

Guidelines based on local research

Description

WDFW's current cougar management framework applies a statewide average of cougar density to a discrete map of habitat suitability (i.e., suitable or unsuitable) to estimate population sizes within population management units (PMUs). While this approach is straightforward and scientifically defensible, it may not adequately capture local variability in habitat quality and cougar densities for some locations. The department could apply local research to inform densities used in some PMUs.

Option

Apply the existing harvest framework using refined PMU population estimates generated from locally derived density estimates obtained from cougar research projects. For PMUs without local research data, we would apply the statewide average density. This option would still have the dual objectives of managing for stable populations and male territoriality.

Pros	Cons
Science-based	Uncertain densities for PMUs/regions without research data
Greater accuracy for PMUs with research data	Decreased opportunity in places
Increased opportunity in places	May reduce public support in places
May improve public support in places	Point estimates from research may not be currently applicable to broader areas or over time and could lead to overharvest or unnecessary restriction on hunting opportunity

Implementation

Population estimates for PMUs associated with cougar research projects would be obtained using the locally derived density point estimate. All remaining PMUs (i.e., those not geographically associated with a cougar research effort) would use the statewide average density (2.2 independent cougars/100 km²) to estimate the size of the cougar population. The current harvest framework would still be applied throughout the state (i.e., season length and structure, 12-16% harvest limit), albeit with new population estimates for many PMUs.