

## **SÉMINAIRE**

## Wolf Re-Introduction in the Northern Rockies, USA: From Population and Predation Trends to Policy and Economics

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Conflicts between wolves and livestock have continued to escalate since wolf re-introduction in the Northern Rockies, USA. We will provide an overview wolf re-introduction, including trends in populations and predation rates. We will also review how wolves have (or have not) affected livestock management practices and ranch profitability. We will then review the legal framework for wolf control in Wyoming, including predation compensation policies. Compensation policies have attempted to reduce the impact of wolf-livestock conflicts by compensating producers for lost livestock. Compensation schemes, however, focus only on direct predation (i.e., confirmed losses) despite a growing body of evidence that predation pressure also have indirect effects on prey, particularly domesticated livestock (e.g., slower weight gain, higher disease rates, or lower reproduction rates). We will then discuss our research, which uses an economic model of livestock production to estimate the economic impact of both direct and indirect effects of wolf predation. Our results suggest that short-run (i.e., year-to-year) financial impacts of wolf indirect effects may be as large as or larger than the direct effects. Including indirect effects implies that the compensation ratio (i.e., number of calves compensated per confirmed depredation) necessary to fully offset the financial impacts of wolves would need to be two to three times larger than current 7:1 compensation ratio used in Wyoming.