

MANAGEMENT OF DALL SHEEP IN NORTHWEST ALASKA

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Abstract: We developed an interagency management program for Dall sheep (Ovis dalli dalli) located in the western Brooks Range. This population inhabits land under State and Federal jurisdiction where sport and subsistence harvest is permitted. We utilized existing baseline data and conducted additional studies to determine the effects of observer and pilot bias, varied fixed-wing survey intensities, stratified sampling, and the use of fixed-wing verses helicopter on the sightability and enumeration of sheep in our management area. Following a severe population decline in 1991, population modeling was used to investigate long term management implications. We review the results of these investigations and their applications to the current management program. Several issues that challenge managers of Dall sheep in northwest Alaska are considered: 1) lack of procedures for estimating population abundance that are statistically and biologically valid, 2) limited manpower and funding, and 3) different management objectives due to State and Federal jurisdiction.