviews of national bags or reproduction indices from wing surveys can represent important basic information for the effective conservation of these populations. At the meeting, the SG coordinators accepted the proposal to continue the work for Wetlands International under a Memoranda of Understanding (MoU) or Memoranda of Agreement (MoA). This formalized way of continuing the work seems to be necessary because of the increased demands for the delivery of data, which are placed upon Wetlands International, but it obviously also places some obligations on each of the group with Wetlands International, but intend not to promise more than we as a group are willing or able to deliver. The MoU or MoA will be presented at the next Seaduck SG meeting.

Stefan Pihl

#### *Status report*

#### News from the Seaduck Specialist Group

It has been such a delight to see two successful workshops in the Seaduck SG take place over the last two years. We believe that it is important to gather together seaduck enthusiasts from time to time, and what better way than to focus on key issues with thematic workshops? Fortunately, the group still exists as a group and reacted immediately to the first blow of the whistle.

During the workshop at Fuglsø in 2000 we called for helping hands to assist with the running of the Seaduck SG. Antra Stipniece from Latvia came forward with an offer to organise the members and correspondents database. Even though the enlisting process been difficult because of some internal problems with our server, Antra has done a marvellous job and we would like to take this opportunity to express our warm gratitude for her work on this. Peter Cranswick from UK offered to take over the editing of the Seaduck Bulletin after the next number. Thank you, Peter, and as this issue is "the next number" we look forward to see you take over in the near future.

A few years ago we set up a homepage that we had hoped you would use much more that has been the case so far. We promise to update the homepage more regularly than we have been able to in the recent past, but it does depend on a flow of information from the membership. Please, send in whatever information about seaducks you find important to the News section, relevant links to seaduck homepages to the Links section and information about future workshops and conferences to the Events section.

One of the things that did not work on the homepage was the facility to enlist as a member of correspondent to SeSG. We have revised the underlying software completely to make this work more efficiently and we encourage all interested to enlist. We intend to publish the entire list of all those who have shown an interest in the group on the homepage. We know that the enlisting form is quite long and involved, but ask for your support since we would like to maintain a detailed profile of our membership. The reason for the all the sections in the form is founded on the need to develop a skills register. Queries relating to seaducks and seaduck conservation regularly appear from Wetlands International. In most cases we can handle the queries here at Kalø, but from time to time queries are received for which we have to rely upon other members in the network. It is so much easier to find the right people to ask for help if we know your interests, expertise and current line of work.

The database has almost been sleeping while we have waited for Wetlands International to initiate the 'gap filling census'. However, after the English report on the costs of undertaking such an extensive census it seems unlikely to take place as a seaduck survey unless we ourselves (as a group) take action. We anticipate that organising such a census will take 3-4 years and suggest discussing this at our next meeting (see below).

All other wetland bird count databases covering Europe are now gathered in Wageningen and only the Seaduck Database exists as a satellite. The idea of the Wetlands International HQ has been to get the Seaduck Database transferred to Wageningen in line with the transfer of the others. We are not against this idea, but wish to reassure everyone that we, as a group, will continue to have access to all the data to which the Seaduck Database currently provides access. We will also be asked to do the same analyses, and provide expert advice, as we have previously done on the basis of the data, particularly in supporting the Waterbird Population Estimates.

At the Fuglsø meeting in Denmark in November 2000 we agreed to adjourn and meet every 18 months. So after the recent meeting in Roosta, Estonia, we are aiming to hold another meeting in autumn 2003. So far, we have not discussed time, venue or subject. It would seem natural to have a follow up on the common eider workshop to see how distribution and abundance has changed and with respect to the measures that have been takes to enhance the conservation status of the species. We very much welcome suggestion for time and venue for the next meeting and particularly any offers to host it.

Stefan Pihl and Tony Fox

#### *Status report*

#### Wetlands International Western Palearctic Seaduck Database

Thanks to National Coordinators for submitting seaduck data to the database (see following Tables 1a-1c). So far, the database has received little data fro the years 2000-2002. Irregular feedback from both the Seaduck Database and Wetlands International HQ has not encouraged data submission in recent years. The next annual report covering 1997-1999 will soon be finalised and distributed. Immediately after, initial steps will be taken to prepare the next triennial report which will cover 2000-2002. Thus, it is still important that the deadline of 1 December in the year of the count is followed for sending in data which are to be included in the next annual report or the newsletter which will be printed in years with no IWC report. If no counts have been conducted, the database would appreciate a short note saying: "No counts this year".

From a number of countries we have received data from counts following the reduced site system. These data will be stored in the database, but due to the extensive movements of seaducks in offshore areas in winter, it is clear that the reduced site data are not representative of the population as a whole.

Seaduck data included in count data submitted to Wetlands International will eventually reach the Seaduck Database, however, this may take a long time. The database regularly receives national midwinter count reports. Although often in languages unreadable to us we are in most cases able to extract summarised data, thus the database is always eager to receive such local reports.

To obtain reliable figures for the seaduck numbers in a country complete surveys must be carried out. Because such surveys are expensive, Wetlands International aims to achieve complete surveys only in a few specific years.

The Wetlands International Seaduck Specialist Group recommends aerial surveys of coastal waters combined with ground counts of near-coast areas where birds are concentrated. Such surveys will not only obtain good results for seaducks but also for other waterbirds, e.g. cormorant, mute swan, mallard, tufted duck, coot etc. However, it is important to remember that the results of aerial surveys for waterbirds depend on experienced observers, thus initial surveys to gain experience are highly recommended before the task force, especially if you are attempting aerial surveys for the first time. *Table 1a.* Status of mid-winter seaduck count data in Western Palearctic countries bordering the Atlantic Ocean (upper) and Baltic Sea (lower) 1994-2000. Data from the Seaduck Database (site-based records) are marked with an asterisk (\*); data from other sources are marked +; parentheses indicate incomplete coverage of sites or species; a hyphen (-) indicates that no data are available; zero (0) indicates that no counts were performed.

	National Coordinators	Number of sites	1994	1995	1996	1997	1998	1999	2000
Belgium	+		+	+	+	-	-	-	-
Denmark west	+	7	(+)	(+)	(+)	(+)	(+)	(+)	*
France	+	36	*	*	*	*	-	-	-
Germany	+	4	*	*	*	*	*	*	*
Great Britain	+	0	+	+	+	+	+	-	-
Iceland	-	-	-	-	-	-	-	-	-
Ireland	+	0	+	+	+	+	+	+	+
Morocco	+	-	(+)	(+)	(+)	-	-	-	-
The Netherlands	+	0	+	+	+	+	+	+	+
Norway	+	0	(+)	(+)	(+)	-	-	-	-
Portugal	+	13	*	*	*	*	-	-	-
Rio de Oro	-	-	-	-	-	-	-	-	-
Russia north	-	-	-	-	-	-	-	-	-
Spain	-	-	(+)	(+)	-	-	-	-	-

	National coordinator	Number of sites	1994	1995	1996	1997	1998	1999	2000
Denmark east	+	38	(+)	(+)	(+)	(+)	(+)	(+)	*
Estonia	+	33	*	*	*	*	*	*	*
Finland	+	0	-	-	-	-	-	-	-
Germany (Kiel)	+	11	*	*	*	*	*	*	*
Germany (Rostock)	+	17	*	*	*	*	*	*	-
Kaliningrad	-	5	+	+	+	+	+	+	+
Latvia	+	17	*	*	*	*	*	*	*
Lithuania	+	3	*	*	*	*	*	*	*
Poland	+	6	(*)	(*)	(*)	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-
Sweden	+	0	+	+	+	+	-	-	-

*Table 1b.* Status of mid-winter seaduck count data in Western Palearctic countries bordering the Black Sea (upper) and Mediterranean (lower) 1994-2000. Data from the Seaduck Database (site-based records) are marked with an asterisk (\*); data from other sources are marked +; parentheses indicate incomplete coverage of sites or species; a hyphen (-) indicates that no data are available; zero (0) indicates that no counts were performed.

