

Report
of the Trilateral Seal Expert Meeting
(TSEG-plus and additional experts)
in Hamburg on 06 June 2002

1 Aim of the meeting

The purpose of the meeting was to ensure an information exchange between scientists and managers on the extended Trilateral Seal Expert level (TSEG-plus and additional experts), to report on the status of the current situation of the disease of common seals in the Kattegat/Skagerrak area, to assess the data and information for the potential further development, and to conclude recommendations for the Trilateral Wadden Sea Cooperation. A list of the members of the TSEG-plus/plus and the participants of the meeting is attached in Annex 1.

Overall Conclusion

The meeting clearly stated that the current developments should be related to the agreements of the Seal Management Plan (SMP = Conservation and Management Plan for the Wadden Sea Seal Population 2002 – 2006), which was adopted at the last Trilateral Governmental Wadden Sea Conference in 2001. Therefore, the SMP should be the guiding principle for the discussion and is the basis for the given conclusions and recommendations.

2 Status/causes/spreading of the seal mortality in the Kattegat/Skagerrak

2.1 Scientific findings regarding the cause

- The occurrence of the phocine distemper virus (pdv) in the found dead common seals in the Danish and Swedish Kattegat/Skagerrak area has been definitively confirmed.
- This virus has caused similar mortality outbreaks in common seal populations in the past (e.g. the outbreak in 1988).
- The meeting is convinced that the morbilli-virus is the most likely cause of the mortality in the Kattegat/Skagerrak area, however, also other relevant monitoring programs and additional sources of information should be checked regarding additional environmental factors, which could contribute to this mortality, such as toxic algae, contaminants and meteorological situations.
- It is unclear, why the mortality commenced in the Anholt area in 1988 and again in 2002. It is possible that the Anholt area is a virus reservoir, or a new introduction of the virus took place, e.g. by another aquatic animal, or from indirect anthropogenic sources (e.g. mink farms).

Recommendation 1:

The virological status of the seals in the Anholt area should be assessed regularly and if possible retrospectively.

Recommendation 2:

More information on the occurrences of pdv in the North Sea/Wadden Sea since 1988 should be collected with the aim to assess the data.

Recommendation 3:

The results of the already carried out regular (toxic) algae monitoring programs, the possible toxic effects of contaminants and further relevant information should be assessed in relation to the seal mortality because of possible other/additional causes involved in the mortality.

2.2 Possible spreading of the disease into other areas

- Accurate predictions on the spreading of the disease into other areas, e.g. the Wadden Sea cannot be provided because of insufficient information on the underlying influencing spreading factors of the disease. However, the epidemic in 1988 showed that the disease can potentially reach the Wadden Sea within short, and therefore, a contingency plan should be in place in all parts of the Wadden Sea.
- There are some indications that the initial phase of the 2002 outbreak seems to be less severe compared to 1988, however, the further development and pattern of this year's outbreak is unclear and therefore it is not possible to predict the expected total extent of the mortality.

Recommendation 4:

Surveying of seal habitats in the Wadden Sea and other areas such as the whole European area, where common seals are occur, for unusual mortalities should be carried out and events should be reported and incorporated in the central information system at the CWSS for further reference.

2.3 Monitoring the development/spreading of the disease

National coordination meetings to prepare the monitoring of the developments concerning the mortality and related issues in case of an outbreak in the Wadden Sea have been organized or intended in the different parts of the Wadden Sea since the end of May 2002.

The national contact points are responsible for the national data collection (number of found dead seals, spreading) including information of the public and the transfer to the trilateral information center (CWSS). The national contact points are for:

DK: Nature and Wildlife Section of the National Forest and Nature Agency

SH: National Park Agency in Tönning

LS: Bezirksregierung Weser-Ems, Dezernat 510

NL: Directie Noord of the Ministry of Agriculture, Nature Management and Fisheries

Recommendation 5:

The central information system for the collection and dissemination of the data (number of found dead seals) regarding the monitoring of the spreading of the disease should be carried out by the CWSS.

