

RUMEN TURNOVER RATES IN MOOSE

Mike Hubbert, Institute of Arctic Biology, University of Alaska, Fairbanks, AK 99775-0180, U.S.A.

Charles C. Schwartz, Alaska Department of Fish and Game, Soldotna, AK 99669, U.S.A.

Robert G. White, Institute of Arctic Biology, University of Alaska, Fairbanks, AK 99775-0180, U.S.A.

Albert W. Franzmann, Alaska Department of Fish and Game, Soldotna, AK 99669, U.S.A.

In each of two experiments adult moose were fed a pelleted diet and dosed with a liquid and solid phase marker to determine flow rates. In the first experiment $^{103}\text{Ru-Cl}$ (Ru) and $^{51}\text{CrO}_2$ (Cr) were used to determine the influence of intake on passage rates. In the second experiment Ytterbium (Yb) was used as the particulate marker and $\text{LiCoEDTA}\cdot 3\text{H}_2\text{O}$ (Co) crystals were used to mark the liquid phase. Fecal samples were analysed in both cases for the presence of marker. In neither case was there a significant ($\alpha=0.05$) effect of intake on flow of liquids or solids. However, in experiment 1 using Ru and Cr, liquids and solids flowed at the same rate ($\alpha=0.01$). This was not true with Yb and Co. There was also no difference ($\alpha=0.05$) in flow rates between ^{103}Ru , ^{51}Cr of the first experiment, and Co of the second experiment. This would indicate that Ru may not mark the particulate phase but rather flow with the liquid phases marked by Cr and Co.



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