

Evaluation of a new device for static acoustic monitoring of harbour porpoises in the wild

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The porpoise

Phocoena phocoena

Is seriously threatened in the Baltic Sea

The PCL (Porpoise Click Logger)

Was recently developed for use along part of the Swedish Baltic coast

The evaluation

Is important for validation of future collected data.



Results

- Hydrophone sensitivities: (25) (23) dB re 1Vp p/μPa, mean- 22, STDAV 4.6
- Furthest detected porpoise 155 m.
- Detection proportion 92% (n=13)
- The design of the PCL is given a 4.4 grade (1 5scale, n=7) by the fishermen

Aim

To evaluate the function of the PCL as a device for passive detection of porpoises in the wild.

Conclusions

- The PCL has overall worked well. It is comparable with earlier similar devices and well suited for use in fishery
- Suggested improvements concern hydrophones, saltwater switch and software.

Method

1. Calibration

2. Trials in Denmark – "Field calibration"

3. Trials in Sweden – Large scale pilot project



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