	National Coordinator	Number of sites	1994	1995	1996	1997	1998	1999	2000
Bulgaria	+	-	+	+	+	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Rumania	+	-	(+)	(+)	(+)	-	-	-	-
Russia	-	-	-	-	-	-	-	-	-
Turkey	-	-	(+)	(+)	(+)	-	-	-	-
Ukraine	+	-	+	+	(+)	-	-	-	-

	National	Number							
	Coordinators	of sites	1994	1995	1996	1997	1998	1999	2000
Albania	-	-	+	+	+	-	-	-	-
Algeria	+	-	(+)	(+)	-	-	-	-	-
Croatia	-	-	(+)	(+)	(+)	-	-	-	-
Cyprus	-	-	(+)	-	-	-	-	-	-
France	+	6	*	*	*	*	-	*	-
Greece	-	-	(+)	+	+	-	-	-	-
Israel			-	(+)	-	-	-	-	-
Italy	+	-	+	+	+	-	-	-	-
Jordan									
Morocco	+	-	(+)	(+)	(+)	-	-	-	-
Slovenia	+	-	(+)	+	+	-	-	-	-
Spain	+	-	(+)	(+)	-	-	-	-	-
Tunisia	+	-	(+)	(+)	-	-	-	-	-
Turkey	-	-	(+)	(+)	(+)	-	-	-	-

*Table 1c.* Status of mid-winter seaduck count data in Western Palearctic non-coastal countries of Central Europe 1992-1998. Data from the Seaduck Database (site-based records) are marked with an asterisk (\*); data from other sources are marked +; parentheses indicate incomplete coverage of sites or species; a hyphen (-) indicates that no data are available; zero (0) indicates that no counts were performed.

	National	Number	1001	100-	1004	400-	1000	1000	• • • • •
	Coordinators	of sites	1994	1995	1996	1997	1998	1999	2000
Austria	0	-	+	+	+	-	-	-	-
Belarus	0	-	-	-	+	-	+	-	+
Bosnia-Herze-	-	-	-	-	-	-	-	-	-
gov.									
Czech Republic	0	-	(+)	(+)	(+)	-	-	-	-
Hungary	0	-	(+)	(+)	(+)	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Moldova	-	-	-	-	-	-	-	-	-
Slovakia	0	-	(+)	(+)	(+)	-	-	-	-
Switzerland	0	-	+	+	+	-	-	-	-
Yugoslavia	-	-	(+)	(+)	(+)	-	-	-	-

#### Western Palearctic and South-West Asia Waterfowl Census 1997-1999

Simon Delany is currently busy finalising the third edition of the Waterbird Population Estimates. Given the timetable for reporting, it is imperative that data from the counts in January which are to be included in the IWC report from Wetlands International or in newsletters, are submitted to the Seaduck Database before 1 December.

#### **Database Format**

The change to Access software for managing the SeSG database was announced in SeSG Bulletin 8 and is now fully effective. Access is therefore now the preferred format for all receipt of data.

#### Funding

The Wetlands International Seaduck Specialist Group is grateful to the Department of Coastal Zone Ecology, National Environmental Research Institute (Denmark) for their continued support to the Seaduck Database in recent years.

**Stefan Pihl** *Database coordinator* 

#### *Status report*

# Revision of the estimate for the Baltic/Wadden Sea common eider population

Population estimates of waterbird population are regularly updated by Wetlands International and published in the form of Waterbird Population Estimates (WPE). The latest version produced was WPE 2 (Rose and Scott 1997). WPE 3 is planned for publication in autumn 2002 and the analysis for the updates are already underway.

Seaducks have not been comprehensively covered in Northwest Europe since 1991-1993 and besides, the Seaduck Database has received little data in very recent years. One notable exception is the Baltic/Wadden Sea population of the common eider, for which sufficient information has been received to form the basis of a re-evaluation of the population size. Estimates for the other seaduck populations in Northwest Europe will thus largely remain unchanged as published in WPE 2.

The Baltic/Wadden Sea population of common eider increased during the 1970s and 1980s, apparently reaching a peak around 1990. By that time, eider reproduction was showing signs of decline in the inner Baltic areas. In 1996 colonies in Denmark were struck by avian cholera(Pasteurellosis), which killed up to 85% of the breeding females in some colonies (Christensen 1996). In 2001, Pasteurellosis hit Danish eider colonies again (Christensen pers. comm.). In the last three winters, mass deaths (caused by starvation) have occurred in the Dutch parts of the Wadden Sea, coincident with a shift in distribution to North Sea coasts (Camphuysen 2001, Camphuysen et al., in press). Given these major mortality events, this eider population is obviously under stress and the numbers counted in 2000 suggest a substantial decline in numbers (see Table 1).

The common eider estimate in WPE 2 in 1997 was mainly based on figures from 1993 (for Denmark using the average counts from 1991 and 1992). It is always difficult to census eiders effectively and comprehensively. Because of aircraft flight speed, the wide distribution of eiders in offshore waters and the fact that the birds dive, aerial survey is not the most perfect technique to obtain good estimates of true abundance. In Sweden, a simultaneous survey from land and aircraft suggested that 86% of the birds seen on the ground were detected from the aircraft (Nilsson 1975). However, it is impossible to count all birds from land, since many lie well beyond the detection of observers using telescopes from the coast. Since the vast majority of the birds have been surveyed from aircraft, the correction factor of 14% was again applied to generate estimates for WPE3.

*Table 1.* Numbers of common eider in the Baltic/Wadden Sea population reported to the Seaduck Database.

	1993	2000	Estimate 2002
Sweden	7000		7000
Poland	24000	10000	20000
Germany (MeckPom.)	11000	90000	10000
Germany (Schleswig- Holstein)	151000	90000	90000
Denmark Baltic	729000*	294000	344000
Denmark Wadden Sea	61000	26000	26000
German Wadden Sea	142000	159000	159000
Netherlands	138000	104000	104000
Belgium France	3000		3000**
Inner Baltic	1000		1000**
TOTAL	1267000		764000
+14% correction (see text)	177000		107000
Estimate	1444000		871000
Estimate range	1350000- 1700000		850000- 1200000

\* average of two winters (1991 and 1992); \*\*substituted "guesstimate"

The total survey of waterbirds in Danish waters in mid-winter 2000 is the only

such coverage since 1991 and 1992. For this reason, this year has been chosen to generate the updated population estimate for this common eider population in 2002. For those countries that have not so far supplied data, and informed "guesstimate" has been used to assess the size of the mid-winter numbers of eider in 2000. These assessments, however, make up an insignificant part of the overall total.

