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LEAD POISONING IN WATERBIRDS

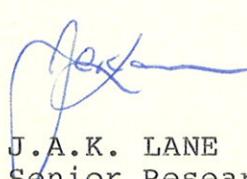
Although lead poisoning from ingested shotgun pellets commonly causes deaths of waterfowl in other countries, notably North America, early studies conducted by Lavery (1971) and Norman (1976) in the Eastern States have suggested that ingestion of lead pellets is not a significant cause of mortality in Australia.

Recent, unpublished studies by the South Australian National Parks and Wildlife Service have suggested that a serious problem now exists at the Bool Lagoon Game Reserve near Naracoorte. During the past twelve months approximately 80 Magpie Geese and two Black Swans have been killed by ingested lead shot and 20-30% of ducks sampled had high concentrations of lead in their blood. As a result of these findings the Service has apparently recommended to its Minister that Bool Lagoon be closed to the use of lead shot in 1987. (Note that steel shot, which is being used to replace lead shot in parts of the U.S.A., is not available in Australia.)

In response to these events we have decided to initiate two lead shot studies in Western Australia. The first will be to collect a sample of duck intestines during the 1987 open season and to examine these for incidence of ingested lead shot. Some blood and/or tissue samples will also be taken for measurement of lead concentrations. Findings will be compared with those obtained from the South Australian studies and from the literature.

This study will be conducted with existing staff and financial resources and will therefore be on a "pilot" scale.

The second study will attempt to determine the fate (ie the biogeochemistry) of lead shot in a small sample of south west wetlands. It is intended that this work be done by a postgraduate student at Murdoch University under joint CALM/Murdoch supervision with minimal funding (\$2-3,000) from the NPNC Trust Account. It is hoped that a suitable student will apply for this project in 1987.


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References

Lavery, H.J. (1971). Lead poisoning as a possible cause of death in waterfowl in Northern Queensland. Emu 71; 138-139.

Norman, F.I. (1976). The incidence of lead shotgun pellets in waterfowl (Anatidae and Rallidae) examined in south-eastern Australia between 1957 and 1973. Aust. Wildl. Res. 3 : 61-71.