Dietary overlap of wolves and cougars within and near Glacier National Park, Montana [TWS]

Kyran E. Kunkel and D.H. Pletscher
Wildlife Biology Program, School of Forestry
University of Montana - Missoula 59812

T. K. Ruth and M. G. Hornocker
Hornocker Wildlife Institute
University of Idaho - Moscow 83843

We compared patterns of prey selection among wolves *(Canis lupus)*, cougars *(Puma concolor)*, and humans to ascertain the effects of wolf recolonization and multiple predators on prey and on each other. Characteristics of prey selected by wolves and cougars in the same ecosystem have not been reported. White-tailed deer *(Odocoileus virginianus)* made up the greatest proportion of both wolf (0.83) and cougar diets (0.87), but elk *(Cervus elaphus)* and moose *(Alces alces)* made up a larger proportion of wolf (0.14, 0.03, respectively) than cougar (0.06, 0.02, respectively) diets. Wolves and cougars selected the same age classes in both deer and elk. They both selected older and younger deer and elk than human hunters did. They both selected fewer males than hunters did and they both selected more fawns and more males than expected based on availability. Cougar predation on elk was more male-biased than was wolf predation on elk. Cougars generally killed animals in poorer condition than wolves did, especially in elk. These data may be used by predator/prey managers to anticipate effects of wolf and cougar presence on populations of prey and may also be used to determine potential impacts of one predator on the other. We suggest possible management alternatives to mitigate effects.