

THE EFFECTS OF WOLF COLONIZATION ON COYOTE BEHAVIOR,
MOVEMENTS AND FOOD HABITS ^{TWS}

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The Flathead area in western Montana is one of the last ecosystems in the United States still containing a full complement of mammalian predators and their prey. Recolonizing wolves (*Canis lupus*) may affect congeneric coyotes (*C. latrans*) by altering food habits, social behavior, movements and habitat use. We examined the effects of colonizing wolves in northwestern Montana on the resident coyote population. Radio-collared wolves and coyotes were monitored from June 1994 through December 1996 to determine home ranges and movements. Home ranges for eleven coyotes were distributed between the two wolf pack territories or on the edge of the territories, and did not overlap with core wolf areas. Locations for a 24-hour period on one canid were used to determine if temporal partitioning occurred between the canids. Coyote movement was the greatest between 1100-1400 and wolf movement between 0200-0400 hours. Some food partitioning does occur in that coyote diets consist of small mammals (i.e. snowshoe hare (*Lepus americanus*) and microtines), however, white-tailed deer (*Odocoileus virginianus*) are also consumed. Elk and white-tailed deer comprise the main diet of the wolf packs. Complex interrelationships between the predators in the North Fork occurs as well as interrelationships between the predators and the prey. Predators in fact account for 80 percent of the coyote mortality in the North Fork. Wolf presence may be beneficial to coyotes as a source of additional food through scavenging, but it also appears that the wolves are affecting coyote distribution and survival.