The discrepancy between the counted numbers in Denmark in 2000 and the estimate in 2002 is due to differences in count methods and coverage in 2000. Overall, numbers counted in 2000 were estimated to be 50,000 below what would have been counted if methods and coverage had been the same as in 1991 and 1992, as fully explained in Pihl et al. (2001).

If the same method for adding missed birds is applied to the 2000 data that was used to generate the 1997 estimates, the estimated numbers will amount to 871,000 compared with 1,444,000 in 1997. The new adopted range is consequently 850,000-1,200,000 birds, suggesting a decline in the winter population of Baltic/Wadden Sea common eider of 40%.

This estimate presented here (as was the previous estimate published in WPE 2) is based solely on the information from mid-winter counts in the area. However, another approach to the problem suggests that the actual population size is much higher. Ringing recovery analysis showed that adult annual mortality was c. 90% in the 1970's and 1980's at a time when the eider population was growing. At that time, c.140,000 birds were shot annually in Denmark and a further c.50,000 adult males shot in the Aland Archipelago, Finland. In addition, an unknown number drowned in fishing nets or were killed in other ways (e.g. oil pollution, disease, starvation). This proportion has been estimated to amount to no less than 50,000 birds. If we assume, for convenience, that juvenile and adult mortality are equal (obviously a flawed assumption) the total population size at the beginning of the 1990's could have been as high as 2,400,000 birds. The Seaduck Database is well aware of this discrepancy, but since future population estimates will also be based upon surveyed numbers of common eider, the estimate presented here is offered as the best possible given the available count data.

#### Stefan Pihl

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#### *Meeting report*

## Scoter workshop, Fuglsø, Denmark, November-December 2000

It is now such a long time ago, it is hard to remember just exactly what happened at the workshop here in Denmark 18 months ago. The reasons for gathering experts to discuss our knowledge about the ecology, distribution and abundance of scoter species *Melanitta* were clear. There were few sources of information and no good synthesis of the factors affecting the distribution and abundance of these seaducks which, compared to other members of the Anatidae were relatively poorly studied. Increasing threats from offshore development, shell- and fin-fisheries, aggregate extraction from the sea and a wealth of other human factors meant that scoters were no longer safe in their offshore havens, and the Seaduck Specialist Group thought it appropriate to gather the available experts and derive as much information as the collective wisdom could achieve.

Broadly, the aims of the workshop were as follows:

1) To determine the distribution and trends in breeding, moulting, wintering and staging numbers throughout the range by inviting the contribution of national reports from acknowledged experts

2) To assess current census techniques used for counting scoter and determine how best to monitor these populations in the future.

3) To gather available information on population processes (specifically survival and fecundity and determine factors that regulate changes in numbers or limit population size).

4) To gain information regarding the factors affecting distribution and abundance (with regard to habitat, benthic fauna, flora and substrate, water depth, disturbance and other factors)

5) To determine the effects of offshore development on scoter numbers and distribution through consideration of existing case studies.

The workshop gathered some 42 participants from 17 countries, from as far away as Estonia, Russia, Canada and the United States. The discussion was informed, lively and the workshop was great success, gathering and synthesising data not previously available in published form. It was decided that the material that the participants presented was so new and so important that there should be some record of the meeting published as a source of reference. To this end it was decided to produce a "Flyway Review" of scoters in the Western Palearctic in the form of a Danish National Environmental Research Institute report. How successful the workshop was in attaining the objectives above will emerge as this "Flyway Review" unfolds, but the meeting marked the first formal gathering aimed at synthesising available information on scoter ecology in the Western Palearctic. As a result, the information presented at the meeting represents an important bench mark against which to measure real change and the increase in our knowledge of these attractive and elusive ducks.

Delegates at the meeting more than met expectations by coming with near final drafts of manuscripts produced from the contributions to the workshop. Fourteen national accounts of the status and distribution of common and velvet scoters were received from throughout the Western Palearctic flyway. The section on population dynamics includes the presentation of impressive data from a long-term common scoter breeding biology study from Iceland as well as contributions on breeding velvet scoter in the Stockholm archipelago. Feeding ecology is considered with regard to studies carried out in Lithuania and Wales, and new information relating to moult chronology of surf scoter in Canada is also presented. With an eye to the potential threats of increasing human development of offshore waters, articles deal with the effects on scoters of fisheries, fast catamaran ferries, windmill farms and other sources of disturbance. Conservation planning is included with a review of the velvet scoter plan drafted for the European Commission and the document will round off with a review of research and conservation priorities.

Unfortunately, although all 33 articles for the "Flyway Review" were received and sub-edited by May 2001, delays in laying out the individual articles (because of enormous pressure on the editorial team producing the reports at Kalø) has meant that only 13 of these have been sent out to authors for proof checking as .pdf files. We do hope progress will be faster now, and that the remaining half will be processed rather quicker, but it is likely that the production of the final document will take some time. We sincerely apologise for this delay, which is beyond our control, and ask for patience on behalf of those authors who were kind enough to be so prompt in their submission of manuscripts after the meeting.

Our sincere thanks to all the participants for making this such a successful workshop and a huge thanks to Else-Marie Nielsen for making the meeting run so smoothly.

#### **Tony Fox**

Meeting report

# Steller's eider workshop, Fuglsø, Denmark, November 2000

Given that the Scoter Workshop was assembling a glittering array of seaduck specialists from around the globe, we took the opportunity to hold two evening workshops on the Steller's eider during the Fuglsø meeting. On the evening of Thursday 30 November, there was an open meeting to follow up on progress, following the drafting of the European Action plan for the species. This included presentations relating to the conservation management status of the species from around the arctic. Discussions ended with the creation of an informal task force for future follow-up on the action plan and the creation of a list server (kindly organised by Baz Hughes from the Wildfowl & Wetlands Trust and the Threatened Waterfowl Specialist Group). To subscribe to the group, send an e-mail to:

#### Majordomo@wwt.org.uk

with the following command in the body of your message:

subscribe stellers

To unsubscribe from the group, send an e-mail to the same address with the following command in the body of your message:

unsubscribe stellers

To post a message to the group at any time, simply e-mail the text you wish to post to:

#### stellers@wwt.org.uk

In addition, because there was such interest in the follow-up research that had happened since the European Action Plan was drafted, we held a technical workshop on the evening of Friday, 1st December. At this open gathering, information relating to breeding range expansion, breeding biology and ecology, wintering numbers and ecology was presented and abstracts from some of the presentations are provided below.

Fuglsø Meeting abstract

## Status, numbers and distribution of the Steller's eider wintering in Estonia, 1990-2000

The Steller's eider was considered a vagrant species in Estonia until spring 1975, with only 5 observations since the beginning of this century. More frequent observations in subsequent winters, especially since 1990, showed that the species winters along western coast of Saaremaa Island regularly from late November to early May. The peak numbers were recorded in 1992, 1994 and 1996, when 4000-6000 were counted. Based on midwinter counts in the 1990s there are two key Baltic wintering sites – 250-2500 (mean 1600) in Uudepanga Bay & Harilaid Peninsula and 350-2500 (mean 1300) off the Vilsandi archipelago.

Only the Vilsandi wintering site is fully protected by national law. In 1998, the Vilsandi National Park was designated as a Ramsar site and IBA. Other important areas - Uudepanga and Küdema Bays have been listed as an IBA since 1998. In the coming years, it is proposed that most Estonian IBAs will be included to the Natura 2000 network, but until accession to the European Union, national legislation does not support these programme areas.