3 Scientific minimum investigation program

Recommendation 6:

A minimum set of data should be collected from as many animals as possible, which include date/place found, sex, length, age (teeth reading if possible) and general health conditions (if possible).

Recommendation 7:

A scientific minimum investigation program for dead seals should be carried out in case of an outbreak of the disease in the Wadden Sea to get answers on special questions. The following procedure to design such a scientific minimum investigation program is recommended.

Procedure how to come to a scientific minimum investigation program for dead seals

A procedure was agreed by the meeting to provide the Trilateral Wadden Sea Cooperation with appropriate information for the decision on a scientific minimum investigation program for the examination of dead seals:

- a) A list of possible questions formulated by the public, related to the management, political and scientific point of views will be compiled in the next days.
- b) Concurrently, a core group (T. Kuiken, U. Siebert, H.H. Dietz, P. Reijnders, A. Osterhaus) will draft, in the next days, a list/protocol for possible examinations of dead seals (including

parameters regarding population dynamic, pathobiology, as well as immunological, endocrinological, reproductive, toxicological, parasitological, bacteriological and virological investigations) and will indicate for each parameter, which possible questions (see above question list under a) can be answered with that specific parameter. This list/protocol including the related questions will be checked/discussed with further experts including TSEG-plus/plus to draft a final version.

- c) Finally, it is up to the management authorities to decide which questions should be answered with which effort, so that a minimum investigation program can be designed and the necessary budget can be made available.

4 Collection of dead and alive seals

4.1 Collection/taking of dead seals

According to the Danish contingency plan the normal system without increasing the searching effort to collect dead seals will be continued in case of an outbreak in the Wadden Sea. The date/place of found, length and sex of all found dead seals will be recorded and the skulls or whole carcasses will be collected. In total, 50 fresh animals from different areas of Denmark are intended to be stored for investigations. In Schleswig-Holstein, all dead seals, also in the core zone, will be collected by normal routine surveys without additional effort. The first 10 found dead seals with symptoms of pdv infection will be put to test concerning pdv and additional investigations. Also Lower Saxony and the Netherlands will act according to the SMP, which means no additional effort for the collection of dead seals; details will be decided on soon.

Recommendation 8:

The logistic aspects regarding the collection, storage and disposal of dead seals should be carried out in line with the SMP, which means no additional effort for the collection of dead seals, and the relevant nature conservation regulations by the responsible national authorities.

4.2 Handling of diseased living seals

Denmark, Schleswig-Holstein and Lower Saxony will not change the current practice of taking in as few as possible living seals, irrespective of a virus outbreak. According to the Danish contingency plan all diseased and weak seals are killed, rehabilitation of seals is not carried out in Denmark. In Schleswig-Holstein, seal hunters decide whether diseased and weak seals are put to sleep; only healthy pups - no adults – are taken to the seal rehabilitation center. The Netherlands will follow the SMP, irrespective of a virus outbreak, and details will be decided on soon.

- **It was, in particular, emphasized that the SMP provides the guiding principle for the exemptions of taking and handling living seals in all situations:
“The number of seals taken from and released to the Wadden Sea should be reduced to the lowest level possible, taking into account that ethical considerations, legislation as well as management practices differ in the three countries.” (SMP)**

In Schleswig-Holstein and Lower Saxony, pups, which are rehabilitated and released by the seal centers in Friedrichskoog and Norden-Norddeich, have not been vaccinated against pdv since 1988. According to the Danish contingency plan, seals are not rehabilitated and therefore also not vaccinated in Denmark. In the Netherlands, all seals in the rehabilitation centers have been vaccinated against pdv since 1988.

- Vaccination of the wild seal population is not a viable option.
- In respect to the question of vaccination in general, it was agreed by the meeting to defer this topic to the intended expert discussion on medical treatment of taken seals (see action of the SMP).

