

SCIENCE IN SHORT



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Influences on Elk TB

Some surprising aspects of elk social interactions and dispersal patterns can influence the spread of disease, according to research reported in *Molecular Ecology* (v. 12/5). Eric Vander Wal and colleagues at the University of Saskatchewan tracked radio-collared elk (*Cervus canadensis*) from the Riding Mountain Region of Manitoba, Canada—one of only three remaining bovine tuberculosis (TB) reservoirs in North America—and found that unrelated individuals interacted with each other just as often as with kin. This unexpected finding indicates that relatedness does not necessarily increase TB transmission, which is more dependent on overall population density. Genetic analysis revealed another surprising find: The elk rarely dispersed to other elk subpopulations in their region. As a result, most TB-infected individuals remained in a single subpopulation, a finding with disease-management implications. The researchers plan to study whether as-yet unknown attributes of geography prevent elk dispersal in the area and therefore accord some protection to uninfected subpopulations.