# **Final Report**

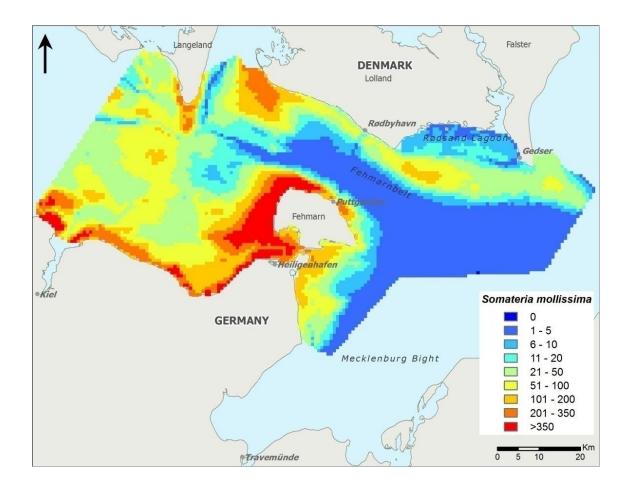
# **FEHMARNBELT FIXED LINK** BIRD SERVICES (FEBI)

**Bird Investigations in Fehmarnbelt - Baseline** 

# **Waterbirds in Fehmarnbelt**

# E3TR0011 Volume II – Appendix II, Part III

# Maps of ship-based surveys in 2008/2009



Prepared for: Femern A/S By: DHI / BioConsult SH Consortium in association with University of Copenhagen and BIOLA

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#### Maps:

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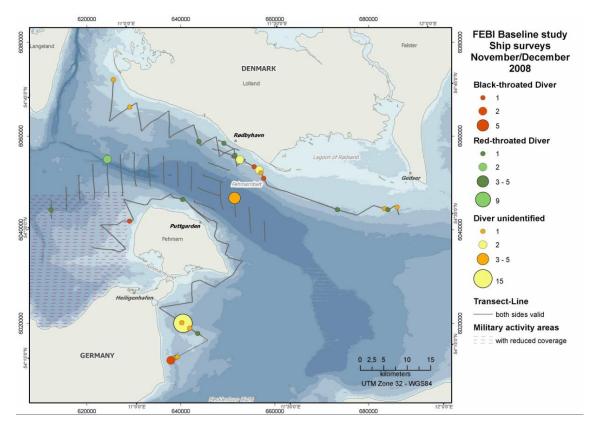
Note to the reader:

In this report the time for start of construction is artificially set to 1 October 2014 for the tunnel and 1 January 2015 for the bridge alternative. In the Danish EIA (VVM) and the German EIA (UVS/LBP) absolute year references are not used. Instead the time references are relative to start of construction works. In the VVM the same time reference is used for tunnel and bridge, i.e. year 0 corresponds to 2014/start of tunnel construction; year 1 corresponds to 2015/start of bridge construction etc. In the UVS/LBP individual time references are used for tunnel and bridge, i.e. for tunnel construction year 1 is equivalent to 2014 (construction starts 1 October in year 1) and for bridge construction year 1 is equivalent to 2015 (construction starts 1st January).

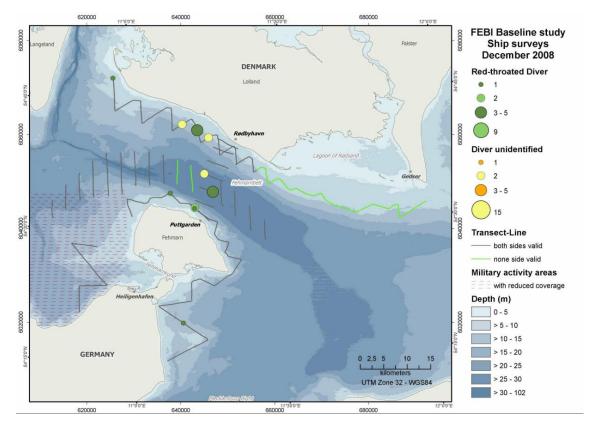
# **1** APPENDIX II - WATERBIRDS IN THE FEHMARNBELT – MAPS

# 1.1 Ship-based Surveys in 2008/2009

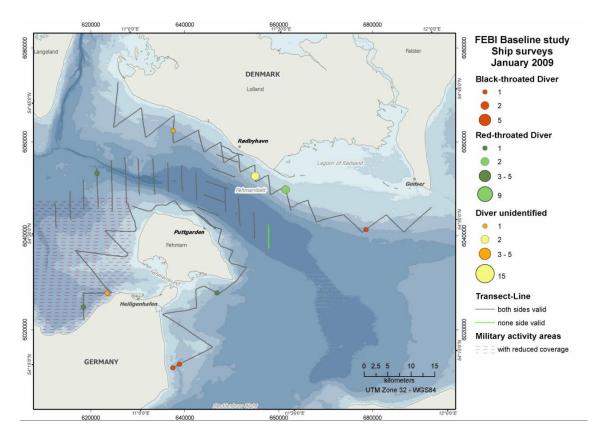
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*Figure 1.2* Diver distribution in the study area during ship-based surveys (December 2008).



*Figure 1.3* Diver distribution in the study area during ship-based surveys (January 2009).

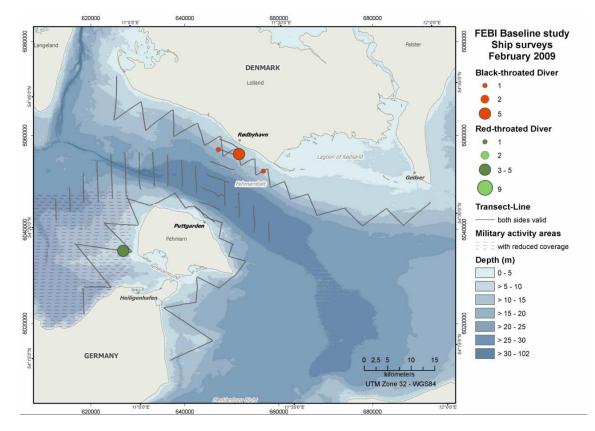


Figure 1.4 Diver distribution in the study area during ship-based surveys (February 2009).

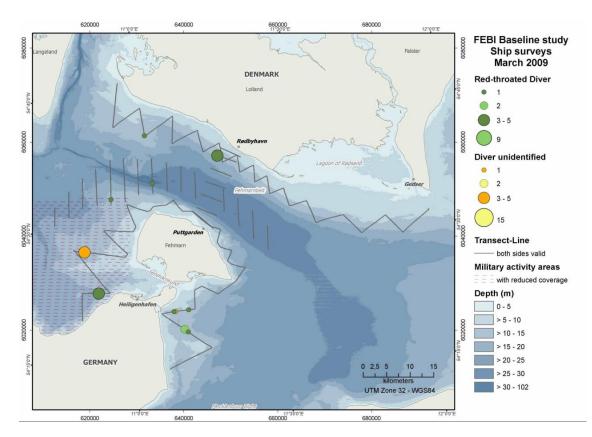
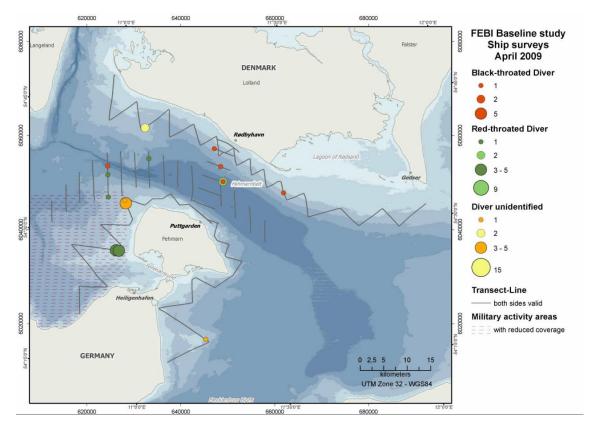
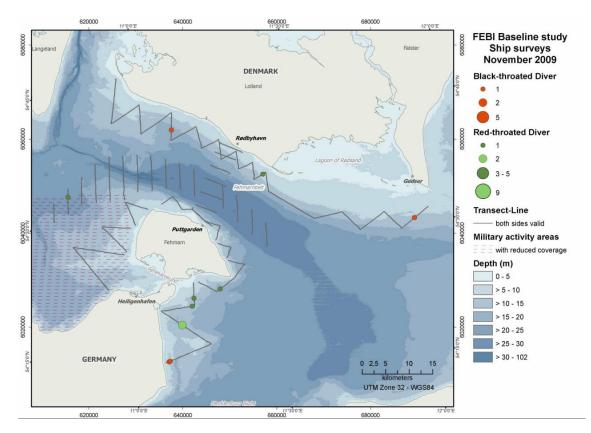


Figure 1.5 Diver distribution in the study area during ship-based surveys (March 2009).

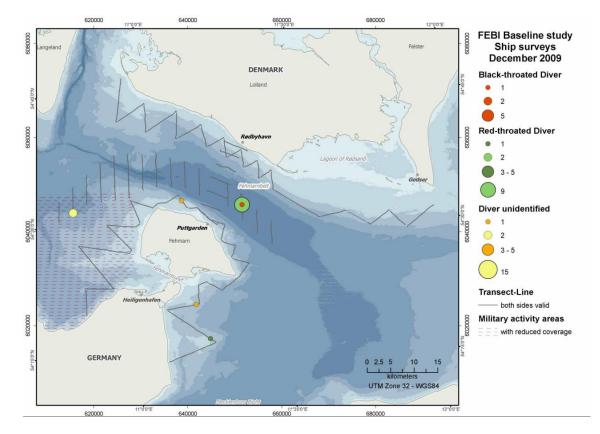


*Figure 1.6* Diver distribution in the study area during ship-based surveys (April 2009).



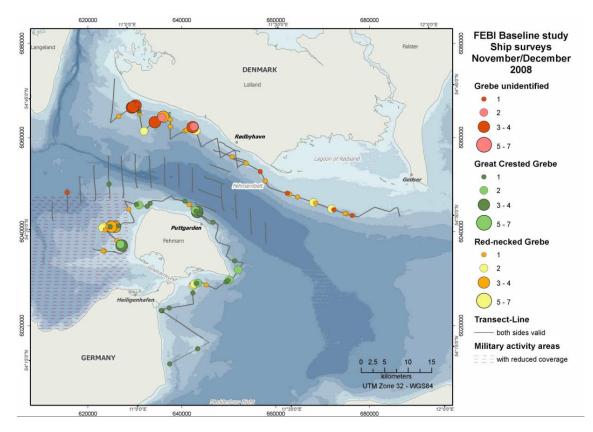
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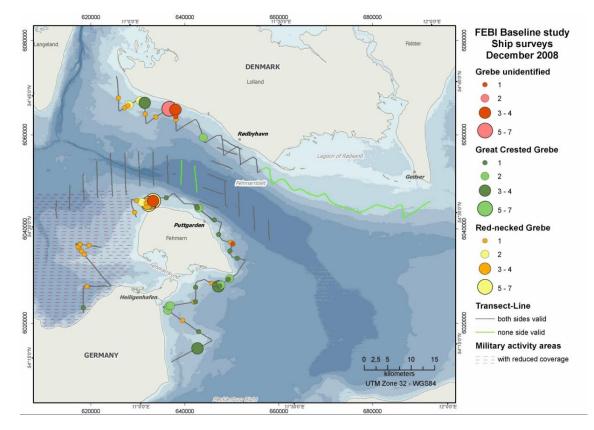


Figure 1.10 Grebe distribution in the study area during ship-based surveys (December 2008).

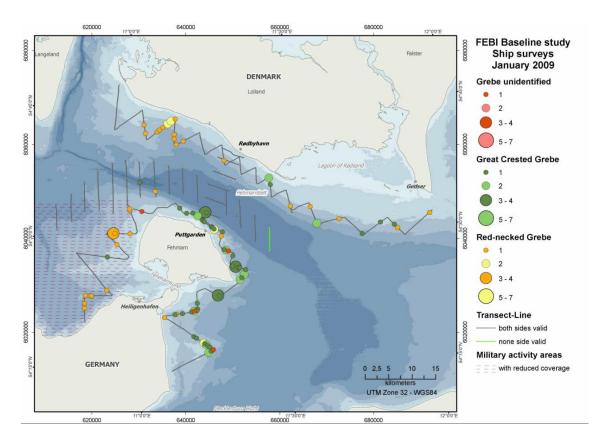


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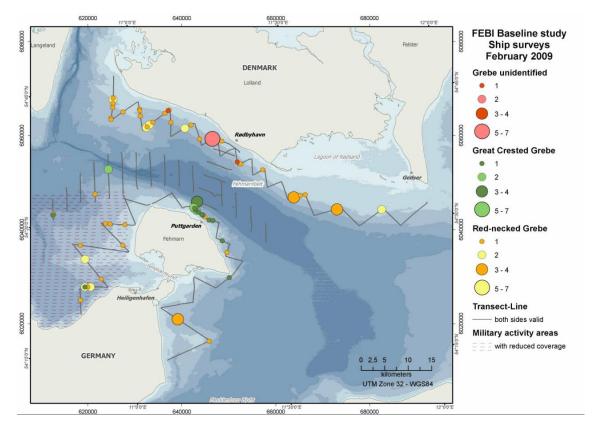
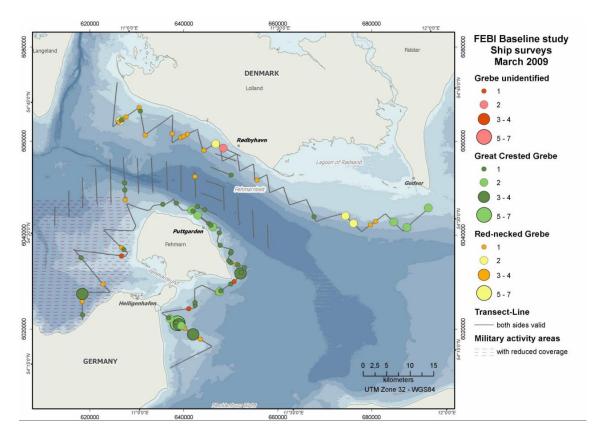


