

## Long-term trends in mercury and PCB congener concentrations in gannet (*Morus bassanus*) eggs in Britain

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Gannet (*Morus bassanus*) eggs from Bass Rock (North Sea) and Ailsa Craig (eastern Atlantic) were monitored for PCB congeners (1990–2004) and total mercury (1974–2004). Congener profiles for both colonies were dominated by PCBs 153, 138, 180, 118 and 170. All declined in concentration at Ailsa Craig but some (153, 170, 180) remained stable or increased slightly at Bass Rock. Egg congener concentrations at Bass Rock were typically 10-fold higher than at Ailsa Craig by 2002, and Principal Component Analysis indicated that colony differences were driven by the dominant congeners. Egg mercury concentrations were significantly lower at Bass Rock than at Ailsa Craig and temporal trends differed, there being a significant decline at Ailsa Craig but a marginal increase at Bass Rock. Our results suggest there may be differences in contamination between the eastern Atlantic and North Sea and/or there are colony differences in prey selection and associated contaminant loads.

Published in: [Environmental Pollution \(2009\) 57, 155-163](#)

Illustrative Figure:

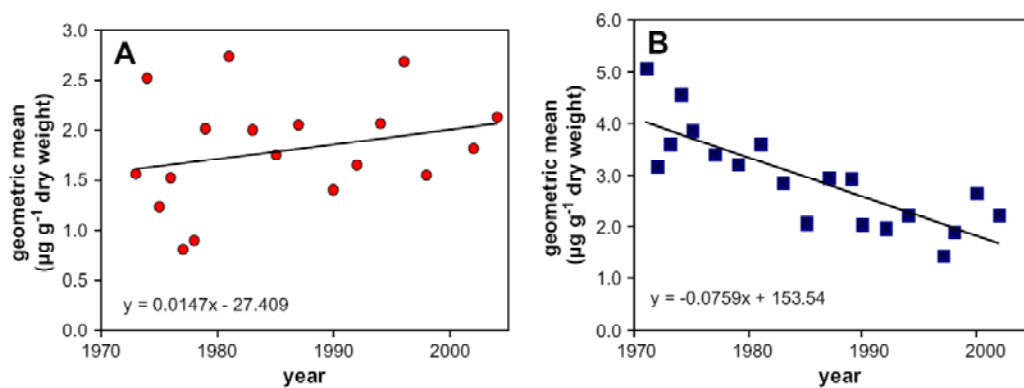


Fig. 5. Temporal trends in Hg concentration (µg g<sup>-1</sup> dry weight) in gannet eggs from Bass Rock (A) and Ailsa Craig (B).