



Environmental Chemistry

environmental problems • chemical approaches



Cover

Mercury (Hg) occurs at high concentrations in Arctic marine wildlife, posing a possible health risk to northern peoples who use these animals for food (see Choi and Grandjean, pp. 112–120). Although the dramatic Hg increases in Arctic Ocean animals since pre-industrial times can be explained by sustained small annual inputs, recent rapid increases probably cannot, because of the existing large oceanic Hg reservoir. Climate change is a possible alternative force underpinning recent trends (see Outridge et al., pp. 89–111).

Photo: Doug Barber (CFL)



Mercury has unique physico-chemical characteristics that include long-range atmospheric transport, transformation into highly toxic methylmercury species, and bioaccumulation of these compounds, especially in the marine environment. This has motivated intense international research on mercury as a pollutant of global concern (see Ebinghaus, pp. 87–88).

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