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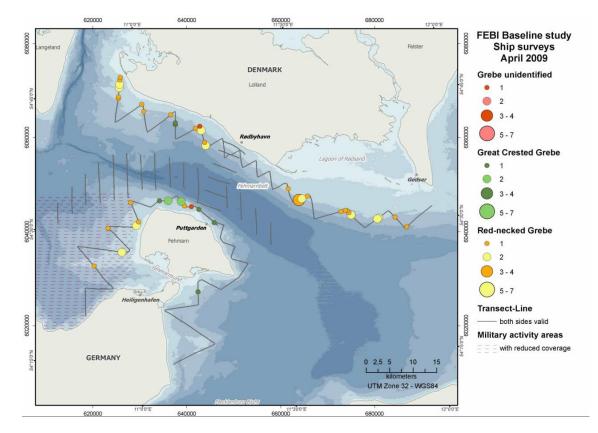


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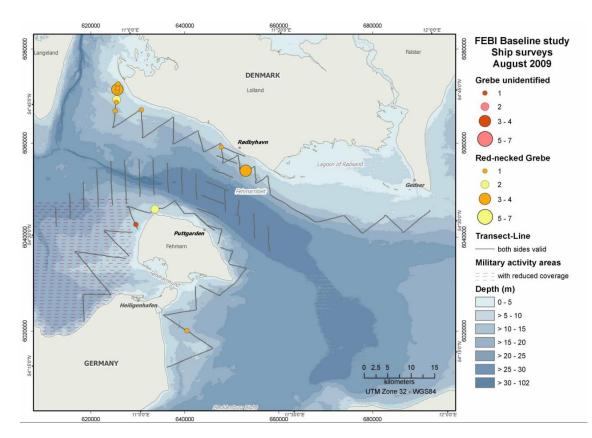


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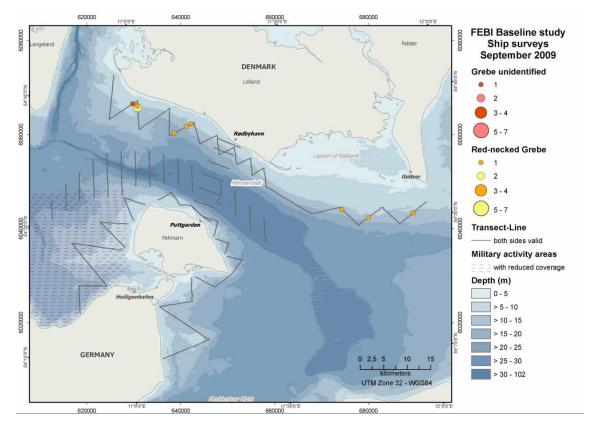
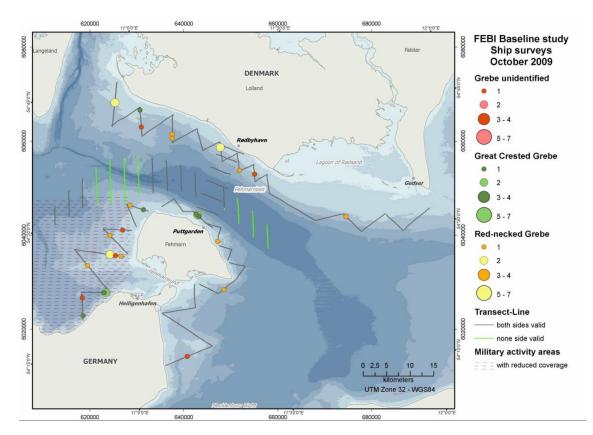


Figure 1.16 Grebe distribution in the study area during ship-based surveys (September 2009).



*Figure 1.17 Grebe distribution in the study area during ship-based surveys (October 2009).* 

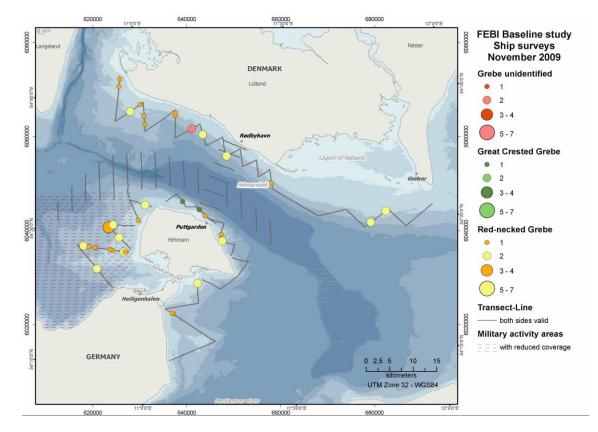
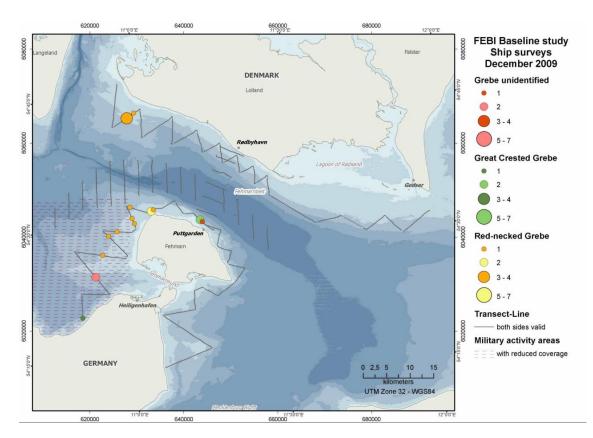
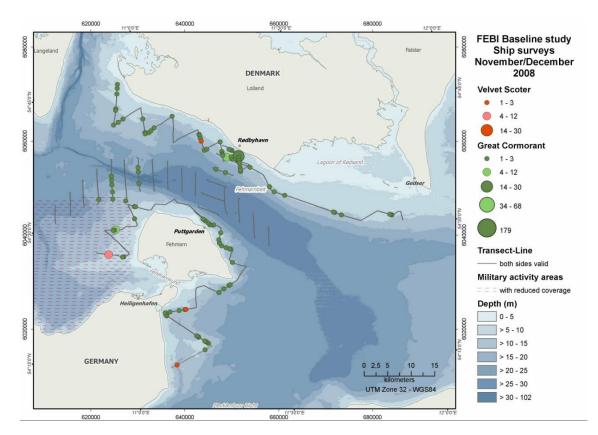


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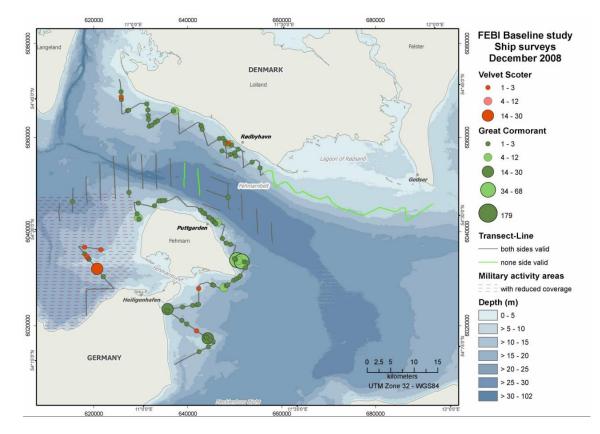


*Figure 1.19 Grebe distribution in the study area during ship-based surveys (December 2009).* 

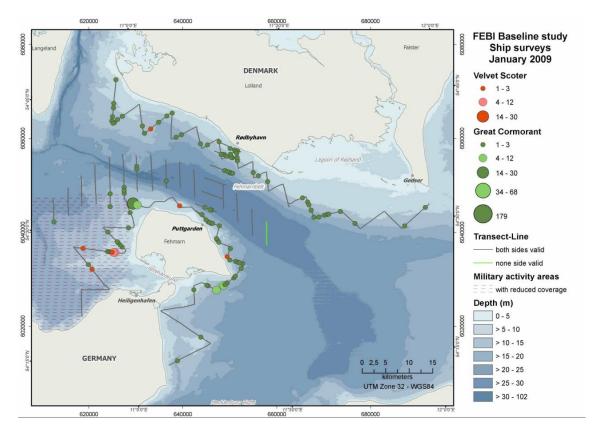
# 1.1.3 Great Cormorant / Velvet Scoter – Phalacrocorax carbo / Melanitta fusca



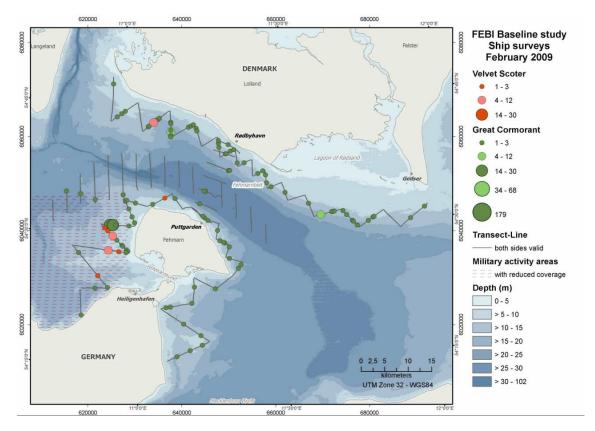
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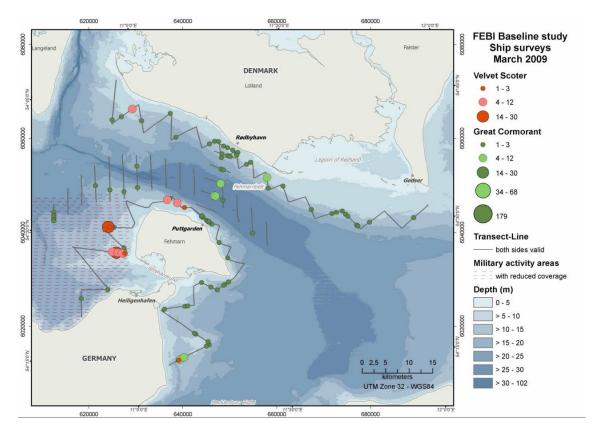
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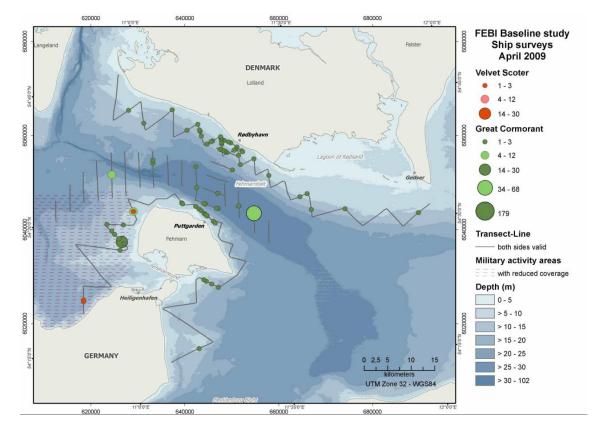
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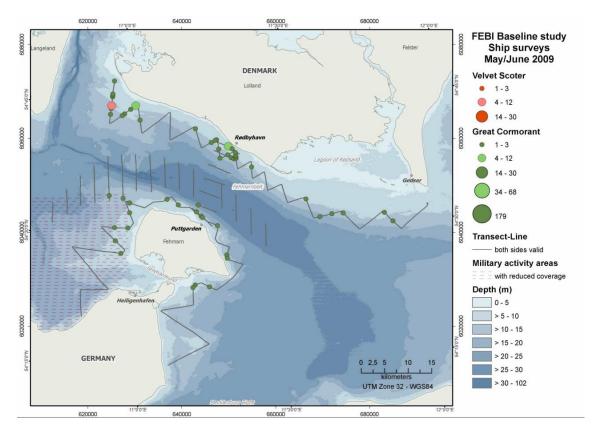
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*Figure 1.26 Great Cormorant and Velvet Scoter distribution in the study area during ship-based surveys (May/June 2009).* 

