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## Ingested Lead Shot in Northern Red-billed Whistling Ducks (*Dendrocygna autumnalis*) and Northern Pintails (*Anas acuta*) in Sinaloa, Mexico

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Lead poisoning of wild waterfowl has been an important issue since the beginning of this century. It has been documented in nearly every major waterfowl hunting locality in the United States and in 14 foreign countries (Anonymous, 1983, Lead Poisoning in Waterfowl: A Resource Issue. Special Texas Parks and Wildlife Department, Admin. Rep. Wildl. Div., FA PRO-W106-R, 13 pp.). However, there are no known published reports on lead ingestion in waterfowl in Mexico. In this report the occurrence of ingested lead in northern red-billed whistling ducks and northern pintails in central Mexico is documented for the first time.

Gizzards from hunter-killed ducks were collected from 18 December 1984, through 2 January 1985, in Rio Fuerte Trailer Park, 21 km north of the town of Los Mochis, Sinaloa, Mexico. Waterfowl were shot in flooded rice, corn, and bean fields within a 16 km radius of the park. Each duck was identified to species, and the sex and age were determined. Presence of lead shot in the gizzard was determined with a hydraulic separating device (Brewer, 1981, J. Wildl. Manage. 45: 496–498). Care was taken to insure that only ingested shot was recorded. If a non-

eroded pellet was found along with an entrance hole into the gizzard, the lead shot was not recorded as ingested. Steel pellets were detected with a magnet.

Six (2.1%) of 282 gizzards examined contained ingested lead shot: 4/85 northern red-billed whistling ducks, 2/69 northern pintails, 0/71 fulvous whistling ducks (*Dendrocygna bicolor*), 0/43 cinnamon teal (*Anas cyanoptera*), 0/8 green-winged teal (*Anas crecca*), 0/3 blue-winged teal (*Anas discors*), and 0/1 each for northern shoveler (*Anas clypeata*), redhead (*Aythya americana*), and ruddy duck (*Oxyura jamaicensis*). There was no evidence of pellets being shot into any gizzards. No steel shot was found.

Among the four red-billed whistling ducks with ingested lead shot, three were males and one was a female. One mature male whistling duck contained six pellets in its gizzard; all were eroded and their sizes could not be determined. The other five birds with ingested lead shot each contained one pellet. None of the ducks containing lead shot in their gizzards had gross signs of lead poisoning.

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