MERCURY IN BIRDS

The decrease in wild birds in Sweden has been remarkable since the latter half of the 1950's and some birds of prey became close to extinction. Food contamination was suspected but it was not until 1960 that mercury was discovered in internal organs of dead birds and in eggs that had failed to hatch. In 1964, it was found that Swedish hens' eggs contained more mercury than eggs from other countries because seed treated with methyl mercury was occasionally fed to hens in Sweden. Subsequently Berg, Johnels and Westmark (1966) examined the mercury content of bird feathers in museum specimens and showed the remarkable increase since the mid-1940's. It has since declined following the banning of the use of methyl mercury and dressings in 1966.

An important source of pollution is from slime controlling agents in the pulp and paper industry. Phenyl mercury used for this purpose is degraded after discharge to inorganic mercury which is then converted to methyl mercury by bacterial action. Other important sources are chlorine and caustic factories using mercury electrodes, electrical industries using mercury for various purposes, and the combustion of fossil fuels. Mercury pollution has been found in lakes and rivers that do not receive industrial waste waters and it is suggested that these are contaminated by wind and precipitation.