



## Transportation of Spotted Knapweed Seeds by Vehicles

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Vehicles have long been suspected of being a major distributor of spotted knapweed seed. The purpose of this experiment was to determine how many seeds could be disseminated by vehicles and to measure how far the seeds would travel. Sites were chosen at the Story Hills in Bozeman, the old Milwaukee Road rail yard in Deer Lodge and a site near the Bauxendale Volunteer Fire Department west of Helena. At each site, twelve plots each measuring twelve by forty feet were staked and the surrounding area was mowed. A late model pickup truck was driven 40 feet into each plot and backed out. The vehicle was then driven 25 mph for distances of 0, 0.1, 1.0, and 10.0 miles. The vehicle was placed on a large tarp and the entire undercarriage was vacuumed to collect spotted knapweed seeds and plant material. The collected material was bagged to await seed counting. At the Deer Lodge site, over 1633, 510, 226 and 138 seeds remained on the vehicle after traveling 0, 0.1, 1.0, and 10.0 miles. The results indicate that spotted knapweed seed is readily disseminated by motor vehicles for long distances.

*MWCA Mission: To strengthen, support, and coordinate weed management efforts in Montana in accordance with the Montana state weed plan.*