
****AGE DETERMINATION OF LIVE-CAPTURED BEAVERS BY WEIGHT IN SOUTHWEST MONTANA (POSTER)**

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Studies evaluating demography and agespecific space use of beavers (*Castor canadensis*) require accurate methods for aging livecaptured individuals in the field. Unfortunately, techniques for aging livecaptured beavers in the field are often unreliable and can require previous experience in handling beavers. Previous ageweight relationships developed in other regions (e.g., Midwest) may not be suitable, because differences in diets, seasonal behavior, and selection for lifehistory traits likely results in significant regional variation in ageweight relationships. Thus, regional assessments of age-weight relationships are necessary for accurate inference. In the fall of 2015, we began a two-year study with the goal of developing accurate growth curves for beavers occurring in southwestern Montana. We are collecting beaver carcasses from local trappers and animal control experts. Carcasses are weighed and the molar teeth extracted for laboratory analysis of cementum annuli which provide an accurate age for each beaver. Regression analysis will be used to model ageweight relationships for beavers, and model predictions will be tested using a holdout dataset and crossvalidation. We expect our results to provide useful information for researchers in forested headwater habitats of Montana, and provide baseline data for calibrations for broaderscale assessments in the region. Please contact us if you can provide whole beaver carcasses.