In autumn 1999, the Estonian NGOs started a campaign against a plan to build a deep-water harbour for the large cruise-ships to Uudepanga Bay. Active intervention by the Estonian Ornithological Society and Estonian Fund for Nature supported by BirdLife International, Wetlands International, WWF etc. forced government to drop plans for the harbour development. Despite this, oil transportation and oil disposal by ships in the eastern part of Baltic Sea still threaten the wintering sites for this species.

#### Andres Kuresoo

Institute of Zoology and Botany, 181 Riia St., 51014 Tartu, Estonia.

Fuglsø Meeting abstract

## Daily time and energy budgets and food consumption of wild Steller's eider.

Daily energy budgets (DEB) of Steller's eiders were calculated from daily time budgets for most periods of the annual cycle, divided between pre-breeding, incubation, brood rearing, migration and wintering periods. Measurements of basal metabolic rate (BMR) and energy of thermoregulation (TR) were made for adult Steller's eiders in summer. Measured BMR and TR were used for construction of DEB with calculated productive energy. The summer BMR in Steller's eiders did not differ from the theoretical predictions (2.6% difference in males, 4.3% in females). Breeding energy budgets differed considerably between birds of different sex and status. Summer DEE was highly variable, ranging between 1.93x BMR (incubating females) to 3.98x BMR (females prior to egg-laying); it would appear that females switched between maximum and minimum energy expenditure during a period of just 2-3 days. Daily food consumption ranged from 123 g to 406 g in breeding females at different stages of reproduction. Food consumption was almost the same in non-breeders of both sexes and breeding males. In winter, DEB varies with season and wintering site, ranging between 2.63x and 3.17x BMR, well short of the limit to survival at 4x BMR. Food intake rates were considered crucial in determining wintering site.

#### **Diana Solovieva**

Lena Delta State Reserve, Fiodorova St. 28, Tiski, 678400, Yakutia, Russia.

#### Fuglsø Meeting abstract

# Winter ecology of the Steller's eider in Varangerfjord, northern Norway.

The Steller's eider is amongst the rarest sea ducks in the world and Norway has a global responsibility for the species since 5-10% of the world population winters in Varangerfjord, eastern Finnmark. The project aimed to identify the environmental factors influencing the winter ecology of the Steller's eider and provide input to the management of the population. We found the most important habitats were shallow kelp forest. The diet consisted of animals most frequently found on kelp plants and we concluded that kelp was very important for Steller's eider. By comparing Steller's eider with long-tailed duck (the most numerous seaduck in the world) we found that the Steller's eider was more conservative in habitat use and diet, compared the long-tailed ducks greater flexibility. Steller's eider is amongst the northernmost wintering seaducks in the world, and we documented behavioural adaptations enabling the species and in Varangerfjord, 90% of birds exploit one habitat type, shallow kelp forests, of which there are some 10 square kilometres in the area. Conserving these habitats is probably highly important for conserving the population in the fjord.

#### Jan Ove Bustnes & Geit Helge Systad

NINA, Department for Arctic Écology, Polarmiljøsenteret, N-9296 Tromsø, Norway.

Fuglsø Meeting abstract

# Filling the gaps in knowledge regarding the Steller's eider in the Baltic states, with special emphasis upon by-catch mortality

This is a joint project involving the Lithuanian, Latvian and Estonian Ornithological Societies. It is well known that the Steller's eider is a species of conservation concern, being IUCN Red Data Listed as "Vulnerable". The Baltic states of Lithuania, Estonia and Latvia support more than 6000 birds every winter. The European Species Action Plan for Steller's eider identifies several important gaps in knowledge about the species' biology, including mortality factors, and recommends actions to obtain the necessary information to fill them, namely:

- Conduct studies on the impact of mortality induced by human activities, *Priority: high, Time scale: short;* 

- Conduct studies on habitat requirement and feeding ecology of the species, *Priority: medium-high, Time scale: short-medium.* 

#### **Objectives:**

- to monitor existing and search for yet unknown wintering sites of Steller's eider in the Baltic sites,

- to evaluate the size of the annual Steller's eider bycatch mortality in the Baltic States,

- to investigate the species diet preferences and habitat use in the course of winter in order to produce practical management recommendations

#### **Project activities:**

#### Lithuania

1)An introductory meeting with persons involved with the study (representatives of fishermen, staff of Pajuris Regional Park, representatives from the environmental protection agency, hydrobiologists and students) will take place in November 2000. The task of hydrobiologists in this study is to identify, locate and describe key features of Steller's eider wintering habitat. The existing knowledge and methods to be used will be discussed at the meeting. The main task for Regional Park Staff will be to visit fishermen during periods between visits by ornithologists to the coast. They also have a right to inspect the catch and gear of fishermen, so there might be an opportunity to collect birds from other vessels not involved in our study.

2) Compilation of time budgets (how much time birds spend feeding, resting, flying, preening, etc) will be carried out during daylight time using traditional behavioural study methods (Altmann, 1974): regular scan-observations of selected study site re-

cording activities of all birds present or continuous focal observation of bird groups for a certain period of time recording all the activities. Results of such observations would reveal periods when Steller's eiders are most vulnerable to disturbance

3) Bycatch studies - it is planned to establish relationships with at least 5 fishermen teams in the area from Klaipëda to Palanga. Fishermen will be asked to keep log-books, registering the fishing gear type and mesh size, depth and time of catch, target species etc. All birds killed as bycatch will be stored in freezers until collected and identified by ornithologists.

*4) Dietary studies - bycatch victims will be used for dietary studies, carried out by the team-leader.* 

5) Habitat description - sites frequented by Steller's eider will be studied according to their benthic characteristics. The main marine benthic biotopes within Steller's eider wintering range will be defined, the existing data reviewed and, if necessary, additional sampling done. In collaboration with hydrobiologists the ornithological data will be adjusted to hydrobiological parameters. The most appropriate methods (scuba diving, dragging, underwater filming) will be selected to ensure that this study enables finer-grained mapping of habitat types used than previously possible.

#### Estonia

- 1) bycatch monitoring (4) vessels
- 2) analyses of dead eiders (dietary and morphometric studies);
- 3) habitat selection studies.

#### Latvia

1) Regions of previous sightings of the species will be inspected.

2) bycatch monitoring (12 vessels) with log-books and regular checking of bycatch victims by ornithologist

#### Projected outcomes and outputs:

*1) assimilation of data on the extent of bycatch mortality of Steller's eider (and other species in marine waters)* 

2) assimilation of data on Steller's eider diet composition

3) compilation of data on Steller'eider habitat use

4) generation of national reports including practical management recommendations

**Team leader Ramunas Zydelis** Lithuanian Ornithological Society, Akademijos 2, Vilnius LT-2600, Lithuania,

**Team leader Antra Stipniece** Latvian Ornithological Society, A.k. 1050, Riga, Latvia,

**Team leader Andres Kuresoo** Institute of Zoology and Botany, 181 Riia St., 51014 Tartu, Estonia.

NB readers should note that progress against these objects were reviewed at the Seaduck Specialist Group meeting in Roosta, Estonia in April 2002 and are summarised on page 32.

