

A TECHNIQUE FOR DEPLOYMENT OF RUMEN BOLUS TRANSMITTERS IN FREE-RANGING MOOSE (*ALCES ALCES*)¹

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ABSTRACT

Recent uses for rumen boluses, such as mortality implant transmitters (MITs), in wildlife have made it necessary to adapt deployment techniques developed for livestock. In 29 and 30 attempts to place MITs in Minnesota free-ranging moose (*Alces alces*) in 2013 and 2014, respectively, success was achieved 83% and 63% of the time. In 2014, new methods for MIT deployment were evaluated in captive moose in Alaska. Mandible measurements provided guidance for selection of an appropriate-sized bolus applicator. A Schulze mouth gag was used to aid insertion of the applicator, and canola oil was used to lubricate the bolus to facilitate swallowing. Time to first swallow and time to continuous swallow following sedative reversal was measured to gauge appropriate timing for bolus administration. Using the adapted technique with trained personnel, success rates for MIT deployment were 100% (10/10) for captive moose and 88% (21/24) for free-ranging moose in Minnesota in 2015.

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