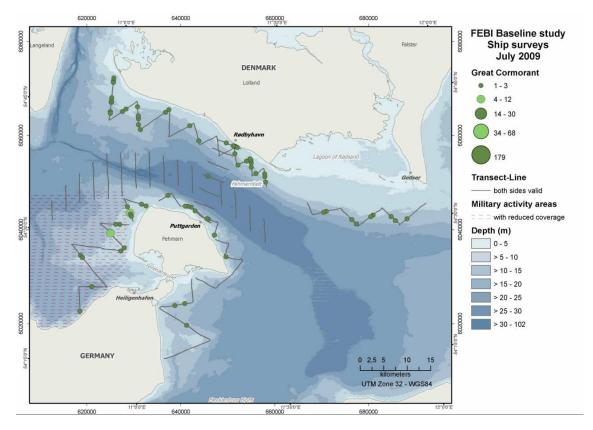
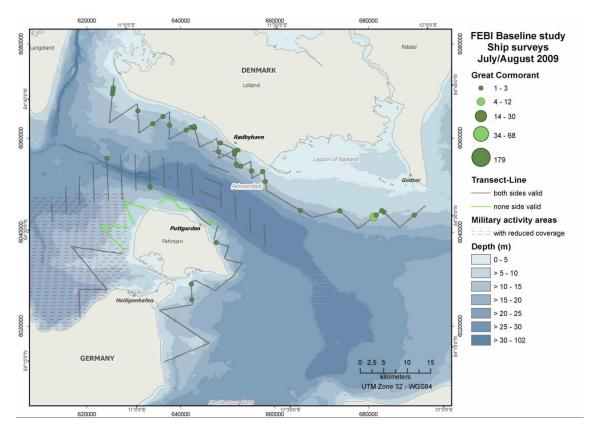
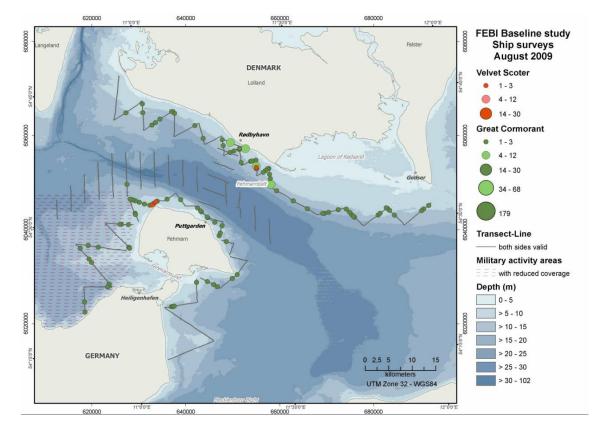


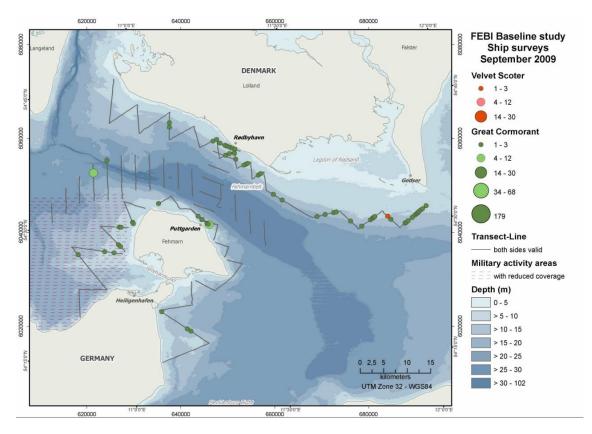
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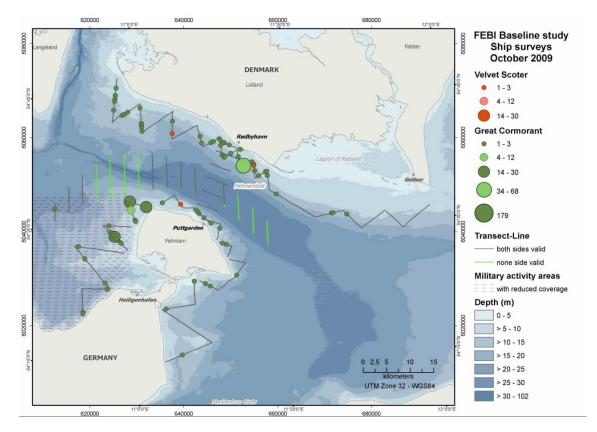
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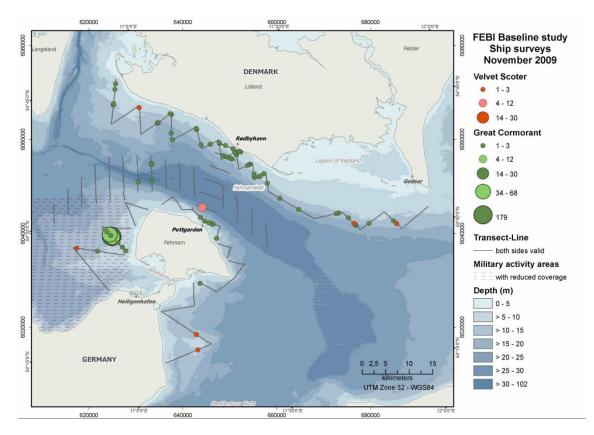
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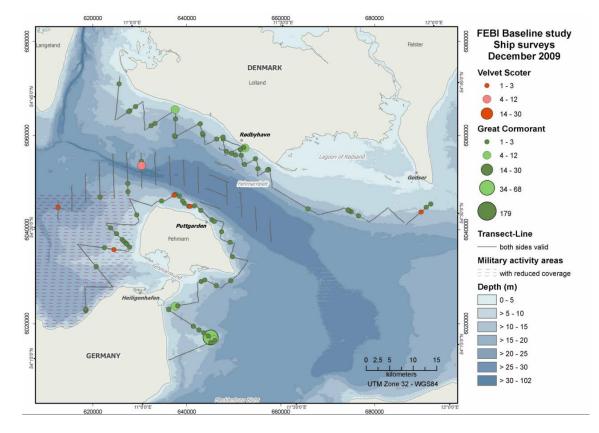
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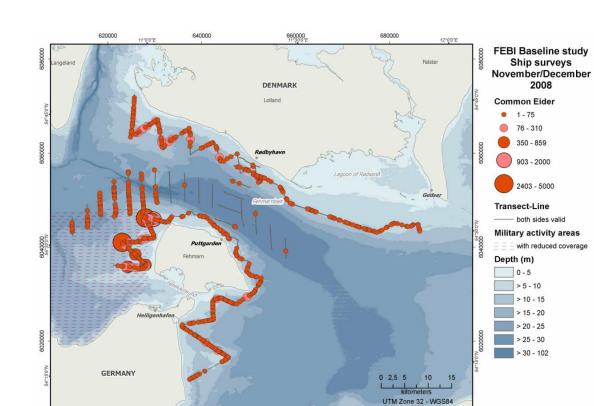
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*Figure 1.32 Great Cormorant and Velvet Scoter distribution in the study area during ship-based surveys (November 2009).* 



*Figure 1.33 Great Cormorant and Velvet Scoter distribution in the study area during ship-based surveys (December 2009).* 



## 1.1.4 Common Eider – Somateria mollissima

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*Figure 1.34 Common Eider distribution in the study area during ship-based surveys (November/December 2008).* 

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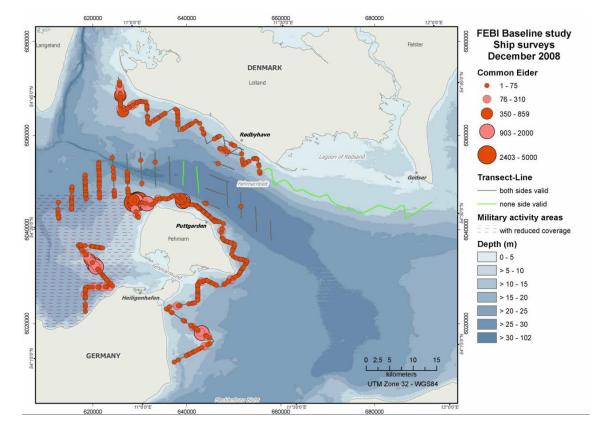


Figure 1.35 Common Eider distribution in the study area during ship-based surveys (December 2008).

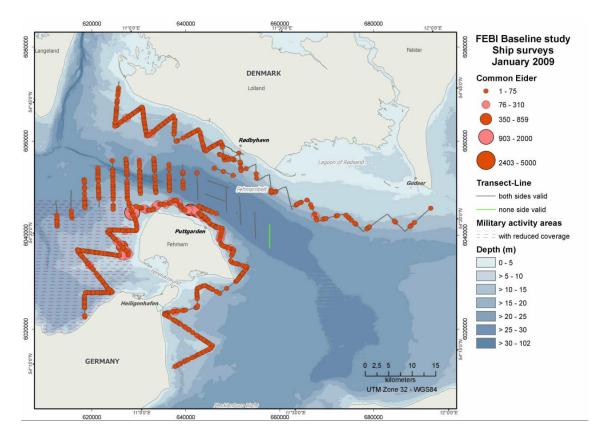
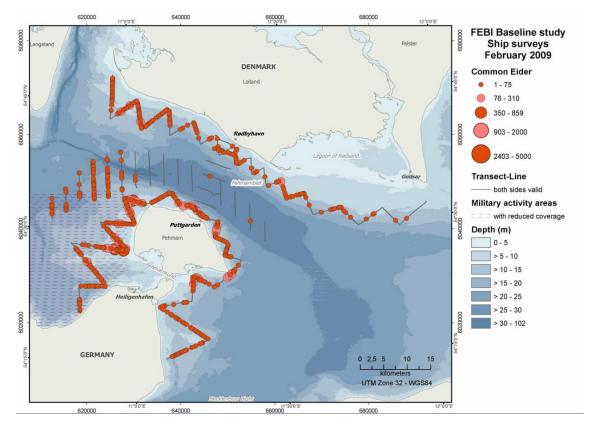
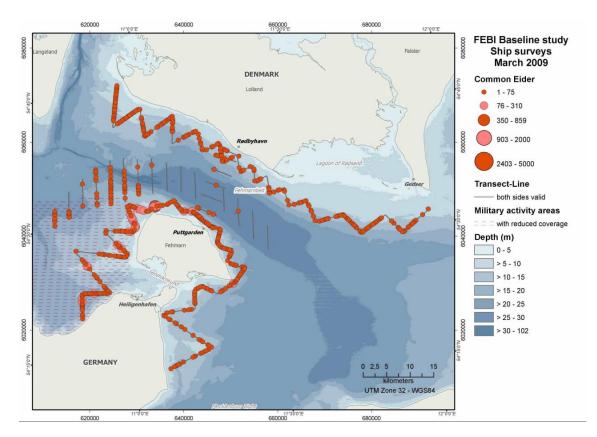


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*Figure 1.37* Common Eider distribution in the study area during ship-based surveys (February 2009).



*Figure 1.38* Common Eider distribution in the study area during ship-based surveys (March 2009).

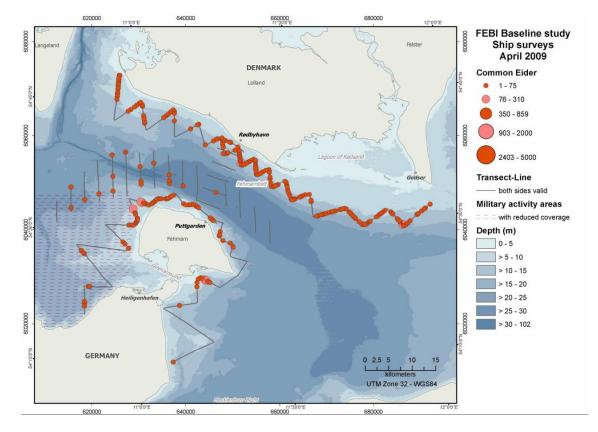


Figure 1.39 Common Eider distribution in the study area during ship-based surveys (April 2009).

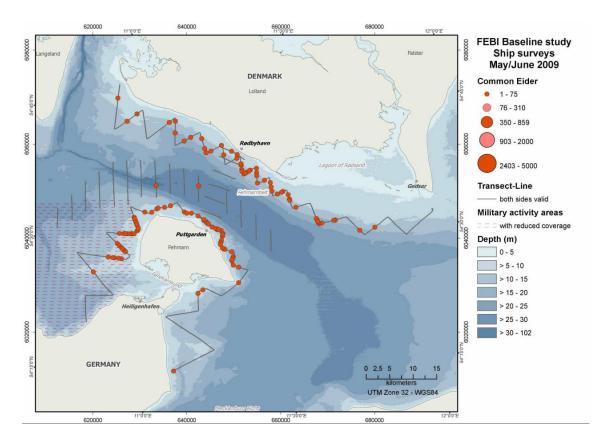


Figure 1.40 Common Eider distribution in the study area during ship-based surveys (May/June 2009).

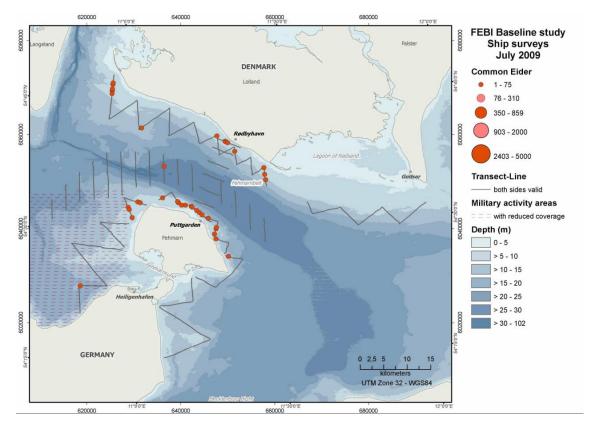
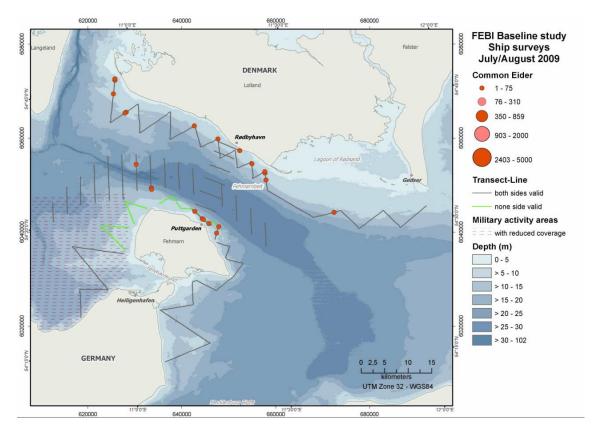


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*Figure 1.42 Common Eider distribution in the study area during ship-based surveys (July/August 2009).* 

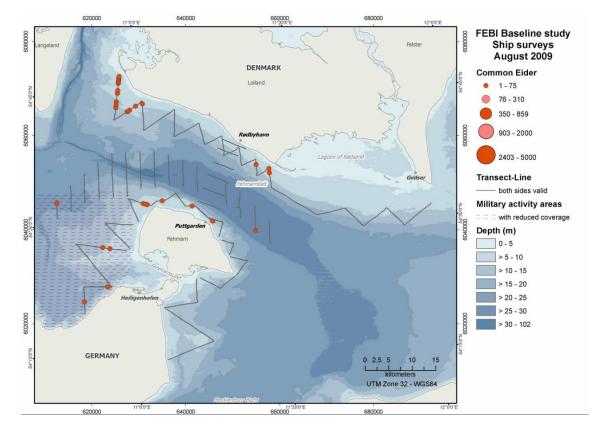


Figure 1.43 Common Eider distribution in the study area during ship-based surveys (August 2009).

