AN ANALYSIS OF THE EFFECTS OF TEN YEARS OPEN SEASON HUNTING ON BIGHORN SHEEP POPULATIONS IN IDAHO

by.

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Abstract

Hunter questionnaires were sent to every Idaho bighorn sheep hunter in 1960 and 1968. Better than 90% return was obtained. A comparison of average number bighorns observed, average number legal rams observed, tag sales trend and harvest trend is made for the period encompassed by the two questionnaires. The point of diminishing returns on open season ram hunting is reflected in the data. Average number of bighorns observed per hunter declined 52% between 1960 and 1968. Average number of legal rams observed per hunter declined 85% for the same period. Open season hunting in the face of extremely low recruitment rates is postulated as the reason for the 33% greater decrease in the ram component. The possibility that reducing the ram component below some specified level may interfere with reproduction through behavioral mechanisms is examined. Management alternatives to regulate the harvest of mature rams are suggested.