

Technical and Scientific Comments on ICES Special Request Advice on Emergency Measures to Prevent Bycatch

to the EU Commission (DG MARE and DG ENV) from the ASCOBANS Jastarnia Group¹

This comment refers to Harbour Porpoise, Measure 3:

“Closure of the Natura 2000 sites Adlergrund (DE1251301), Westliche Rönnebank (DE1249301), Pommersche Bucht mit Oderbank (DE1652301), Greifswalder Boddenrandschwelle und Teile der Pommerschen Bucht (DE1749302), Ostoja na Zatoce Pomorskiej (PLH990002), Wolin i Uznam (PLH320019), and the SPA site Pommersche Bucht (DE1552401) (Figure 2) for fishing with static nets during November–January”

In contrast to the proposal by WKEMBYC² which called for a seasonal closure of the cluster of Natura 2000 sites during November–April, the ICES Special Request Advice reduced the proposed closure season to November–January. The rationale presented with the measure is that *“Baltic Proper harbour porpoises being (occasionally) present during some winter months”*. **This is vague and does not sufficiently reflect scientific knowledge and long-term acoustic monitoring results in German waters of the Pomeranian Bay. Available data from German acoustic and Danish telemetry studies give a more accurate picture of the occurrence of Baltic Proper Harbour Porpoises in the area than this very general statement in the ICES advice.**

As the WKEMBYC report points out, acoustic and telemetry studies show that the southern Baltic Sea area is primarily used by the Baltic Proper population during **November–April** (see also Fig. 2 in the ICES advice, from Carlén et al. 2018). Whereas the summer distribution of the Baltic Proper Harbour Porpoise population is east of a line Hanö-Jaroslawicz, during November–April, Baltic Proper porpoises spread out across the Baltic Sea, and the distribution pattern indicates that a part of the population moves into the southern Baltic Sea where the cluster of Natura 2000 sites proposed for seasonal set net closure is situated (Carlén et al., 2018).

In acoustic monitoring studies of Harbour Porpoises in the German waters of the Pomeranian Bay (i. e., in the cluster of Natura 2000 sites), detection rates peak twice seasonally: once associated with the summer occurrence of Belt Sea porpoises, and once correlated with (1) cold air temperatures and (2) air temperatures lower than water surface temperatures. This suggests that to avoid suffocation during winter, Baltic Proper porpoises migrate into the part of the Pomeranian Bay that is mostly ice-free (Gallus et al., 2012). A study covering approximately ten years of acoustic monitoring data collected in German waters from Fehmarn Belt in the west to the Pomeranian Bay in the east (from approximately 11°E to 14.5°E) supports this interpretation (Benke et al., 2014) and proposes that the Pomeranian Bay is used regularly by Baltic Proper porpoises in winter, and by Belt Sea porpoises in late summer. This is also supported by the seasonal distribution patterns of porpoises satellite tagged in the Belt Sea area (Sveegaard et al., 2011, 2015, Mikkelsen et al., 2016). The results of the tagging studies show that Belt Sea porpoises use the Pomeranian Bay to a very small extent in summer, and even less in winter, indicating that the winter peaks are from porpoises migrating into the Pomeranian Bay from the Baltic Proper.

¹ Steering Group for the ASCOBANS Recovery Plan for Baltic Harbour Porpoises (Jastarnia Plan) and the ASCOBANS Conservation Plan for the Harbour Porpoise Population in the Western Baltic, the Belt Sea and the Kattegat (WBBK Plan).

² Workshop on fisheries Emergency Measures to minimize Bycatch of short-beaked common dolphins in the Bay of Biscay and harbor porpoise in the Baltic Sea.

In the long-term acoustic study (Benke et al., 2014), distinct winter maxima of acoustic activity were found between January and March in addition to a summer/autumn maximum between July and November. Annual minima of activity were recorded in April/May and October/November. The winter maximum has been visible in almost all years since 2002, whereas the summer maximum only became prominent after 2006. Since a correlation with air/sea temperatures was found by Gallus et al. (2012), it can be expected that the seasonal occurrence of Baltic Proper Harbour Porpoises varies between years, depending on weather conditions. The pattern of acoustic activity found by Benke et al. (2014) varied in time: the winter maximum can be as early as November (in the year 2008), and the summer minimum (interpreted here as the time after Baltic Proper animals had left the area) can be as late as July (in the year 2010). Also, in more recent data, at a number of acoustic monitoring stations within the proposed Natura 2000 cluster this general phenology can be found throughout. An example from 2018 in the graph below demonstrates that the occurrence can last as long as April with no occurrence of harbour porpoises in May 2018 before the next increase of activity begins in June which is interpreted as the influx of Belt Sea animals (Gallus & Brundiens, 2019).

As a conclusion, acoustic monitoring in the Pomeranian Bay with a long-term data series starting in 2002 confirms the seasonal fluctuations in porpoise occurrence and the need for protection measures to cover the whole seasonal management period covering the months November to April.

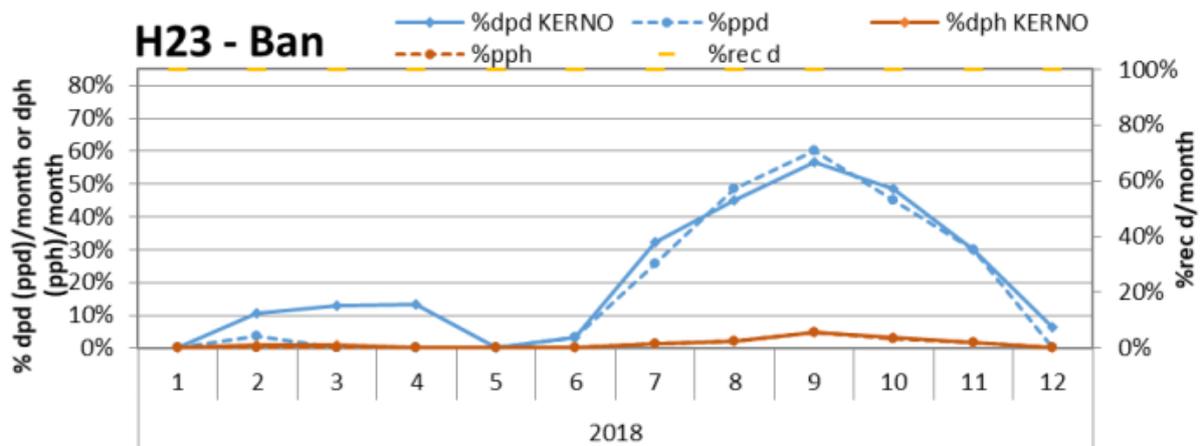


Fig. 1 Acoustic phenology of Harbour Porpoise acoustic activity in the calendar year 2018 at the monitoring station H23 which is situated in the Natura 2000 site "Pommersche Bucht mit Oderbank" (Gallus & Brundiens, 2019).

In order to avoid any bycatch of Baltic Proper Harbour Porpoises, a closure for set nets must cover the whole period of their occurrence in the Pomeranian Bight (including inter-annual variation), not only a part of it. Thus, it is proposed that the EU Commission follow the initial suggestion by WKEMBYC to close the Natura 2000 site cluster from November-April.

In the absence of detailed knowledge about the spring, summer and autumn distributions of the Baltic Proper population in German waters, which might be obscured by acoustic activity by animals from the more abundant Belt Sea population, it cannot be ruled out that animals from the Baltic Proper population are in the area even outside the proposed closure period from November-April.

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