#### Meeting reports

#### Steller's eiders workshop, Roosta, Estonia, April 2002

The Seaduck Specialist Group Meeting in Estonia in spring 2002 gathered in a very special part of the world for Steller's eider, since the Estonia coast has proved to be the stronghold for the modest Baltic-wintering population of the species. For various reasons, it was decided to call a small workshop session to deal with the species, not least because it is now five years since the EU Action Plan (Schäffer & Gallo-Ursi 2001) was drafted and it was timely to review progress. In 2001, the plan to develop a deep water port near Undva Cape (an important wintering site for 1000 birds in Estonia) was dropped, several research projects have been completed (e.g. by-catch and winter ecology studies) and satellite transmitters have been deployed on birds in Norway, so there was a great deal to report upon! Umberto Gallo-Ursi from BirdLife International was gracious enough to chair the session and guide the stimulating discussion throughout the workshop.

Andres Kuresoo and Arvo Kullapere provided an important update on the distribution and numbers of Steller's eiders wintering in Estonian waters in recent years. This showed a worrying decline in peak winter numbers in the last five years since the peak counts of the mid-1990s, but again highlighted the fact that co-ordinated synchronous counts at all known sites again suggested the presence of some 2000 extra birds present along Estonian coasts during the spring. The puzzle remains as to where these birds spend their winter, as this number far exceeds those counted in Lithuania and Latvia during mid-winter.

One of the most significant issues to surface in recent years has been the problem of the drowning of seaducks in the new fishery that has sprung up along the formerly militarised coast of Lithuania. Ramunas Zydelis reported on results of his recent studies of the feeding ecology of Steller's eiders and attempted to assess the magnitude of the annual kill of this species, known to be sensitive to changes in adult survival. Ramunas supplied an abstract of his presentation prior to the meeting and was kind enough to permit its reproduction here (see below).

It was with great pleasure that the meeting welcomed Margaret Petersen from the US Geological Survey in Alaska. Margaret came to report on the latest results from her joint project with Jan-Ove Bustnes (NINA Norway) using satellite telemetry to track Steller's eiders from their capture site in Varangerfjord, Northern Norway throughout the annual cycle. The results showed individual birds followed different tracks, but highlighted the previously unknown moulting areas on the west coast of Novaya Zemlya, which the meeting agreed should be followed up by a ground visit to determine the importance of the area for the species during this critical period.

#### **Tony Fox**

#### Reference

Schäffer, N. & Gallo-Ursi, U. 2001: European Union action plans for eight priority bird species. - Office for Official Publications of the European Communities, Luxembourg.

#### Roosta Meeting abstract

## Ecology of Steller's eider and a recent assessment of the fishing bycatch in Lithuania

The winter ecology of wintering Steller's eiders along the Lithuanian coast was studied in winter 2000/2001, with special emphasis on determining the bycatch of the species in fishing nets. An estimated c.750 Steller's eiders wintered along the Lithuanian coast in 2000/2001, restricted to a narrow stretch of the coast. Statistical analysis suggested that Steller's eiders chose habitats characterised by vegetated, hard bottom, shallow water zones. The main foods of these birds were crustaceans, bivalves and gastropods. Highly specific patterns of distribution and food choice were observed in spring, when all Steller's eiders gathered at herring spawning grounds and fed mainly on fish eggs. The Steller's eider wintering grounds off the Lithuanian coast fall, however, within an area subject to very intensive gill net fisheries. Numerous cases of bird entanglement in fishing nets were documented. The most dangerous threat to diving birds appeared to be associated with large mesh size nets set for salmon. The most critical period during bird wintering season was March and April, when intensity of fishing is highest. It was estimated that up to 10% of all birds wintering along the Lithuanian coast might drown in fishing nets annually. Besides causing direct mortality of birds, fishing activities in the near shore zone is also an *important source of disturbance to birds. The Steller's eider is especially sensitive to* disturbance, as even under natural conditions, these birds spend a greater proportion of the day feeding. Additional energetic costs incurred by disturbance, together with the loss of foraging time, might adversely affect the ability of birds to satisfy their daily energetic requirements. In conclusion - current conditions of Steller's eider wintering area at the Lithuanian coast requires immediate conservation measures and proper management. There is some hope that the conservation of Steller's eiders will improve in future years during the process of expansion of the Natura 2000 network.

#### Ramunas Zydelis

Institute of Écology, Akademijos 2, LT-2600 Vilnius, Lithuania Meeting reports

#### Common eider workshop, Roosta, Estonia, April 2002

This Workshop was prompted by concern over recent declines in breeding and wintering populations of common eiders in north-west Europe. The aims were to review the distribution, numbers and conservation status of common eiders in the Baltic and North Seas, discuss factors responsible for changes in numbers and distribution, and devise a strategy for improved future monitoring of population sizes and trends. The main emphasis was on the Baltic/Wadden Sea flyway, but with reports also from Norway, the British Isles, Greenland and Alaska. The common eider workshop was followed by one on Steller's eider, with progress reports on their numbers and conservation status in the Baltic, and satellite-tracking studies in northern Norway.

The isolated Roosta Holiday Village, on the north-west coast of the country, was a perfect location for the Workshop, comprising comfortable chalets tucked away in pine woods around a modern and well equipped conference centre. A short walk to the beach before breakfast on the first morning revealed flocks of long-tailed ducks just offshore, woodlarks on the forest edge, migrating black-throated divers, an early caspian tern, and a distant white-tailed eagle - an inspired venue!

The 40 or so participants heard welcome addresses from Urmas Tartes and Andres Kuresoo of the Estonian Institute of Zoology and Botany, after which Tony Fox (NERI) reported news from Wetlands International and the SeSG, and then opened the first session, Abundance and conservation status in range states. For countries in the Baltic/Wadden Sea flyway, there was a common theme to population trends - increases during the 20th century until the early or mid 1990s, followed by either stability, or in most cases, declines, either in breeding or wintering numbers, or both. In recent years, there had been mass mortality during winter in The Netherlands, a 50% decrease in wintering numbers and outbreaks of avian cholera at breeding colonies in Denmark, and low duckling survival and falling breeding numbers in Finland, to cite just three examples. Attempts to match estimates of breeding and wintering numbers in the flyway, and to quantify the scale of decrease during the past decade, proved difficult and highlighted the need for better co-ordination of surveys and monitoring between the relevant countries. It also highlighted the difficulty involved in comprehensive surveys of the Baltic region, with it's tens of thousands of islands available for nesting and vast areas of shallow waters available for feeding flocks. From farther afield, we heard of both decreases and increases along different regions of the Norwegian coast, but relatively stability in the largely resident population in the British Isles.

The organizers had put together a very full programme, and we reconvened for an evening session on *Lessons from specific discrete populations*. Reports were generally unfavourable, with an 80% decline in breeding numbers in west Greenland since the 1960s, and winter hunting of both local and migrant Canadian birds continuing at an unsustainable level. The small, resident population in the Shetland Islands had declined by two-thirds in the past 25 years, with oil pollution having been a significant negative factor. More encouragingly, numbers in western Scotland had increased, and had fuelled range expansion into Ireland and Wales. Finally, population modelling at a large, but declining Danish colony suggested that adult survival was lower than had been presumed and was the likely cause of declines.