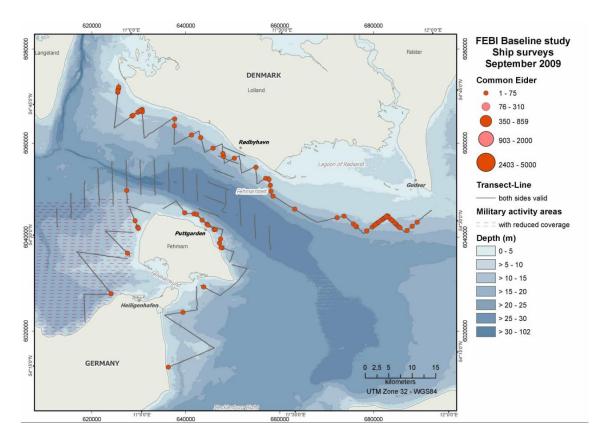
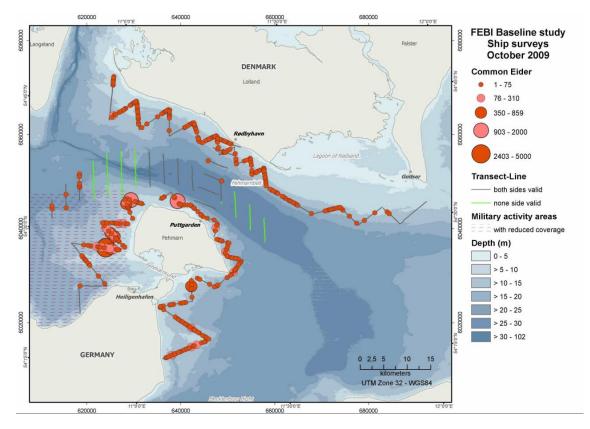


Figure 1.44 Common Eider distribution in the study area during ship-based surveys (September 2009).



*Figure 1.45* Common Eider distribution in the study area during ship-based surveys (October 2009).

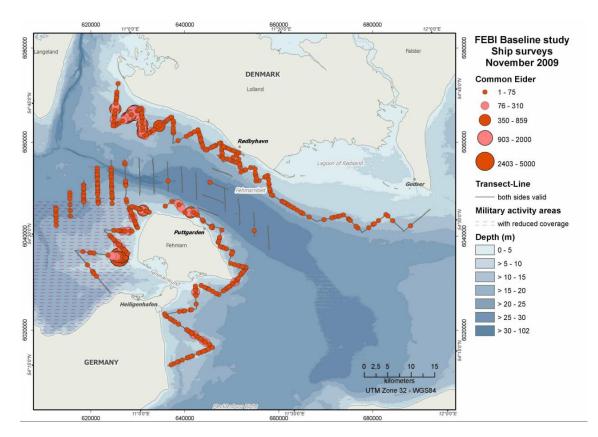
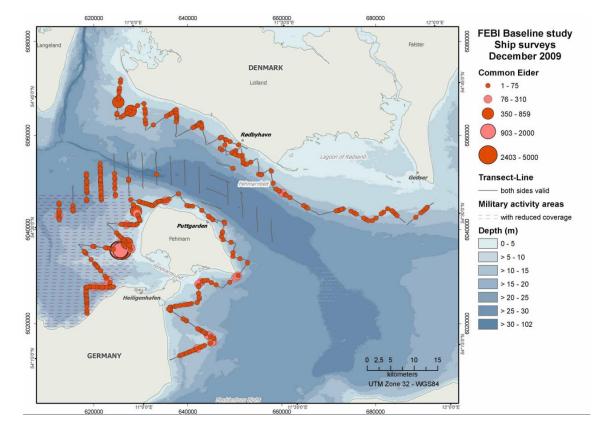
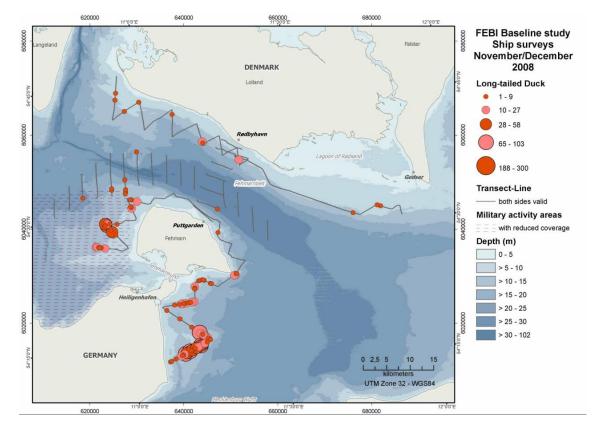


Figure 1.46 Common Eider distribution in the study area during ship-based surveys (November 2009).



*Figure 1.47* Common Eider distribution in the study area during ship-based surveys (December 2009).



# 1.1.5 Long-tailed Duck – Clangula hyemalis

*Figure 1.48 Long-tailed Duck distribution in the study area during ship-based surveys (November/December 2008).* 

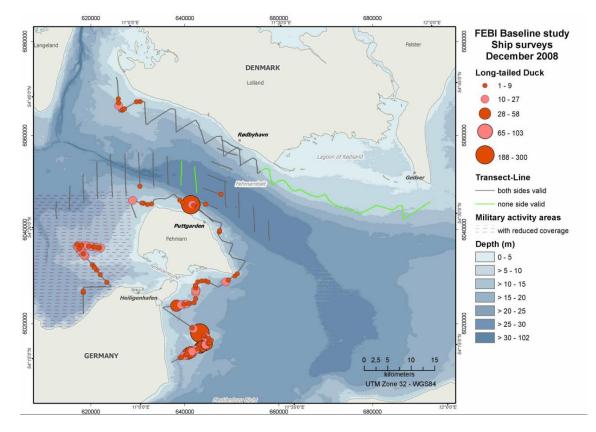


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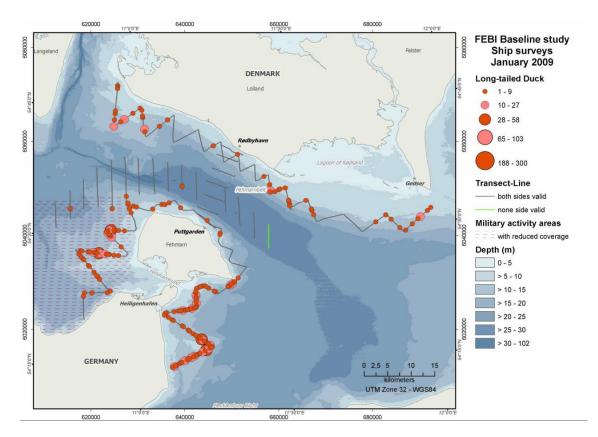
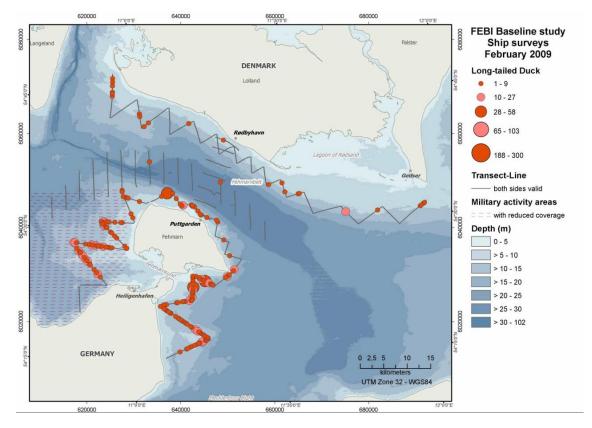
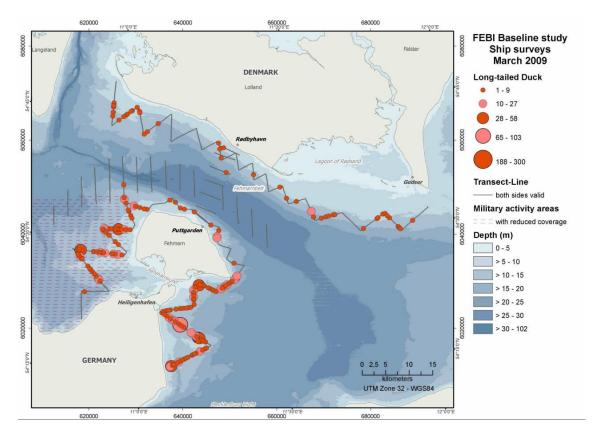


Figure 1.50 Long-tailed Duck distribution in the study area during ship-based surveys (January 2009).



*Figure 1.51* Long-tailed Duck distribution in the study area during ship-based surveys (February 2009).



*Figure 1.52* Long-tailed Duck distribution in the study area during ship-based surveys (March 2009).

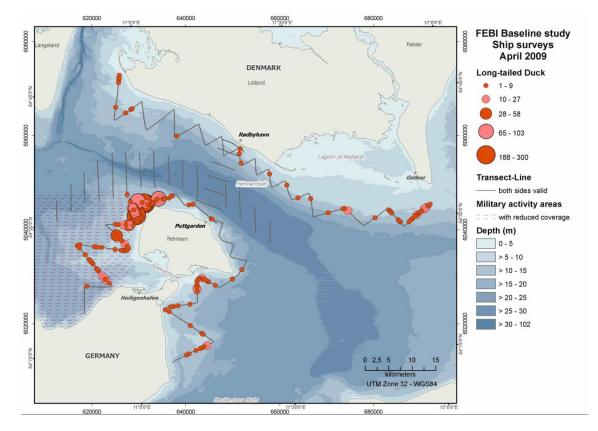


Figure 1.53 Long-tailed Duck distribution in the study area during ship-based surveys (April 2009).

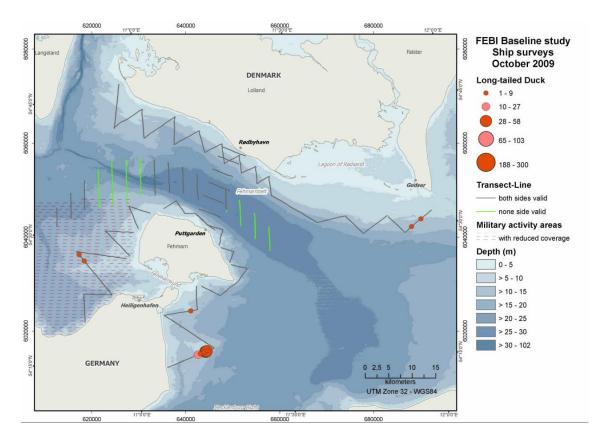
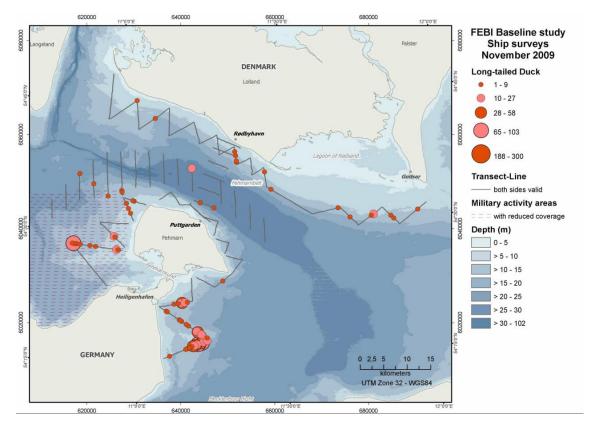
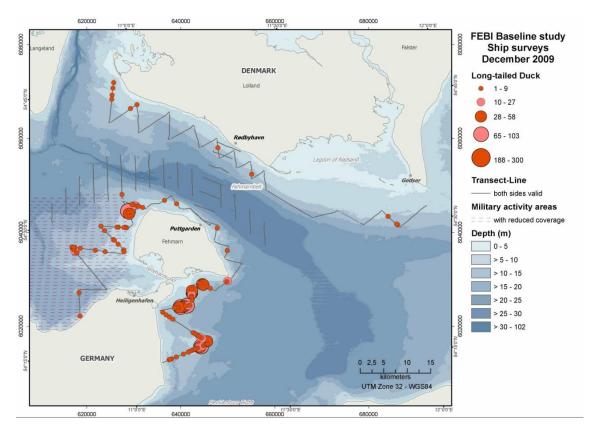


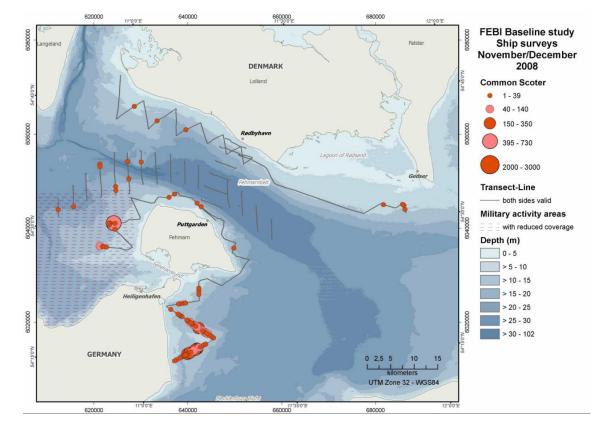
Figure 1.54 Long-tailed Duck distribution in the study area during ship-based surveys (October 2009).



