

LARGE-SCALE SAMPLING OF COUGAR POPULATIONS AND ONE OF THEIR PATHOGENS: WORKING WITH COUGAR HUNTERS IN MONTANA ^{TWS}

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Cougars (*Felis concolor*) in the Rocky Mountains are commonly infected with a cougar-specific form of feline immunodeficiency virus (FIV). Contrary to its name, data available do not indicate that this virus causes any disease in infected cougars. Genetic analysis shows that most cats in a given area are infected with highly related viruses but that cougars from different regions have genetically distinct viruses. Because transmission of a virus type from one area to another requires movement of an infected cougar, evaluation of virus genetics will give important insights into how well cougar populations are connected. With the assistance of outfitters, hunters, and houndsmen, we have undertaken a study on the large-scale distribution of FIV types across all of western Montana. Small amounts of fresh blood samples are being collected from harvested animals using a sampling kit we distribute to interested hunters. In addition, we work with agencies and taxidermists to obtain samples of tissues that are likely to contain virus. Through this collaborative effort we are hoping to get a better understanding of movement and connectivity for cougar populations in Montana.