After nine hours of talks and discussion, there was a rapid migration to the bar where the very friendly, but perhaps over-enthusiastic, barman seemed content to pull glasses of Saku beer for as long as his customers could stay awake - black coffee and orange juice were popular choices at breakfast a few hours later!

The next session, *Causes of changes in abundance and distribution*, covered disease, parasitic infection, hunting, predation and food scarcity. Avian Pasteurellosis had caused mass mortality of females at colonies in Denmark, and in the St Lawrence Estuary, where some drastic habitat management and provision of artificial nest shelters had helped breeding numbers recover. In Denmark, a surprisingly high infestation rate of the acanthocephalan worm Profilicollis botulus was discovered, although no relationship was found between parasite load and body condition. Coming from Scotland, it was a bit of a culture shock to be reminded that common eiders are still legally hunted in Europe - the Danish bag has declined to a mere 80,000 birds in recent winters (equivalent to shooting the entire British and Irish population!), and a third of the breeding population there carries spent shot, but the declining bag is thought to largely reflect a reduction in the number of hunters. Perhaps the most worrying situation in the Baltic/Wadden Sea flyway is the mass deaths of common eiders through starvation in The Netherlands in recent winters. The western Wadden Sea has traditionally been the main breeding and wintering area for common eiders in the country, because of the stocks of shellfish there (blue mussels and common cockles). In what, to an outsider, seems to have been gross ecological mismanagement, overfishing of these stocks has altered the benthic ecology of the Wadden Sea to the extent that common eiders now move to adjacent North Sea coasts in winter where they feed on nutritionally inferior Spisula (itself subject to a commercial fishery). Tens of thousands of birds have starved to death in the past three winters, and local breeding numbers and success have been reduced severely. Migrant common eiders from the Baltic use the Wadden Sea in large numbers during winter, and the food supply problem there could be affecting breeding populations in a number of countries.

The afternoon was spent reviewing *Methods to monitor numbers and distribution*, and discussing what could be done to help restore the Baltic/Wadden Sea population, or at least better quantify population trends and understand the processes underlying changes in numbers. Common eiders may be surveyed on their wintering grounds, on spring migration, during pre-breeding gatherings near colonies, in colonies themselves, or during the moulting period. The appropriate mix of the timing of such surveys will vary between different parts of the flyway, but a co-ordinated and standardised approach is essential if accurate population figures are to be derived. Monitoring of parameters such as reproductive output and adult survival, especially of females, were also identified as important in understanding demographic processes. The conclusions were carefully crafted into 'The Roosta Resolution', which recommends setting up a working group on common eiders and urges the drafting of an EU management plan for the species in the Baltic/Wadden Sea flyway.

Two other fascinating talks concerned satellite tracking studies of common eiders breeding in two separate areas of Alaska (in both areas birds wintered in the closest available ice-free habitat), and assessment of moulting and wintering populations of king eiders in West Greenland, through aerial surveys and satellite tracking. About 40,000 king eiders moult along the coastline (c.f. 200,000 in the 1950s) and c.300,000 winter there, although further surveys are needed to firm up the latter estimate.

The Workshop Banquet that evening was a splendid affair, and I was not alone in assuming that the magnificent spread of starters constituted the main course! Short speeches and toasts were made, especially thanking our Estonian hosts who had worked very hard to ensure the Workshop ran so smoothly, and in such a friendly and convivial atmosphere. Unfortunately, the insomniac barman was on duty again, which led to some confusion over the identity of various bird calls heard from the forest by the diehards, wending their way back to their chalets in the dark.

The Steller's eider workshop on the Saturday morning heard of recent changes in wintering numbers in Estonia (declines), and of recent studies of their wintering ecology in Lithuania, where it was worryingly reported that up to 10% of birds might be drowning each winter in gill nets. An intriguing report from a satellite telemetry study of Steller's eiders caught in spring in Varanger Fjord, Norway, suggested the presence of a moulting area off the west coast of Novaya Zemlya, and possible breeding areas further west along the Siberian coast than previously thought. The session ended with a review of current threats to Steller's eiders, and a discussion on conservation work and future research priorities.

So, all too soon, a most enjoyable and constructive meeting came to an end. Having spent nearly 25 years counting common eiders in the relative isolation of Shetland, I found it highly rewarding to discuss the species with fellow dunter-counters (dunter is the Shetland name). Hopefully, the deliberations will be soon lead to improved and more co-ordinated population monitoring of common eiders, and a better understanding of the causes of recent declines in numbers. Many thanks to Tony Fox, Mark Desholm and Thomas Kjær Christensen in Denmark, and to Andres Kuresoo, Leho Luigujõe and everyone else in Estonia for their hard work in organising the Workshop.

Two post-Workshop excursions had been arranged, an afternoon trip to Matsalu Bay, and a longer trip to Saaremaa island, also stopping off at Matsalu on the way. Seventeen of us opted for the longer excursion, guided by Andres Kuresoo, the highlight of which was to be Steller's eiders on the north-west coast of Saaremaa. Matsalu Bay is a site of immense conservation value for birds, and you only need to check out page 213 of Vol.1 of Important Bird Areas in Europe to get a flavour of the species to be seen there. We briefly visited the Haeska observation tower on the north side of the Bay (with cracking views of a pair of white-backed woodpeckers on the way) and 'scoped the thousands of waterfowl in that part of the Bay, the highlight being close views of a pair of lesser white-fronted geese. After dinner in Lihula, we boarded the ferry for Muhu and Saaremaa - a stop at the causeway linking these two islands giving all three European swans in the same field of view and overnighted in Kuressaare.

On a lovely calm, sunny Sunday morning we drove north-west through forests to the Tagamoisa Peninsula, where we were met by Arvo Kullapere, Director of Vilsandi National Park. Arvo guided us straight to Undva Cape, where about 500 metres offshore was a tight feeding flock of Steller's eiders, just distant enough for me to be grateful for having lugged telescope and tripod all the way from Shetland. The birds, diving highly synchronously, were impossible to count accurately but it was instructive to hear the muttered 'guesstimates' from all these seaduck experts ranging from 320-580! After a morning exploring the stunningly wild countryside around Uudepanga Bay we stopped for lunch at the imposing and beautifully restored Loona Manor, headquarters of the Vilsandi National Park, where Arvo's hospitality was second to none. Then a couple more stops - Andres got quite excited over some migrant ring ouzels, the rest of us were very pleased with close views of black woodpecker at the nest hole - and we had to catch the ferry again back to the mainland, and Tallinn. We only got a small taste of Estonia, but the birdwatching attractions of the country are tremendous and I'm sure I'll be back again on holiday.

Martin Heubeck. University of Aberdeen, c/o Sumburgh Head Lighthouse, Virkie, Shetland ZE3 9JN, Scotland, UK.

Progress report

## Update on progress under the Steller's eider Action Plan - notes from the Conservation and Research Workshop, Roosta, April 2002

The gathered experts reported that the Baltic wintering population of the Steller's eider has been showing declines in Estonia and Lithuania since the-mid 1990s, and in Latvia, regular wintering appeared to ceased in winter 2001-2002. However, it was stressed that we may be dealing with a population that shows long term and large fluctuations in abundance in this region.

#### Conservation

There followed a discussion relating to current threats to the Baltic population.

