

Journal Publications

Frame P.F, H.D. Cluff and D.S. Hik. 2007. **Response of Wolves to Experimental Disturbance at Homesites**. *The Journal of Wildlife Management* 71(2):316-320.

ABSTRACT

Events during the denning period (parturition to first autumn) often determine the reproductive success of wolves (*Canis lupus*). Consequently, there is concern about the potential adverse effects of human-caused disturbance at wolf den and rendezvous sites (homesites), but relatively little information on this subject is available. We conducted standardized experimental disturbance treatments at 12 unique wolf homesites in the Northwest Territories, Canada, during summers 2002 and 2003. The treatment consisted of an intruder approaching a homesite once per day for 3 consecutive days and recording behavioral responses, response distance, and response intensity of wolves. We counted pups and estimated their ages prior to the initial treatment at each site. Adult wolves moved pups at 3 of 6 treated homesites in each year. The amount and type of known human activity within a pack's home range did not influence whether adults moved pups in response to the treatment. The response intensity of wolves to the treatment was inversely related to the amount of human activity near a homesite. There was no relationship between the distance at which wolves responded to the intruder and the amount or type of human activity. There was a positive relationship between increasing age of pups and their relocation in response to the treatment. Reproductive success was not influenced by the treatment or by the amount and type of human activity. Treated sites were used by wolves the following year in the same proportion as untreated sites. It appears that pups are most vulnerable early in the year when less mobile; therefore, managers should consider age of pups before human activity at or near wolf homesites occurs.