



"Our environment is our future"

RESEARCH COLLOQUIUM SERIES

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Friday

Feb. 12, 2010

3:30 - 4:30

LECTURE THEATRE

7 - 152

LIGHT REFRESHMENTS
SERVED AT 3:20 PM

YouTube™ Insights into Moose-Train Interactions

To gain a better understanding of the behavioral aspects of moose-train encounters, we reviewed videos of ungulate-train interactions available on YouTube™ and from train operators. Video footage viewed included: moose (47.4%), cattle (15.8%), deer (10.5%), elk (10.5%), camels (10.5%) and sheep (5.3%), 46% of which were adults. Although footage of ungulates in general was recorded predominantly in snow-free conditions, most of the recorded moose-train interactions were taken in winter when moose appeared to be "trapped" by deep snow on either side of the rail bed. In fact, when under chase by trains, moose, elk and deer all ran within ~50-60 cm of track center and ran less than ~30 cm outside of the steel rails where snow was restricting mobility. Escapes from train chases in winter occurred where a discontinuity in the habitat/setting was encountered by moose and where the speed of train enabled them time to escape. Ungulates in groups displayed social behaviors in response to group leadership that generally elicited escapes; although one cow-calf moose pair was struck as was a domestic livestock calf when attempting to follow the herd across the track in front of an oncoming train. Most ungulates were killed on straight stretches of track. We determined that videos are a valuable resource for trying to understand reactions of ungulates to trains. We suggest that videos continue to be filmed and be posted on open source databases such as YouTube™ for use by biologists attempting to understand the dynamics of collisions for mitigation.