Trace elements and organochlorines in sperm whales stranded on the coast of Schleswig Holstein in 2016

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January 2016: STRANDING

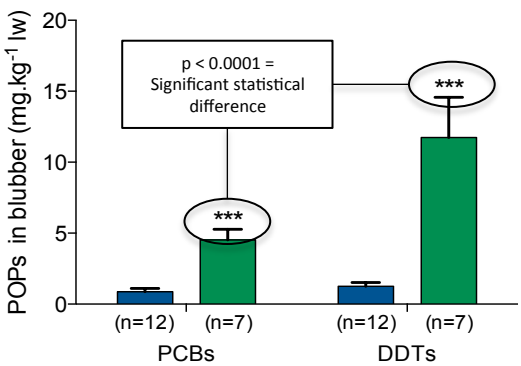
16 sperm whales along the coasts of Schleswig Holstein

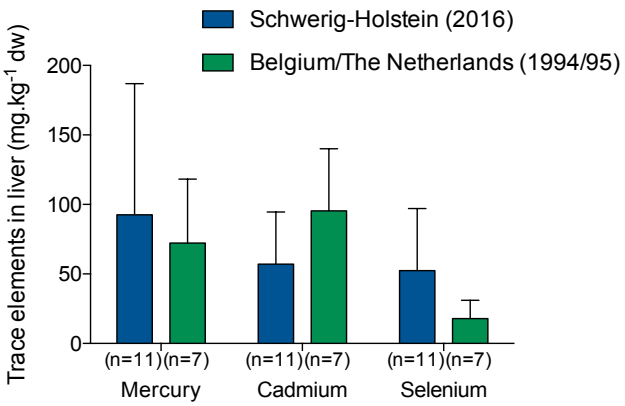
NECROPSIES & SAMPLING

Toxicological analyses of 12 carcasses:

- POPs (PCBs and DDTs) in adipose tissue
- Metals and trace elements (cadmium, selenium and mercury) in liver, kidney and muscle.

RESULTS & comparison with sperm whales stranded in 1994/95





- **2016 sperm whales less contaminated in PCBs and DDTs** than the ones stranded in winter 1994/95
- **No difference is observed** with regards to **trace element** concentrations in liver
- Average size of 1994/95 sperm whales = **14±1 m**
- Average size of 2016 sperm whales = **11±1 m**

1994/95 animals were older than 2016 sperm whales

DISCUSSION & CONCLUSIONS

- The lower contaminant burden in 2016 sperm whales may be due to their **younger age**
- **CONTAMINATION DOES NOT SEEM TO BE THE MAIN CAUSE OF DEATH**

In perspective:
A more Integrative study on contamination profiles associating samples from a majority of the 30 sperm whales that stranded on European coasts in Germany, The Netherlands, the United Kingdom and France is in preparation.

References: Holsbeek *et al* .1999 Marine Pollution Bulletin Vol. 38, No. 4, pp. 304–313

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