

WSU Department of Natural Resource Sciences

Large Carnivore Conservation Lab

Current Projects 2012

<http://nrs.wsu.edu/Research/Carnivore/current.html>



Effects of heavy hunting on cougar spatial Ecology and cougar-human conflicts.

J. Brown, R. Wielgus, B. Maletzke, & others.

This project is part of Jeremy Brown's M.S. project. Our previous research has shown that heavy hunting results in increased young male immigration. Another project showed that younger immigrant animals use human-occupied areas more than older resident animals. Our previous research also showed that heavy hunting does not result in decreased cougar complaints and livestock depredations. In this heavily hunted study area, we hypothesize that numerous young immigrant males use human occupied areas more than other sex and age classes – and that this could be contributing to high levels of complaints and livestock depredations in the area.

Completed Projects

<http://nrs.wsu.edu/Research/Carnivore/completed.html>



Population growth of cougars in the Selkirk Mountains of BC, ID, & WA

C. Lambert, R. Wielgus & others.

This project was part of Catherine Lambert's M.S. program. We tested the commonly held belief that cougars were increasing in the Selkirk Mountains as evidenced by increased cougar complaints and predation on mule deer and caribou. Contrary to accepted belief, cougars were declining rapidly due to excessive hunting mortality. We hypothesized that the high levels of hunting may have caused increased immigration by teenage male cougars – and that could have increased the number of complaints and incidents of predation on rare prey. Increasing complaints were not associated with increasing cougars. ***This research caused cougar***

managers in the Americas to re-think their assumptions that increased complaints and predation is due to increased cougars.

Lambert, C., **R.B. Wielgus**, Robinson, H.S., Cruickshank, H., Katnik, D.D., Clarke, R., and Almack, J. 2006. Dynamics and viability of a cougar population in the Pacific Northwest. *Journal of Wildlife Management*. 70(1): 246-254. [PDF](#)



Effects of hunting on cougar complaints and livestock depredations

K. Peebles, B. Maletzke, R. Wielgus & others.

This project was part of Kaylie Peeble's Honors B.S. program. We found that increased remedial hunting of cougars did not reduce cougar complaints and livestock depredations in WA. ***This research resulted in new progressive legislation (equilibrium management) regarding livestock depredations. Heavy remedial hunting (>14% yr) is no longer used in WA to reduce complaints and depredations.***

Peebles, K., Maletzke, B.N., and **Wielgus, R.B.** 2011. Does remedial hunting reduce cougar complaints and livestock depredations? *Wildlife Society Bulletin (In Prep)*.



Effects of hunting on sexually segregated habitat use in Carnivores.

J. Keehner, R. Wielgus & others.

This project was part of Jon Keehner's Ph.D. program. We tested and confirmed our hypothesis that excessive hunting of adult male cougars resulted in avoidance of immigrant males by females with young cubs because of increased infanticide. Females with cubs did not avoid resident males in lightly hunted areas. Remedial hunting of cougars actually caused increased cougar predation on rare, declining sensitive and endangered prey. ***This work cemented a dramatic change in cougar - prey management in WA. Excessive remedial hunting of cougars was discontinued in WA in 2011 as a result of this work.***

Keehner, J.R., Maletzke, B.N. **Wielgus, R.B.**, Koehler, G.M., and Swanson, M. 2011. Tests of hypotheses for sexual segregation in carnivores. *Ecology (Submitted – being revised)*.