*Figure 1.55* Long-tailed Duck distribution in the study area during ship-based surveys (November 2009).

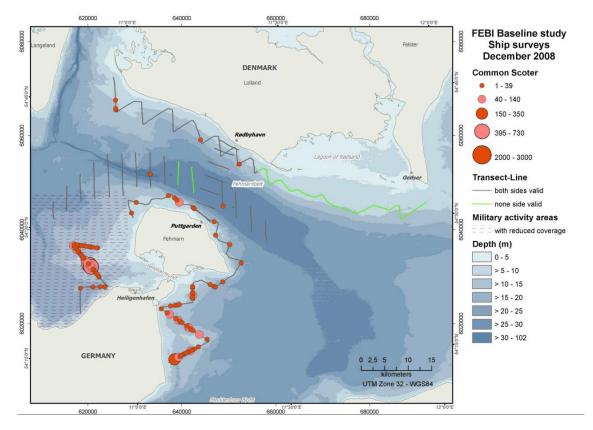


*Figure 1.56* Long-tailed Duck distribution in the study area during ship-based surveys (December 2009).

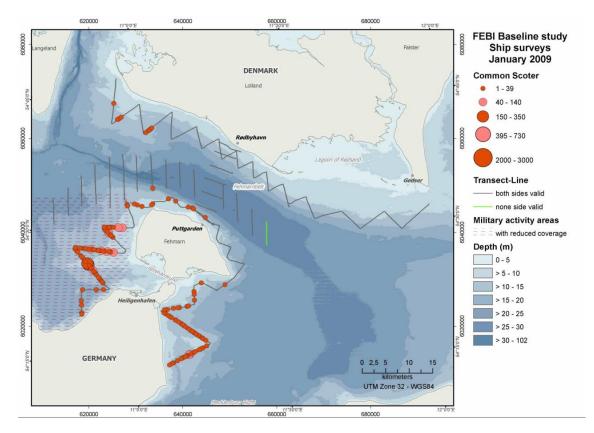


# 1.1.6 Common Scoter – Melanitta nigra

*Figure 1.57* Common Scoter distribution in the study area during ship-based surveys (November/December 2008).



*Figure 1.58 Common Scoter distribution in the study area during ship-based surveys (December 2008).* 



*Figure 1.59* Common Scoter distribution in the study area during ship-based surveys (January 2009).

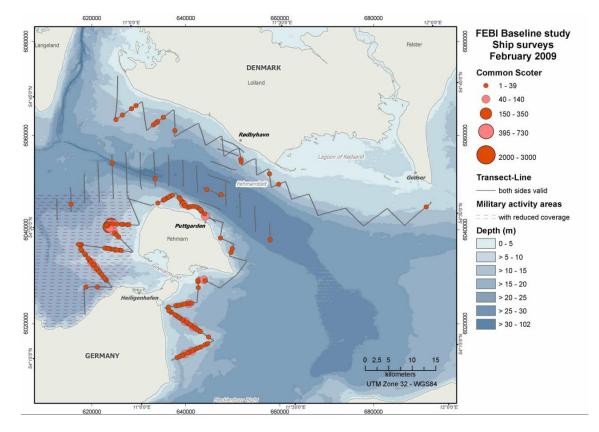


Figure 1.60 Common Scoter distribution in the study area during ship-based surveys (February 2009).

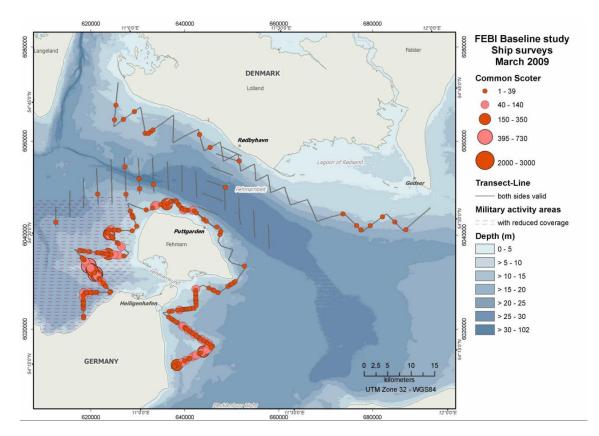
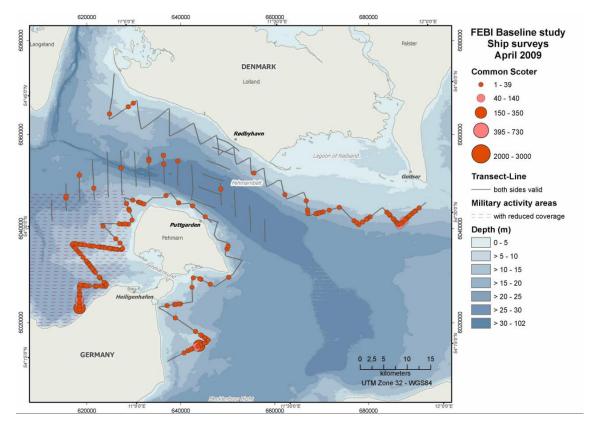


Figure 1.61 Common Scoter distribution in the study area during ship-based surveys (March 2009).



*Figure 1.62* Common Scoter distribution in the study area during ship-based surveys (April 2009).

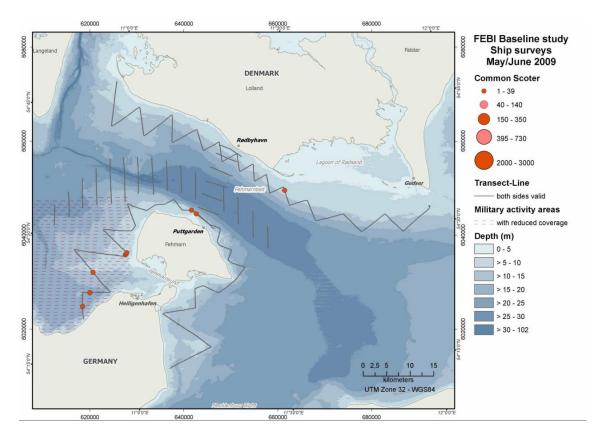


Figure 1.63 Common Scoter distribution in the study area during ship-based surveys (May/June 2009).

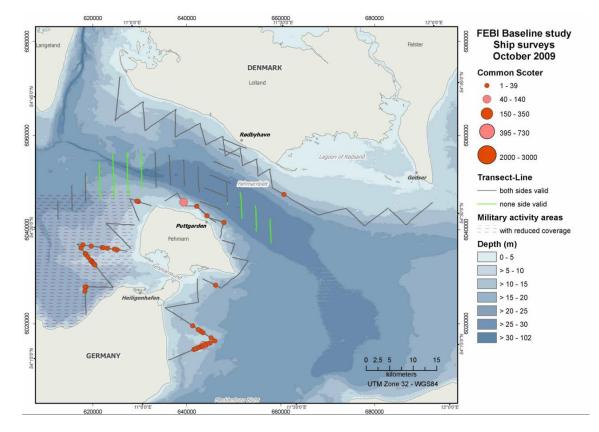
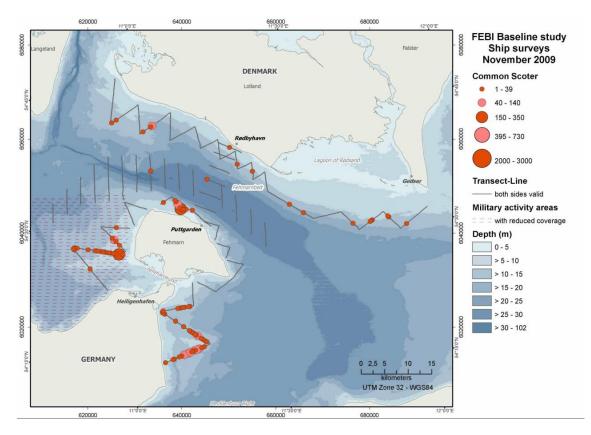
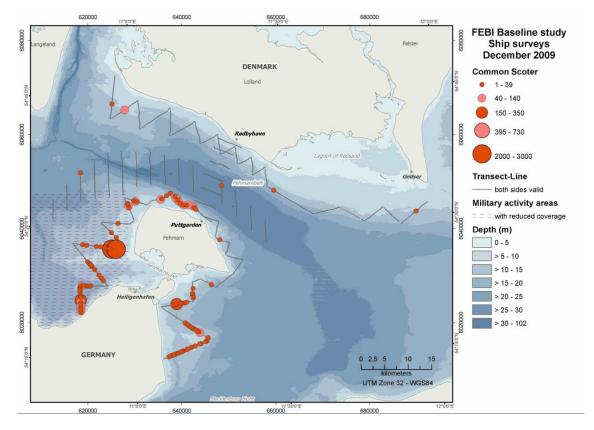


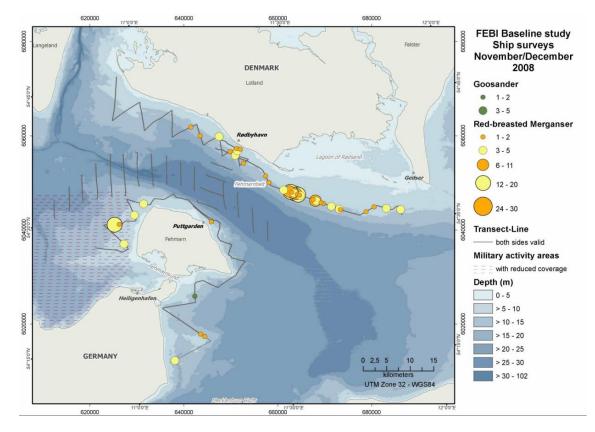
Figure 1.64 Common Scoter distribution in the study area during ship-based surveys (October 2009).



*Figure 1.65* Common Scoter distribution in the study area during ship-based surveys (November 2009).



*Figure 1.66 Common Scoter distribution in the study area during ship-based surveys (December 2009).* 



# 1.1.7 *Red-breasted Merganser / Goosander –* Mergus serrator / Mergus merganser

*Figure 1.67 Red-breasted Merganser and Goosander distribution in the study area during ship-based surveys (November/December 2008).* 

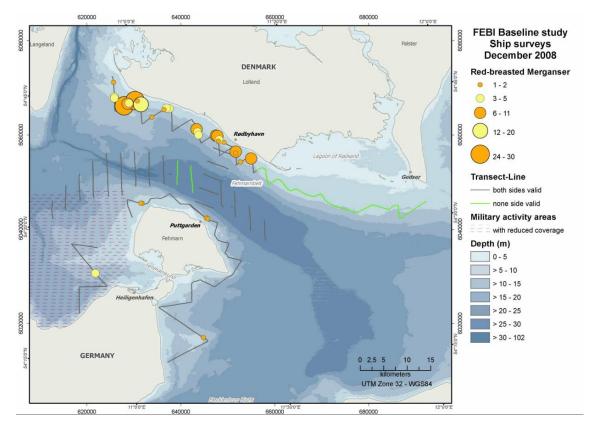


Figure 1.68 Red-breasted Merganser distribution in the study area during ship-based surveys (December 2008).

