

Coyotes (Canis latrans) occupy many diverse habitats throughout the continental United States. These habitats range from climax forest to residential areas of large cities. Because of the general ecological and economic significance of this species, it is an important subject for biological study. While several investigations have examined home ranges and movement patterns of the species, these studies are somewhat incomplete. Sample sizes are generally small, and the number of locations recorded for individual animals is usually limited. Animals such as coyotes that have large home ranges (e.g., 31 km² to 60 km²) and that are capable of long distance travel (e.g., 200 km to 300 km) are difficult to monitor by conventional means. Data collections are also hampered by weather conditions and schedules of investigators. For the most part, management programs directed toward coyotes have not been effective. Our understanding of this important wildlife species is limited. Additional information relating to home range and movement patterns is badly needed in order to understand the biology of coyotes and to develop management strategies for the species. It appears that satellite data collections and location systems offer a unique opportunity to gather valuable data on an important biological species.

The investigation will serve as a pilot study. Two coyotes will be fitted with satellite collars and each monitored 12 hrs per day for the life of the collars (about 4 months). Locations of coyotes (recorded by satellite) will be provided to the investigator. From these data, home ranges will be determined and movement patterns assessed. Such results should provide new and significant data relating to movements of coyotes. If this is the case, a study will be developed that includes monitoring of additional animals over a longer time period.

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