LEAD SHOT INGESTION AND ABSORPTION BY WATERFOWL IN UPPER COOK INLET.

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Five hundred seventy-four paired samples of livers and gizzards from mallards (Anas platyrhynchos) and northern pintails (A. acuta) were collected from hunter harvested birds from the Palmer Hay Flats, Susitna Flats, and Redoubt Bay in 1985 and 1986. Gizzard contents were x-rayed to determine ingestion rates of spent lead shot. Lead concentrations in livers were measured using atomic absorption spectrophotometry. Ingested lead shot was found in the gizzards of 27% of mallards and 17% of northern pintails. Highest ingestion rates occurred in birds collected from the Palmer Hay Flats. Lead concentrations in livers >= 2ppm (wet weight) occurred in 29% of mallards and 12.5% of pintails. Liver lead concentrations were highest from birds collected on the Palmer Hay Flats.

Keywords: lead, lead shot ingestion, lead absorption, waterfowl, ducks, mallard, pintail, Cook Inlet.
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