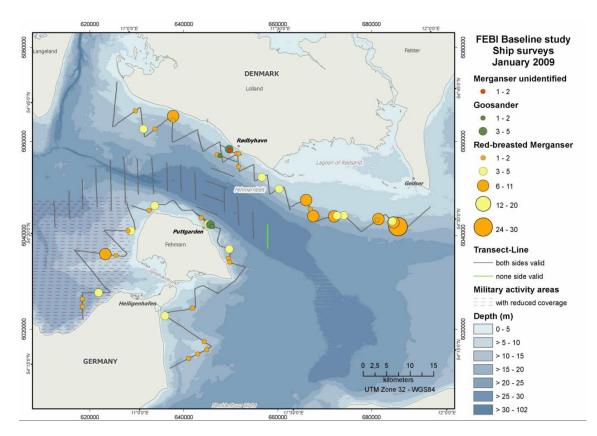


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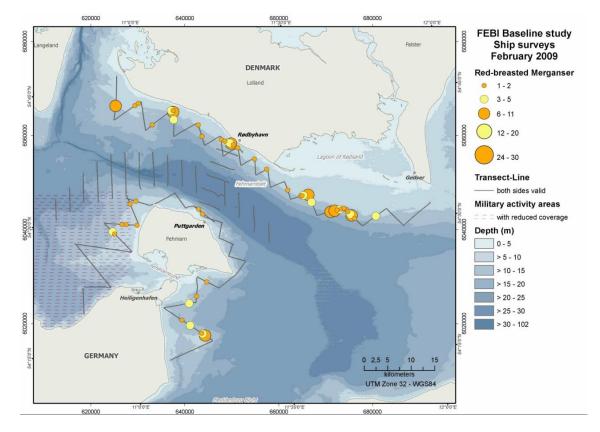
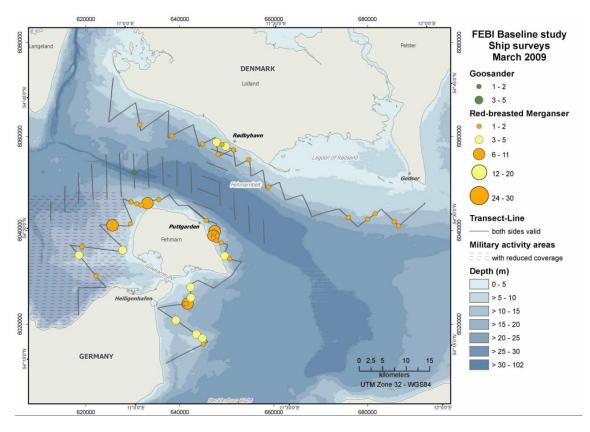
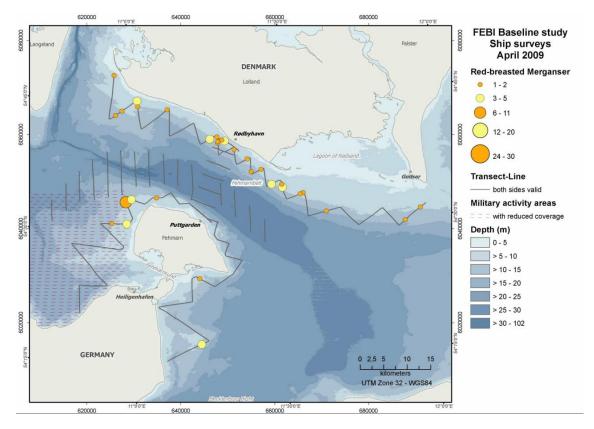


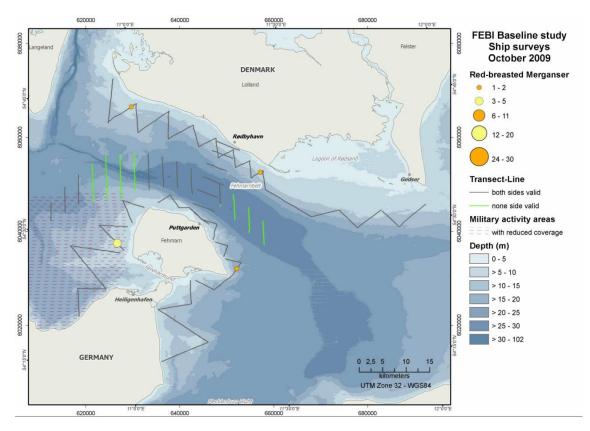
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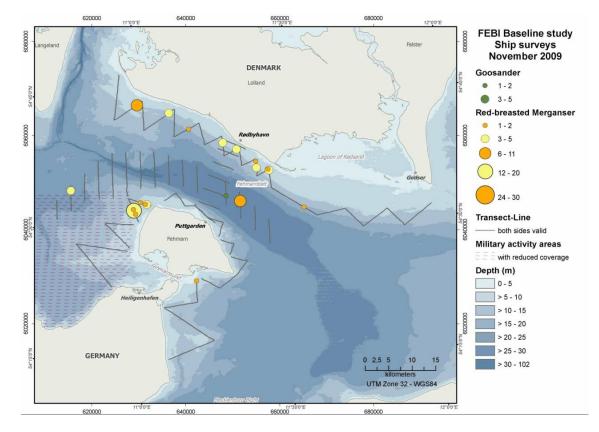
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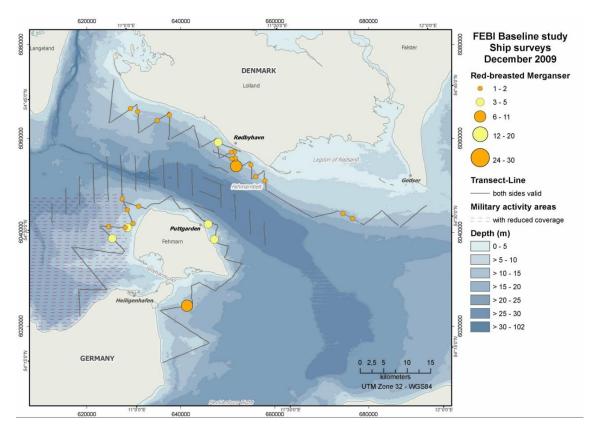
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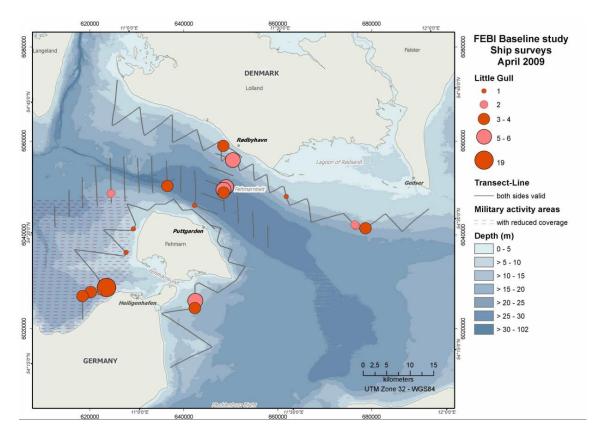


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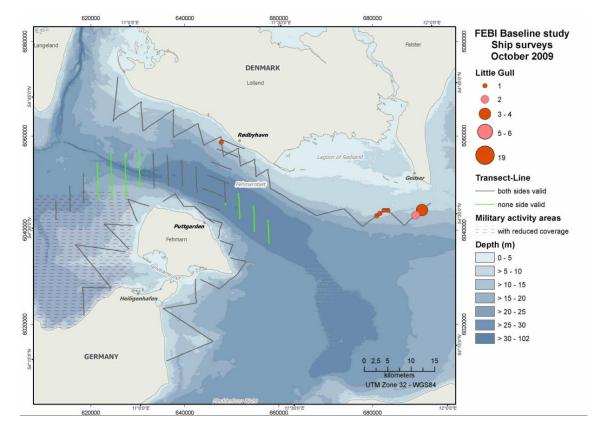


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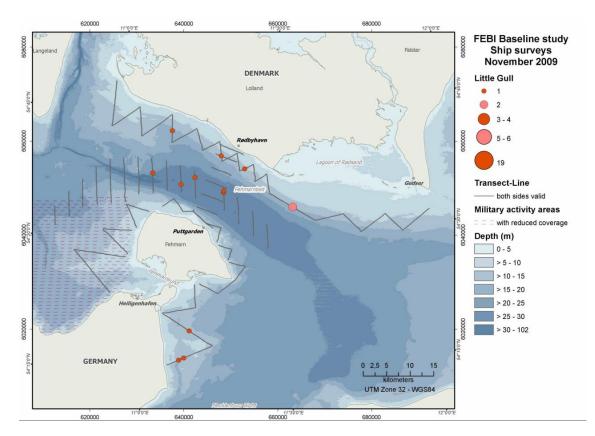
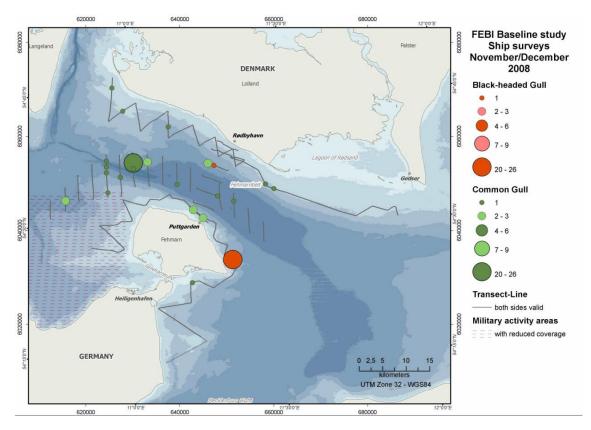
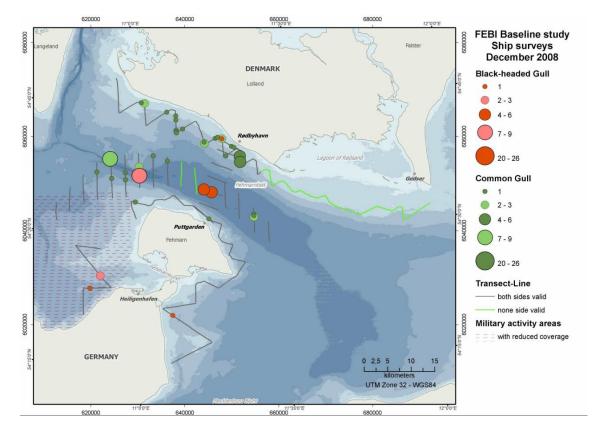


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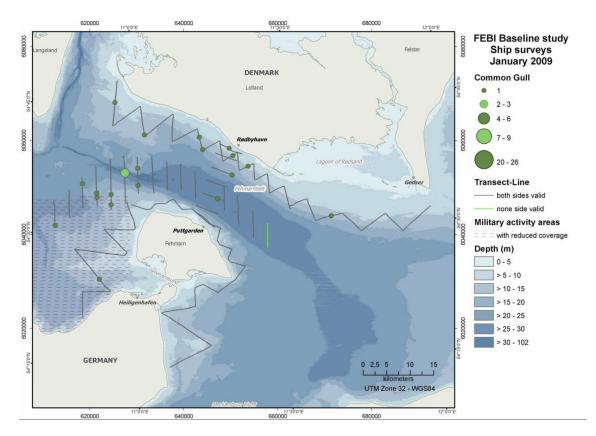


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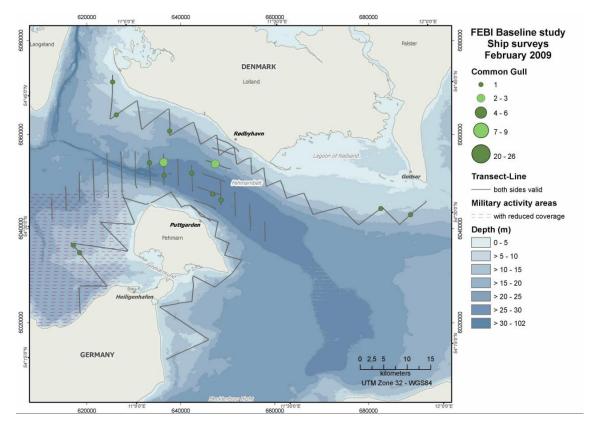
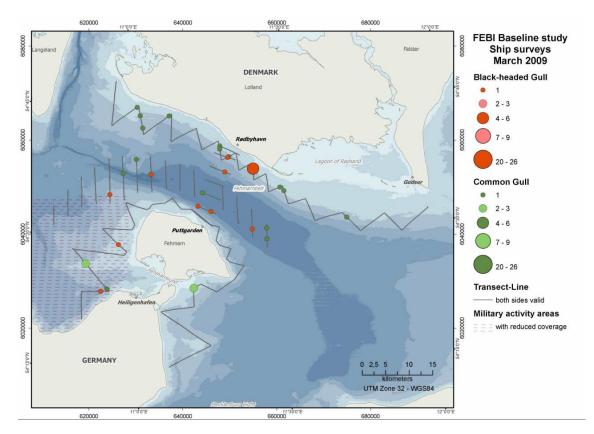
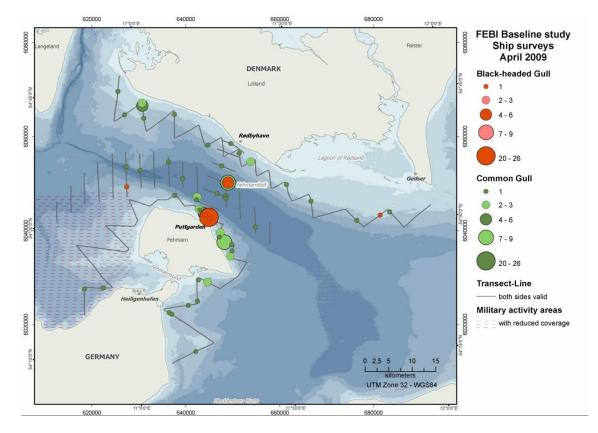


