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POTENTIAL TOXICITY FROM BLACK DUCK CONSUMPTION
(RE: Your request for comments of 4/30/87)

Haskell believes there is no significant toxicological risk to individuals consuming black ducks from the Lordship area. We disagree with Dr. Herb Wilson's letter of 4/27/87 stating "40 ug of lead per day is the threshold value for human lead poisoning". Total lead intake ranges from 20 to 1,000 ug/day worldwide with no apparent toxicity [1,2].

Dr. Wilson's letter should have noted that human blood lead levels of 40 ug/100 mL and below are not considered harmful in adults. Children appear to be more sensitive; blood lead levels of 80 ug/100 mL can produce toxicity [1,3]. While blood lead level has been used as an indicator of lead exposure, there is no conclusive evidence of a quantitative relationship between lead exposure and blood lead level in humans [1].

There is no evidence that consuming lead contaminated waterfowl presents a risk to individuals [4]. Assuming Lordship black ducks contain 10 ug/g (parts per million) of lead in edible tissue, and an individual consumed 100 g of this tissue (0.2 lbs), their intake from this source still would fall within the nontoxic range [1,2].

Please contact me (366-5574) if you have any questions.

Ralph
RALPH G. STAHL, JR.

RGS/lcp/16

as
5/6/87

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- [3] Wegner, G. (1976) Shoshone Lead Health Project. Idaho Dept. of Health and Welfare, Boise, Idaho.
- [4] Jordan, J.S. and Bellrose, F.C. (1951) Lead poisoning in wild waterfowl. State of Illinois, Dept. of Registration and Education, Natural History Survey Division, Biological Notes No. 26, Urbana, Illinois.