LRES Thesis Defense

METHANE EMISSIONS OF AMERICAN BISON (Bison bison) MEASURED USING THE EDDY COVARIANCE TECHNIQUE

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Date: Wednesday, January 16th

Time: 9:00 AM

Location: Plant Bioscience Building Room 108

American bison (Bison bison L.) have recovered from the brink of extinction over the past century. Bison offer potential environmental benefits as they re-occupy their native range, but many specific impacts of bison reintroduction are not well understood. Methane emissions are known to be a major climate impact of ruminants, but few measurements for bison exist due to challenges caused by their mobile grazing habits and safety issues associated with direct measurements. Here, we demonstrate measurement of methane and carbon dioxide fluxes from a bison herd on winter range using indirect eddy covariance measurements.