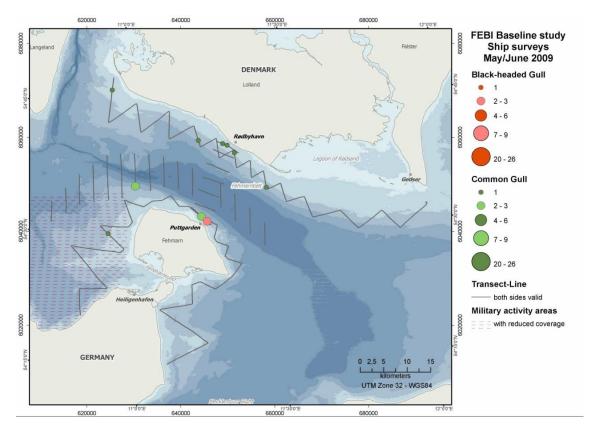
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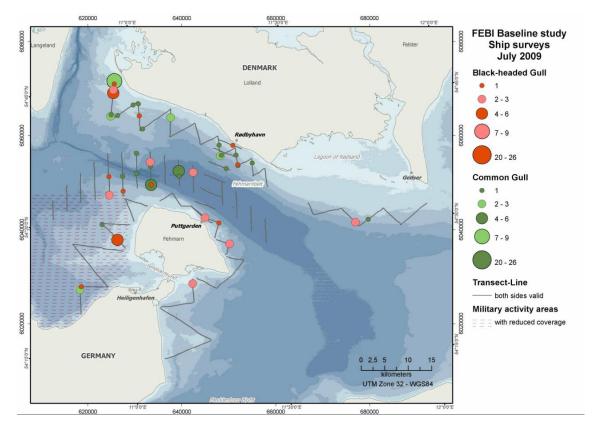
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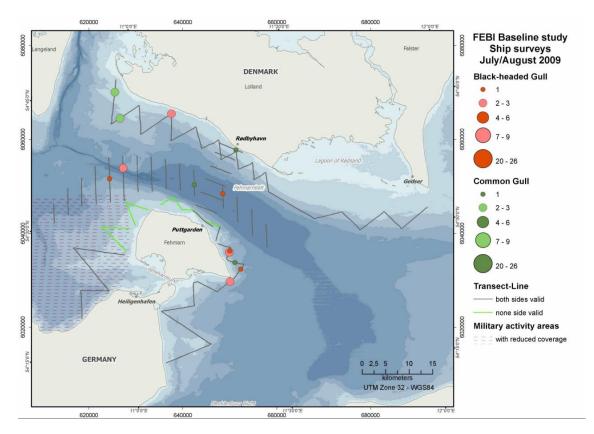
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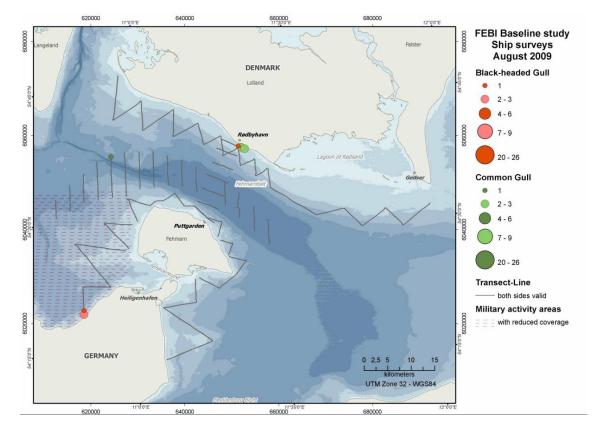
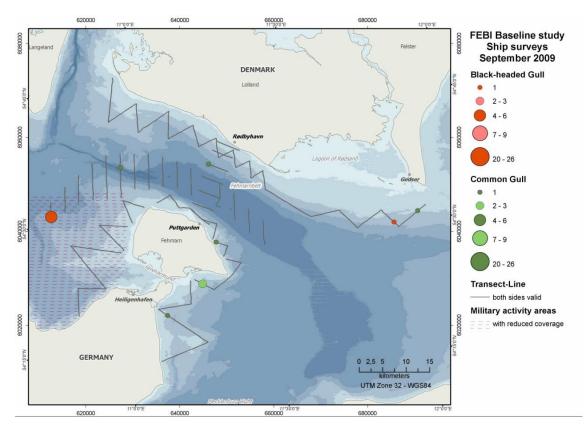
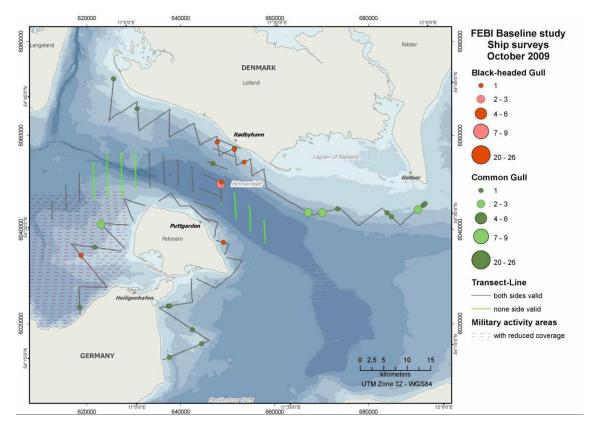


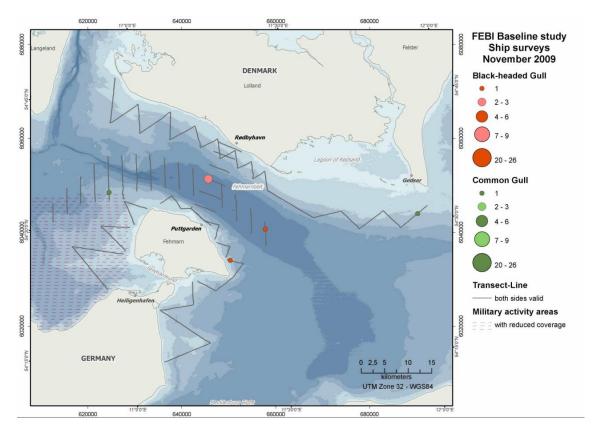
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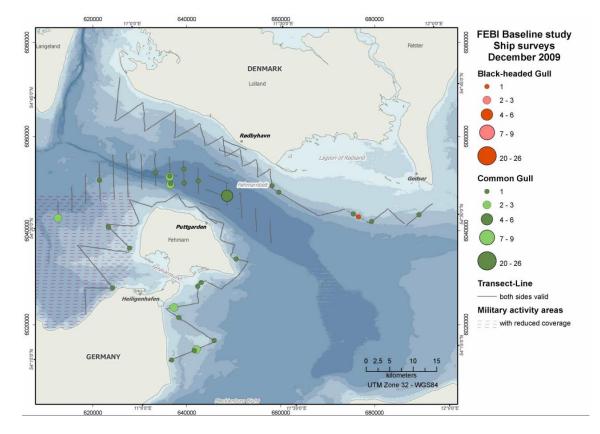
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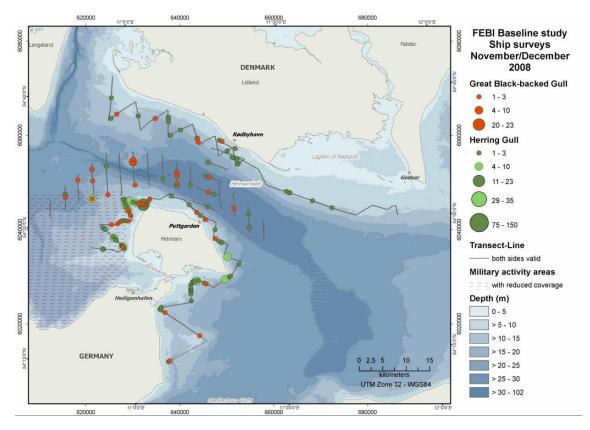


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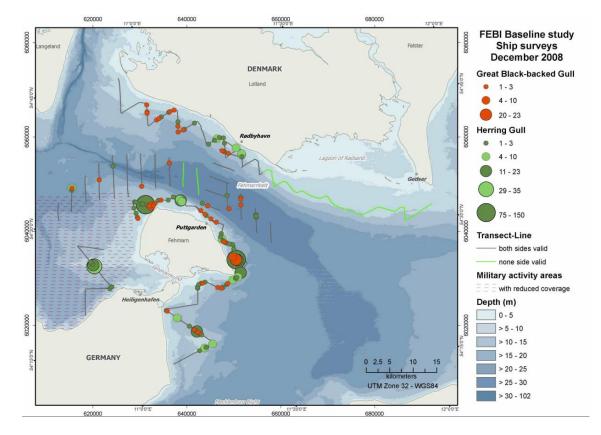


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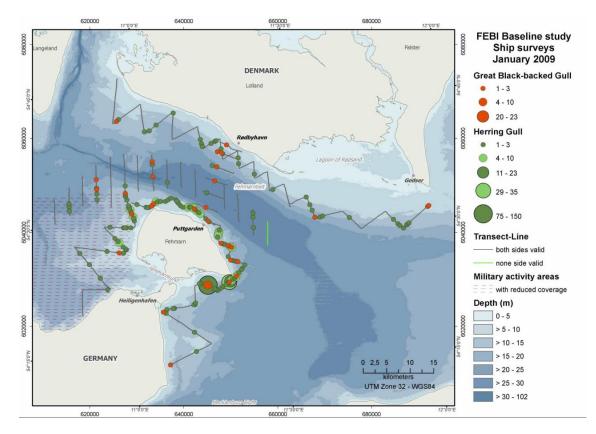
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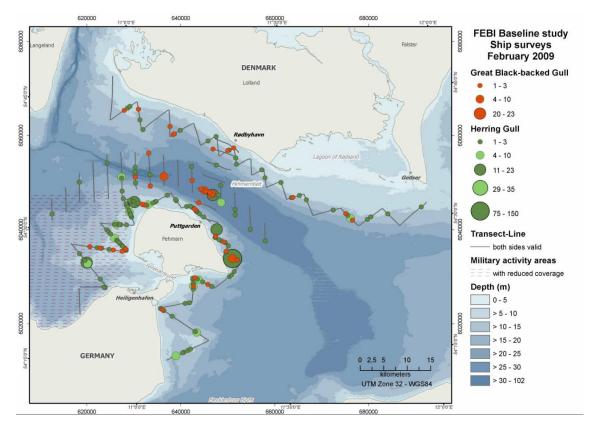
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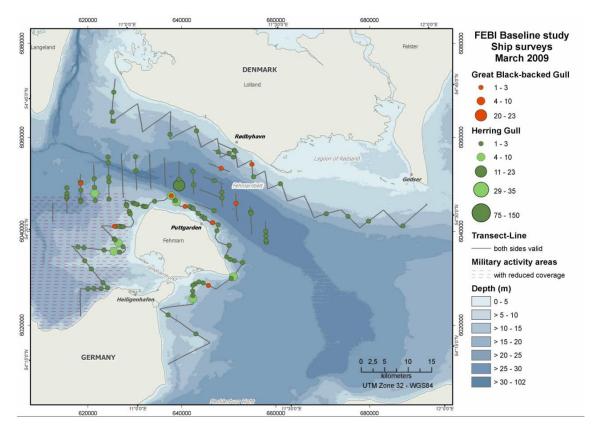
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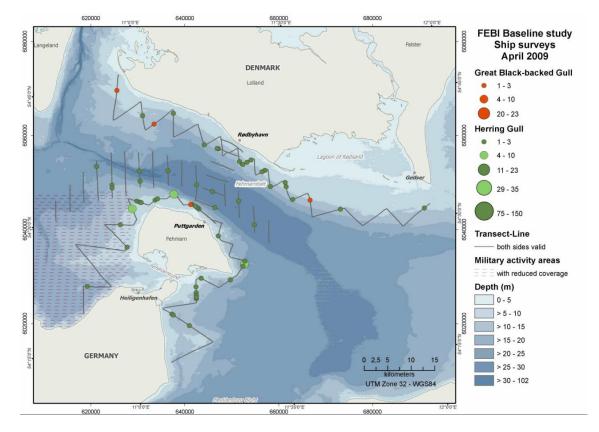
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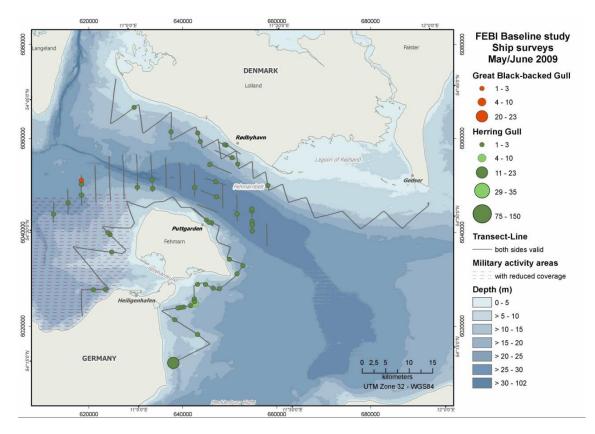
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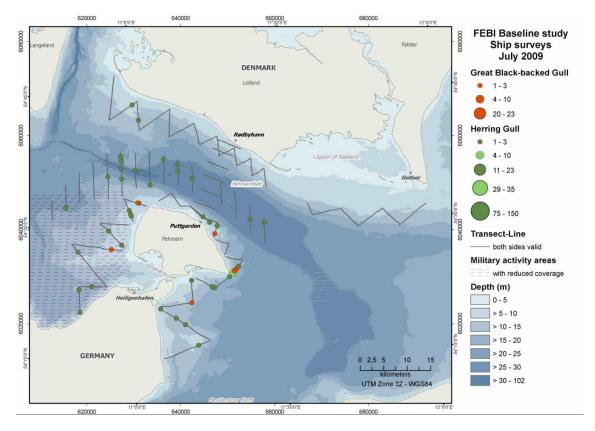
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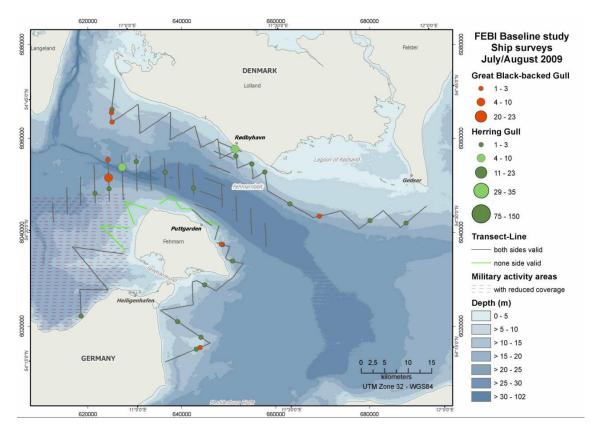
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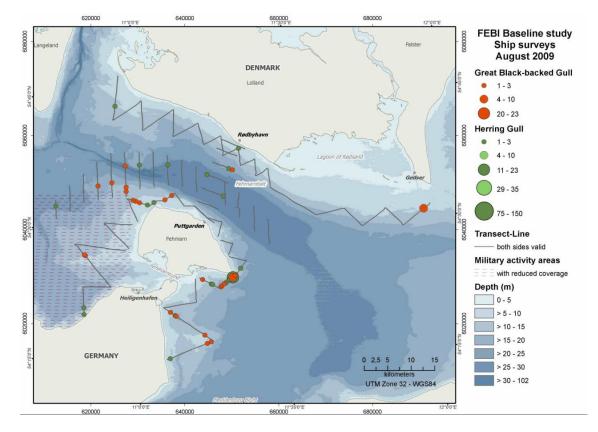
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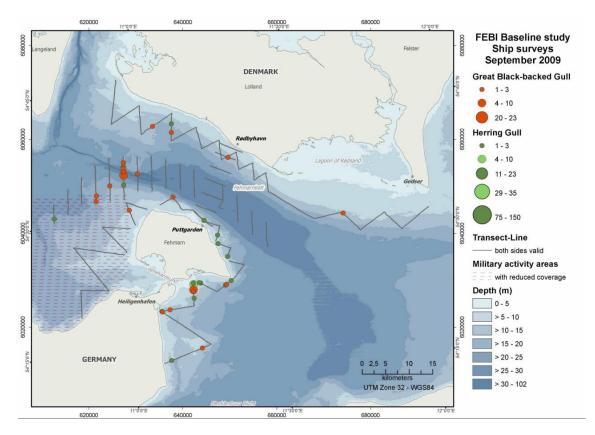
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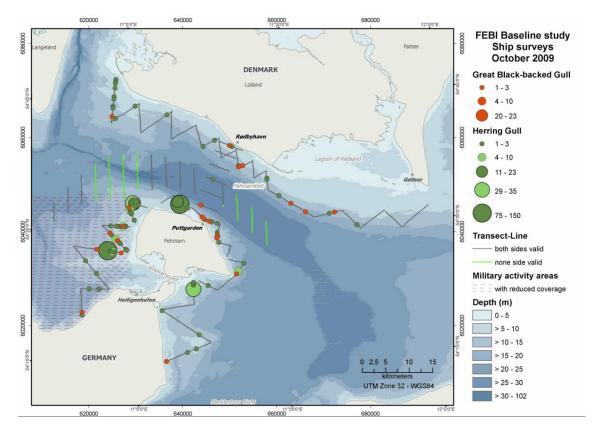
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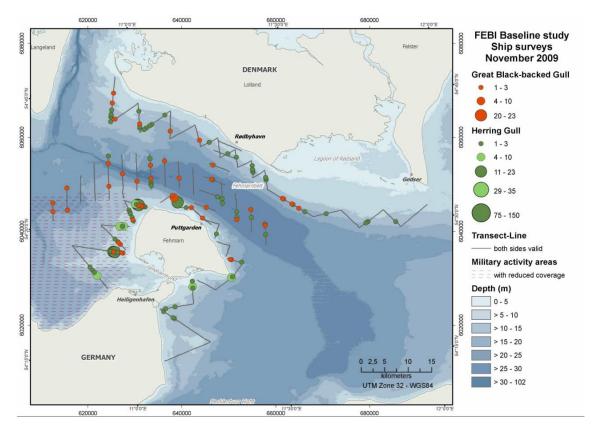
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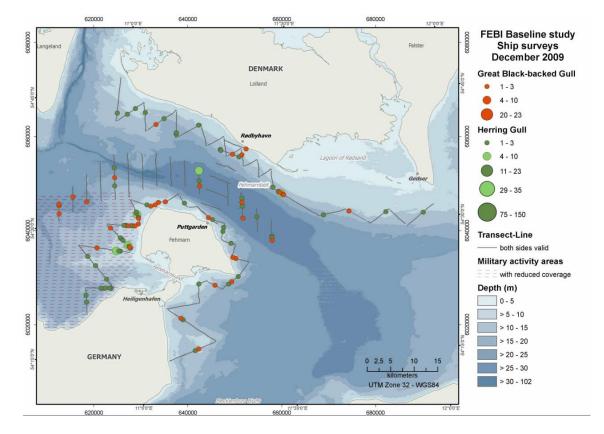
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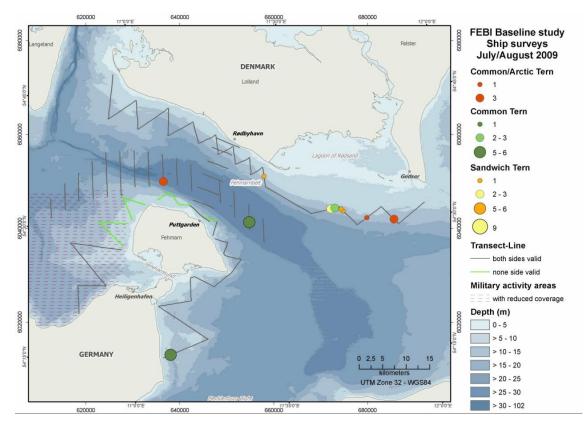
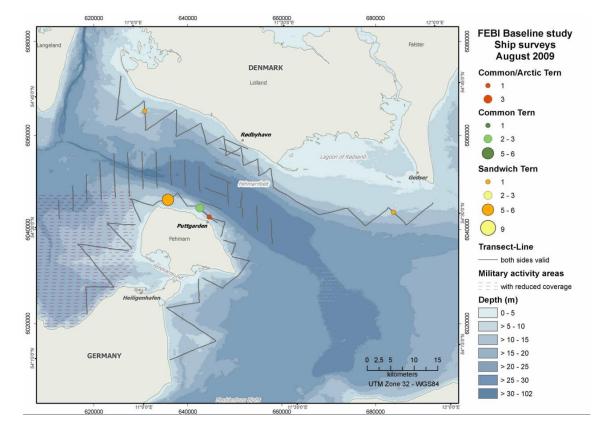