*Salmon nets* - This seems to be the most serious threat to the population, since the mesh sizes of the nets used to catch salmon (especially in March) are seemingly the worst at trapping seaducks. In Estonia, the bycatch is thought to be minimal (5% of winter numbers at maximum, and this is concentrated on specific parts of the coast; Vilsandi for instance is not threatened by fishing). However, in Lithuania, an estimated 5000 seaducks may be drowned each winter. Although the majority of drowned seaducks are velvet scoters, 10% of all wintering waterfowl along this coast are Steller's eider.

The major need here is to increase the visibility of nets - experience in this field is limited, and there is currently no obvious solution. It would seem highly worthwhile investigating methods that would make nets visible to birds to ensure their avoidance of entanglement. Since fish prices drive fisheries, it is clear that when fish are very rare, prices rise and make the extra effort expended to catch rarer fish worthwhile. Naturally greater fishing effort ensures a larger bycatch. The meeting recognised the need for establishing a common market for selling fish and hence to regulate prices, but also appreciated that this necessitates a major culture change in fishing policy. One option might be to encourage the marketing of fish, which are caught in an ecological way ("bycatch free" or "seaduck friendly"). The meeting recognised the need for an exchange of fishery management experience between countries, and for attempting to establish the benefits of Steller's eider to local communities (e.g. through ecotourism) to balance the local economic arguments for high fishing intensities.

*Oil Spills* - A constant threat, Steller's eiders have been lucky to date that a severe spill has not occurred in the Baltic. Legislation requiring double-skin

hulls has reduced the risks of very large disasters, but frequent small incidents are a constant threat to all seaduck concentrations. Lack of local law enforcement relating to small spills also reduces the effectiveness of existing legislation.

*Offshore wind farms* - Offshore windmill farms were being proposed in all the Baltic States, with potential threats in specific coastal areas in Estonia, but it was thought this threat would create only limited habitat loss to the species.

*Dredging of harbours -* In very recent years, there has been dumping of dredged material excavated from harbours along the Palanga coast in Lithuania. The material is deposited offshore, ostensibly to create a sand source for "streng-thening" of the coastline. The potential of the deposition of dredged material and the addition of sediment burdens in the water column could have severe consequences for the algae beds in the area, and present an, as yet unknown, threat to the food base of the population.

*Deep water ports* - The threat of the creation of a deep-water port close to the major wintering areas for Steller's eider in Estonia has been removed. Thanks to considerable efforts of Andres Kuresoo, an alternative site has been located away from the seaduck concentrations, and a potential problem has been averted. It is clear that development issues will continue to threaten the species even in the most remote of wintering resorts.

#### Research

The meeting also reviewed progress against the various objectives set under the Steller's eider action plan, in terms of completed, on going and recently started activities.

*Locate and identify breeding areas* - no progress, except the results of the satellite telemetry work. Diana Solovieva has now completed her work in the Lena, so there is little current activity on the breeding areas - this remains a high priority, but with minimal activity.

*Locate and assess key moulting areas* - The Norwegian/US satellite telemetry programme has identified some important moulting areas in North American and Palearctic populations. Ground surveys needed to follow up on the initial findings - this remains a high priority.

*Locate and assess key staging areas* - The Norwegian/US satellite telemetry programme has also identified some important (mostly unknown) staging areas. Ground surveys needed to follow up on the initial findings - this remains a high priority.

Locate and monitor key wintering areas - Much progress under this heading -

recent years have seen the strengthening of the count network and good collaboration, enabling national and Baltic trends to be established, showing the declines in recent years. In Norway, the Varangerfjord population remains stable, based on winter counts. The maintenance of the network and collaborative reporting remains a high priority.

*Adult/juvenile ratios* - Little co-ordinated effort has gone into establishing a method of measuring recruitment of young birds in the wintering population. At present, there is a lack of agreed sampling protocol, although data exist from Estonia and Lithuania. There remains a need for more effort to be expended on this problem and for an agreed methodology to be developed which remains a high priority.

*Studies on breeding biology* - Congratulations to Diana Solovieva, whom successfully defended her Ph.D last year. However, despite some data being published in the Birds of the Western Palearctic Update account of the Steller's eider, little information has been forthcoming, largely because the text is in Russian (a translation is currently underway in the US, which will be available in due course). Basic monitoring occurs in the breeding population in Alaska. More breeding biology studies remain a high priority.

*Monitoring of annual adult survival rate* - It was recognised that large scale ringing activity (of for example, moulting or wintering birds), would be a suitable method for determining this critical parameter. However, this would require 200+ birds to be caught annually at the same site over at least 3-5 years. This might be possible in Norway, and remains a high priority.

*Habitat and feeding studies* - The meeting heard about the highly commendable work being carried out on the moulting grounds, on behaviour and food availability in Alaska and the recent work from Lithuania has been very impressive. Although of lesser priority, this work is still required to make the link between food availability and bird distribution, a factor that may be critical under certain circumstances.

*Human activities* - The last few years have seen great improvements in our understanding of the effects of human activity on bird distributions and abundance, bringing the issues into focus. A great deal has been achieved in recent years. Habitat and feeding ecology studies in Norway, bycatch studies in Lithuania and beached birds surveys along all coasts all continue to monitor the effects of human activities on Steller's eider. This remains a high priority.

The workshop was an excellent and dynamic talking shop, with a good exchange of ideas and some positive developments coming from the meeting. We are enormously grateful to Umberto Gallo-Ursi for chairing the session and evoking such a stimulating discussion from the audience and especially to Andres Kuresoo and Ramunas Zydelis for their contribution to the process.

Tony Fox

#### Progress report

#### **Recent seaduck literature**

During the recent absence of the Bulletin from the scene, we have missed the opportunity to review some of the material emerging in the literature that may be of general interest. We are extremely narrow in our choice of material, but we would draw attention to the following that may be of wider interest. Although now way out of date, it was cheering to see counts of Velvet Scoter reported from the mysterious and poorly known population in the Black Sea, in the IBA report from Turkey (Magnin & Yarar 1997). Sites holding more that 50 individuals are Aktas Gölü (with a count of 725), Yesilirmak Deltasi (57-870), Kizilirmak Deltasi (75-97). Data from another area not normally associated with large wintering sea duck populations are presented in a summary of waterfowl counts from Italian waters, where up to 400 scaup, 180 common eider, 290 common scoter and 160 velvet scoter were reported (Serra et al. 1997).

In Lithuania, two impressive doctorate dissertations dealing with offshore populations in that part of the Baltic were successfully defended in recent years. That of Gediminas Vaitkus (1999) investigated the distribution and abundance of seabirds in Lithuania waters throughout the annual cycle, with no particular emphasis upon seaducks, but just recently (2002) Ramunas Žydelis defended his thesis which focussed primarily on seaduck distributions and trophic relationships, concentrating on diets and feeding ecology and interactions with Man's activity. Ramunas is well known to group members, having been a loyal contributor to the activities of the SeSG, but his work is especially relevant, combining good research on feeding behaviour and habitat selection with the effects of human activities (especially general disturbance, fishing and oil pollution) on the wintering seaduck populations of this important coastline.

In Norway, the monitoring of seabirds programme has now been running since 1979 and covers all seaducks. Analysis of the trends in numbers has been carried out and is summarised in Lorentsen & Nygård (2001). The long run of data enables the generation of trends for the commoner species, which includes the long-term decline in common eider numbers discussed elsewhere in this Bulletin. Although in Norwegian, all the tables and figure legends in this impressive compilation are translated into English.

