Using Long-Acting Neuroleptics and Other Drugs to Facilitate Bighorn Sheep Capture and Translocation

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ABSTRACT Capture and translocation are important tools for managing bighorn sheep (*Ovis canadensis*) in many jurisdictions. Over the last 10 years we have been exploring uses of longacting neuroleptics (LANs) and other tranquilizers as adjuncts to bighorn sheep capture and translocation. For capture via darting, a combination of butorphanol (30 mg), azaperone (10 mg), and medetomidine (12 mg) (BAM), which constitutes a 1.1 ml dose, provides a small-volume alternative to the potent opioids. BAM immobilization can be antagonized with atipamezole (60 mg) and naltrexone (50 mg), both of which are delivered intramuscularly. To reduce stress associated with physical capture (drop net or helicopter netgunning), a combination of midazolam (40–45 mg) and azaperone (15 mg) administered immediately upon capture provides transient tranquilization and muscle relaxation during handling. For extended tranquilization (e.g., during transport and overnight holding), long-acting haloperidol (30 mg) provides sustained calming effects for 24–48 hours. In our experience, uses of these various drugs and drug combinations can be tailored to management applications on a case-by-case basis to facilitate handling, reduce stress, and improve the overall success of bighorn sheep capture and translocation.

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