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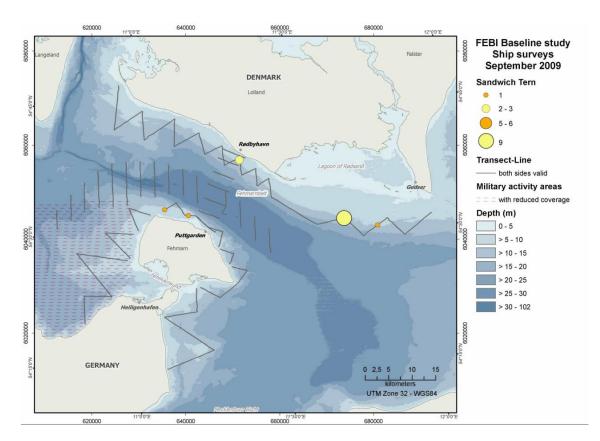
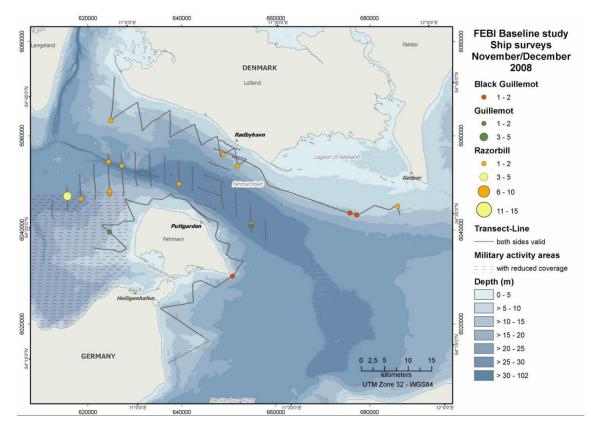


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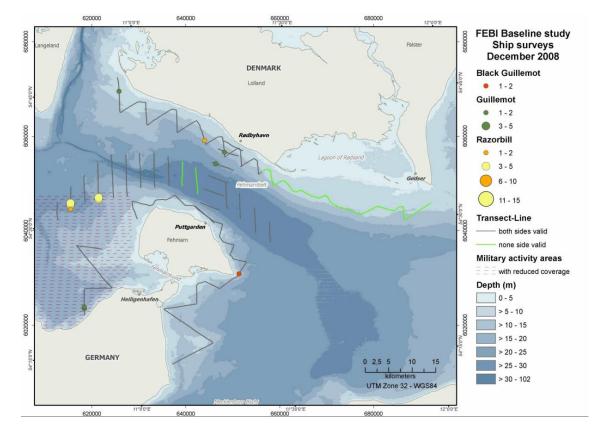


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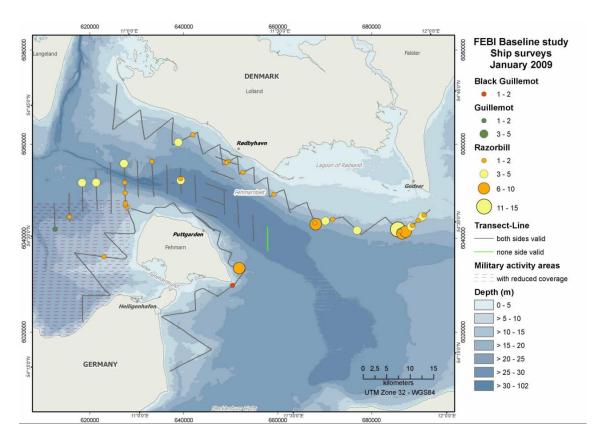


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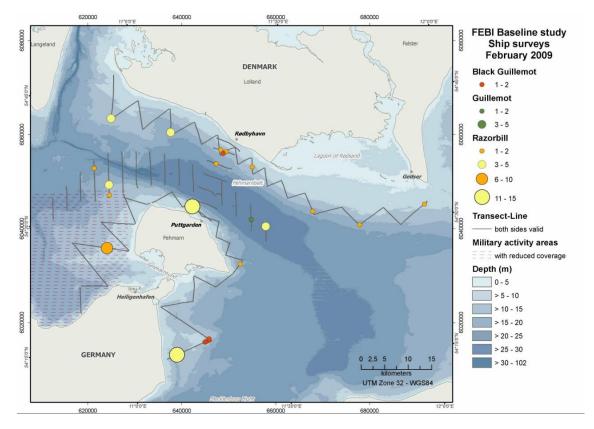


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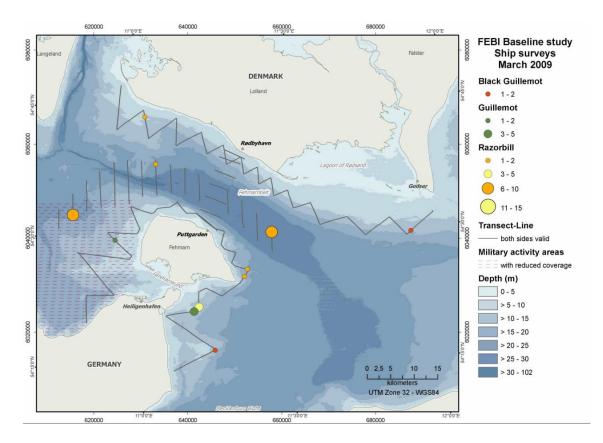


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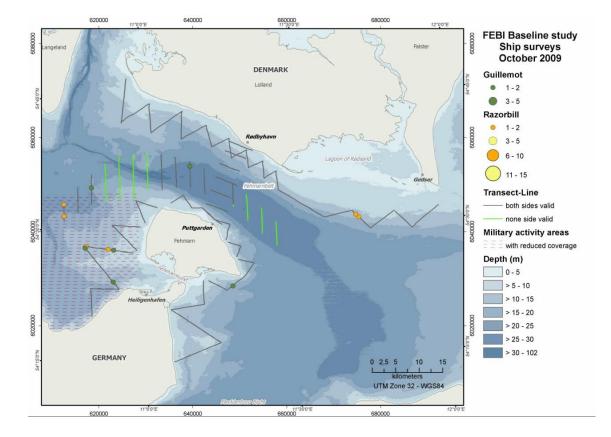


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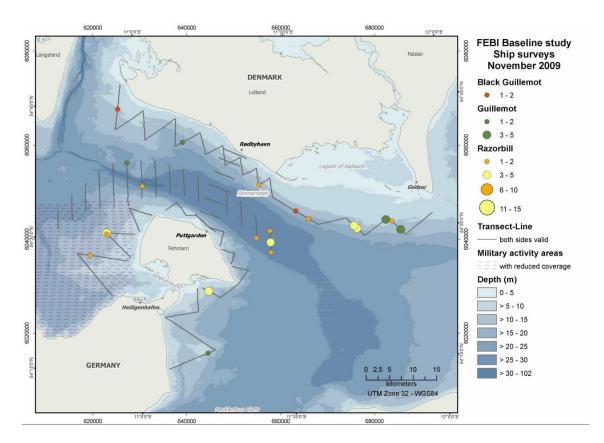


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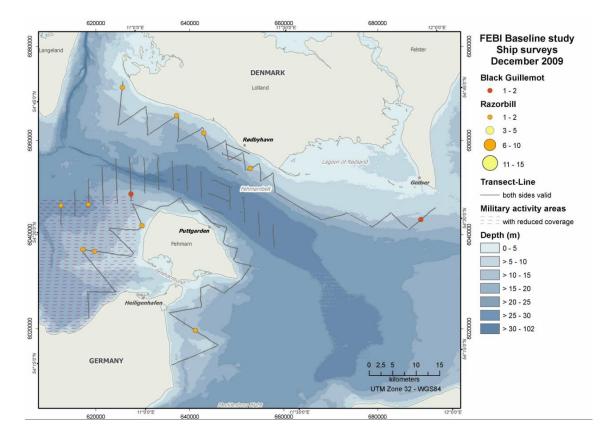


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