If you have not already seen a copy of Švažas et al. (2001), then we recommend you get hold of one as soon as possible. Saulius and his editorial team have done a very impressive job of gathering together diverse data

relating to the changes in wintering distribution of waterfowl in eastern Europe in recent decades in the face of a string of mild winters. Accounts of wildfowl counts and patterns of ringing recoveries from Lithuania, Kaliningrad, Poland, Belarus and Ukraine complement each other to draw a broad picture of birds remaining further east in those years of mild winters that in preceding years. This pattern holds for many seaduck species (notably velvet scoter and long-tailed ducks) as well as for the freshwater species. This report is ground breaking and a very important contribution to our current knowledge and the future of managing waterfowl populations in the Western Palearctic.

#### **Tony Fox**

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Vaitkus, G. 1999: Studies of spatial structure and dynamics of seabird populations in the Eastern Baltic. - Doctoral dissertation, Institute of Ecology, Vilnius.

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Announcements

#### North American Seaduck Conference and Workshop, Victoria, British Columbia, Canada, 6-10 November 2002

Sponsored by Sea Duck Joint Venture Partners, the first ever **North American Seaduck Conference and Workshop** will gather researchers, managers and administrators with an interest in seaduck biology and conservation. Activities include scientific presentations and a poster session to define where we are in our understanding of seaduck biology and population status, with workshops on specific issues and methods and a few fun events. The meeting has a website to provide information on all aspects of the conference, which can be found at:

http://seaduckjv.org/conference/index.html

Announcements

## **Limnology and Waterbirds Conference**, Sackville, New Brunswick, Canada, 3-7 August 2003

This will be the fourth conference of the Working Group on Aquatic Birds of the International Society of Limnology (SIL), which will organise the conference **Limnology and Waterbirds 2003** in Sackville, New Brunswick during 3-7 August 2003. It is proposed that the proceedings will appear in the journal Hydrobiologia, similar to the last Sackville meeting. The meeting has a website to provide information on all aspects of the conference, which can be found at:

http://www.links.umoncton.ca/lw/

#### Announcements

#### The Roosta Resolution

1. Thirty-six seaduck experts from thirteen countries around the globe gathered at the Seaduck Specialist Group Meeting in Roosta, Estonia during 18-22 April 2002 and agreed the following:

2. The Meeting noted the major declines in wintering numbers of the Baltic/Wadden Sea population of the common eider Somateria mollissima mollissima and reductions in breeding numbers at individual colonies in Finland, Denmark, The Netherlands and in some areas in Sweden and Estonia. It recognised that the Baltic/Wadden Sea wintering population of common eider has declined by up to a half in the last 10 years and therefore qualifies as a huntable species of unfavourable conservation status. It noted recent declines in other discrete breeding and wintering common eider populations in Greenland, Shetland and Norway.

3. The Meeting recognised that consecutive annual changes in the size of common eider breeding populations are highly susceptible to small-scale changes in adult survival, but relatively robust to large changes in reproductive success. Hence, changes in additive mortality are critical in affecting year to year changes in breeding number (e.g. as a result of disease, starvation, drowning in fishing nets or hunting), but poor breeding output contributes relatively little to between year changes in breeding population size. Very high breeding female philopatry and skewed sex ratio means that adult female survival is an especially sensitive parameter in local breeding population dynamics.

4. The Meeting recognised that death of incubating females from Avian Cholera has caused dramatic declines at some Danish colonies in 1996 and 2001, and perhaps affected Baltic colonies elsewhere. Predation pressures from mink, fox and other species have increased at many Baltic breeding sites. Although neither factor can easily be eliminated, management techniques may be available to locally minimise their effects. Hunting in Denmark since the 1980s has declined in line with eider abundance. Nevertheless, whilst respecting that the earlier hunting kill was sustained during a period of population increase, the present declines in abundance give cause for concern.

5. The Meeting recognised that wintering eiders have shifted from the Dutch Wadden Sea to adjacent parts of the North Sea, coinciding with years of high mortality (i.e. mass death through starvation), in years of scarcity of sublittoral mussels. Studies found high levels of Acanthocephalan infestation in healthy wintering Danish birds, with no relationship between parasite numbers and individual body condition, suggesting unusual parasite loads were not re-

sponsible for mass mortality events in the Wadden Sea. The Meeting noted that a great deal more needs to be known about the factors affecting food profitability before we can estimate the sustainable harvestable fraction of a shellfishery resource and understand its role in the population dynamics of the common eider.

6. The Meeting noted that many factors potentially affecting population trends of the common eider can be identified (e.g. starvation, disease, predation, pollution, hunting, drowning in fishing nets, etc.). There remains an urgent need to assess their relative contribution to declines in common eider numbers through population modelling or some other approach. Such analysis would identify the most effective use of resources to increase annual adult female survival and enable restoration of the population to favourable conservation status.

7. The Meeting recommends the immediate establishment of a working group to identify current and future potential threats to the nominate race of common eider and develop effective integrated research and monitoring mechanisms to enable assessment of the potential for population recovery. The Meeting recommends combining independent count methods (e.g. at breeding colonies, at migration points, moult concentrations and on the wintering grounds) and monitoring of demographic parameters (e.g. duckling production and female annual survival) into a future population monitoring strategy.

8. The Meeting urges the Ornis Committee to accept the dramatic declines in the population and formally recognise that the Baltic/Wadden Sea population of the common eider is a Birds Directive Annex II huntable species of unfavourable conservation status. The Meeting accordingly urges the drafting of an EU management plan for the population as soon as possible to prioritise remedial actions.

#### Seaduck Specialist Group Meeting Roosta, Estonia

19 April 2002

#### Appendix

List of English names of birds mentioned in this issue and the corresponding scentific names:

Black woodpecker Black-throated diver

Caspian tern Common scoter Common eider

Lesser white-fronted goose Long-tailed duck

Dryocopus martius Gavia arctica

Sterna caspia Melanitta nigra Somateria mollissima

Anser erythropus Clangula hyemalis

Ring ouzel

Steller's eider Surf scoter

Velvet scoter

White-backed woodpecker White-tailed eagle Woodlark Turdus torquatus

Polysticta stelleri Melanitta perspicillata

Melanitta fusca

Denrodcopos leucotos Haliaeetus albicilla Lullula arborea The Wetlands International Seaduck Specialist Group Bulletin is an annual publication which aims to improve communication and information exchange amongst seaduck researchers throughout the world.

The Bulletin is produced by the Wetlands International Seaduck Specialist Group with support from various sources. The bulletin publishes contributions covering seaduck research and monitoring projects, project proposals, status and progress reports, as well as regular reports from the Seaduck Database.

The Editors welcome potential contributions to the Bulletin and will be pleased to advise on presentation. Manuscripts sent on diskette as Word, WordPerfect files are welcomed; a hard copy printout should also be enclosed.



Jesper Madsen, Gill Cracknell & Tony Fox (Eds.): Goose populations of the Western Palearctic. - A review of status and distribution.

This book can be ordered from: NERI, Grenaavej 12, Kalø, DK-8410 Rønde, Denmark. Phone: +45 89 20 17 00; fax: +45 89 20 15 15; e-mail: tpe@dmu.dk