5 Monitoring the population: Arial survey system in 2002

According to the SMP five flights per year will be carried out in a trilateral coordinated way as a minimum program to monitor the seal population. In the Schleswig-Holstein part of the Wadden Sea, the first flight of this season has been advanced to 4th June 2002.

Recommendation 9:

Basically, there is no need in the current situation to change the monitoring schedule for the aerial surveys, which has been agreed in line with the SMP for 2002 by the TSEG.

The responsible monitoring institutions should consult each other in time whether a shift in the agreed trilateral survey schedule would be appropriate.

6 Trilateral Information network

According to SMP the CWSS is the coordinating institution for the implementation of the SMP.

The initiative by the CWSS to collect and distribute the data and topical information regarding the seal mortality via Status Reports was welcomed by the meeting.

Recommendation 10:

The central information system on the mortality and further related to the collection and dissemination of the data and information should be continued to be carried out by the CWSS.

7 Future activities

A further Trilateral Seal Expert meeting could be appropriate in case a possible outbreak of the disease in the Wadden Sea has been confirmed.

Hamburg / Wilhelmshaven 10.06.2002

ANNEX 1: List of Members of the extended Trilateral Seal Expert Group (TSEG-plus and additional Experts)

Participant of the meeting on 06.06.02 in **bold**

<p>Mr Peter Reijnders / Ms Sophie Brasseur Alterra Marine Coastal Zone Research Postbus 167 NL - 1790 AD Den Burg/Texel</p>
<p>Mr Gerrit van Brakel Min. Landbouw Natuurbeheer en Visserij Directie Noord Postbus 30032 NL - 9700 RM Groningen</p>
<p>Mr Ab Osterhaus Dept. Virology Erasmus MC P.O. Box 1738 NL – 3000 DR Rotterdam</p>
<p>Mr Thijs Kuiken Institute of Virology Erasmus University Rotterdam P.O. Box 1738 NL – 3000 DR Rotterdam</p>
<p>Mr Palle Uhd Jepsen Miljøministeriet Skov- og Naturstyrelsen Reservatsektionen Ålholtvej 1 DK - 6840 Oksbøl</p>
<p>Mr Svend Tougaard c/o Fiskeri-og Søfartsmuseet Tarpbagevej 2 DK - 6710 Esbjerg V</p>
<p>Mr Hans Henrik Dietz Danish Veterinary Institute Dept. of Poultry, Fish, and Fur Animals Section for fur animals, wildlife, zoo and pet animals Hangøvej 2 DK - 8200 Århus N</p>
<p>Mr Ekkehard Vareschi Uni. Oldenburg AG Aquatische Ökologie FB7 (Bio.) Carl-von-Ossietzky-Str. D - 26111 Oldenburg</p>
<p>Ms Ursula Siebert / Mr Kai Abt Forschungs- u. Technologiezentrum Westküste (FTZ) Universität Kiel AG Marine Säuger u. Vögel Wertstr. 6 D - 25761 Büsum</p>

<p>Mr Michael Stede / Mr Uwe Jark Staatl. Veterinäruntersuchungsamt f. Fische u. Fischwaren Schleusenstr. D - 27472 Cuxhaven</p>
<p>Mr Arnd Rüger Ministerium für Umwelt, Natur und Forsten des Landes Schleswig-Holstein Postfach 5009 D - 24062 Kiel</p>
<p>Mr Klaus Koßmagk-Stephan (substitution for of Mr. Rüger) Landesamt für den Nationalpark Schleswig-Holsteinisches Wattenmeer Schloßgarten 1 D 25832 Tönning</p>
<p>Mr Peter Cornelius Bezirksregierung Weser-Ems - Dez. 510 - Postfach 24 47 D - 26106 Oldenburg</p>
<p>Ms Bettina Reineking Common Wadden Sea Secretariat Virchowstr. 1 D – 26382 Wilhelmshaven</p>